Open Source Used In BGP TE Controller Version 4.3.0

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1.3 xz 5.2.4 3.el8

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1.5 pflag 1.0.5

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1.6 xkeyboard-config 2.28 1.el8

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1.7 x-sys 0.0.0-20211013075003-97ac67df715c

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* /bin/grep

1.11 klauspost-compress 1.11.13

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<p>Three class-level annotations describe the intended thread-safety promises of a class: <code>@Immutable</code>, <code>@ThreadSafe</code>, and <code>@NotThreadSafe</code>. <code>@Immutable</code> means that the class is immutable, and implies <code>@ThreadSafe</code>. <code>@NotThreadSafe</code> is optional; if a class is not annotated as thread-safe, it should be presumed not to be thread-safe, but if you want to make it extra clear, use <code>@NotThreadSafe</code>.

<p>These annotations are relatively unintrusive and are beneficial to both users and maintainers. Users can see immediately whether a class is thread-safe, and maintainers can see immediately whether thread-safety guarantees must be preserved. Annotations are also useful to a third constituency: tools. Static code-analysis tools may be able to verify that the code complies with the contract indicated
by the annotation, such as verifying that a class annotated with
<code>@Immutable</code> actually is immutable.

</p>

<h2>Field and method annotations</h2>

<p>
The class-level annotations above are part of the public documentation
for the class. Other aspects of a class's thread-safety strategy are
entirely for maintainers and are not part of its public documentation.
</p>

<p>
Classes that use locking should document which state variables are
guarded with which locks, and which locks are used to guard those
variables. A common source of inadvertent non-thread-safety is when a
thread-safe class consistently uses locking to guard its state, but is
later modified to add either new state variables that are not
adequately guarded by locking, or new methods that do not use locking
properly to guard the existing state variables. Documenting which
variables are guarded by which locks can help prevent both types of
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</p>

<p>
The <code>@GuardedBy(lock)</code> annotation documents that a field or method should
be accessed only with a specific lock held.
</p>

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* /opt/cola/permits/1135935007_1613638427.33/0/asm-util-7-2-sources-2-jar/org/objectweb/asm/util/CheckModuleAdapter.java
* /opt/cola/permits/1135935007_1613638427.33/0/asm-util-7-2-sources-2-jar/org/objectweb/asm/util/CheckFieldAdapter.java
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analysis/common/src/java/org/apache/lucene/analysis/it/ItalianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/pt/PortugueseLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/ru/RussianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/sv/SwedishLightStemmer.java

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The Polish analyzer (stempel) comes with a default
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1.20 azure-sdk-for-go 55.0.0+incompatible

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set terminal pngcairo font 'Sans, 8' lw 1 size 1400,1024
set xtics rotate by -45
set style histogram errorbars gap 2 lw 1
set style fill solid border -1
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1.22 go-xerial-snappy 0.0.0-20180814174437-776d5712da21

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1.25 stack 1.8.1

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1.27 ipset 7.1 1.el8

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1.34 argon2-cffi-bindings 21.2.0

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Argon2 reference source code package - reference C implementations

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1.35 olivere-elastic 5.0.70

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Gocheck - A rich testing framework for Go

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Support for streaming Protocol Buffer messages for the Go language (golang).
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1.39 gopkg.in-inf 0.9.1

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Eclipse

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

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Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

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Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

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OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm

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Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

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MortBay

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org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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1.42 autoconf 2.69-29.el8
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* /opt/cola/permits/1260641771_1643189305.41/0/jline-style-3-12-1-sources-jar/org/jline/style/StyleExpression.java
* /opt/cola/permits/1260641771_1643189305.41/0/jline-style-3-12-1-sources-jar/org/jline/style/StyleFactory.java
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* /opt/cola/permits/1260641771_1643189305.41/0/jline-style-3-12-1-sources-jar/org/jline/style/NopStyleSource.java
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1.46 couchbase-go-couchbase 0.1.0

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1.47 jackson-databind 2.10.4
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1.49 kballard-go-shellquote 0.0.0-20180428030007-95032a82bc51

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1.50 gjson 1.10.2

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1.51 go-md2man 2.0.0
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1.53 naoina-go-stringutil 0.1.0

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1.54 notary 0.7.0

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Protocol Buffers for Go with Gadgets

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* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/OpenSslSessionContext.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/OpenSslSessionContext.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/OpenSslSessionContext.java
* /opt/cola/permit...
jar/io/netty/handler/ssl/Java7SslParametersUtils.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-
jar/io/netty/handler/ssl/SniHandler.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-
jar/io/netty/handler/ssl/JdkApplicationProtocolNegotiator.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-
jar/io/netty/handler/ssl/OpenSslContext.java
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* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/pcap/PcapWriter.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/pcap/PcapHeaders.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/pcap/IPPacket.java
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* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/pcap/EthernetPacket.java
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* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/address/package-info.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/SslMasterKeyHandler.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/address/DynamicAddressConnectHandler.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/OpenSslPrivateKeyMethod.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/PseudoRandomFunction.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/util/X509KeyManagerWrapper.java

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* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-
  jar/io/netty/handler/traffic/TrafficCounter.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-
  jar/io/netty/handler/traffic/GlobalTrafficShapingHandler.java
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* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-
  jar/io/netty/handler/ssl/DelegatingSslContext.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-
  jar/io/netty/handler/ssl/PemEncoded.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-
  jar/io/netty/handler/ssl/PemX509Certificate.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/TrustManagerWrapper.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/flush/FlushConsolidationHandler.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/PemPrivateKey.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/package-info.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/PemValue.java

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* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/OpenSslKeyMaterial.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/OpenSslX509KeyManagerFactory.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-
jar/io/netty/handler/ssl/OpenSslX509TrustManagerWrapper.java
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* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/OpenSslCachingKeyMaterialProvider.java
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* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/ExtendedOpenSslSession.java
* /opt/cola/permits/1171712321_1623127834.9/0/netty-handler-4-1-62-final-sources-jar/io/netty/handler/ssl/OpenSslCachingX509KeyManagerFactory.java
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* /opt/cola/permits/1173557785_1623688681.96/0/msgpack-0-5-6-gem/data-tar-gz/ext/msgpack/buffer_class.h
MessagePack[http://msgpack.org] is an efficient binary serialization format. It lets you exchange data among multiple languages like JSON but it's faster and smaller. For example, small integers (like flags or error code) are encoded into a single byte, and typical short strings only require an extra byte in addition to the strings themselves.

If you ever wished to use JSON for convenience (storing an image with metadata) but could not for technical reasons (binary data, size, speed...), MessagePack is a perfect replacement.

```ruby
require 'msgpack'
msg = [1,2,3].to_msgpack  #=> "\x93\x01\x02\x03"
MessagePack.unpack(msg) #=> [1,2,3]
```

Use RubyGems to install:

```
gem install msgpack
```

or build msgpack-ruby and install:

```
bundle
rake
gem install --local pkg/msgpack
```

= Use cases

* Store objects efficiently serialized by msgpack on memcached or Redis
* In fact Redis supports msgpack in EVAL-scripts[http://redis.io/commands/eval]
* Upload data in efficient format from mobile devices such as smartphones
* MessagePack works on iPhone/iPad and Android. See also Objective-C[https://github.com/msgpack/msgpack-objectivec] and Java[https://github.com/msgpack/msgpack-java] implementations
* Design a portable protocol to communicate with embedded devices
* Check also Fluentd[http://fluentd.org/] which is a log collector which uses msgpack for the log format (they say it uses JSON but actually it's msgpack, which is compatible with JSON)
* Exchange objects between software components written in different languages
* You'll need a flexible but efficient format so that components exchange objects while keeping compatibility
= Portability

MessagePack for Ruby should run on x86, ARM, PowerPC, SPARC and other CPU architectures. And it works with MRI (CRuby) and Rubinius. Patches to improve portability is highly welcomed.

= Serializing objects

Use *MessagePack.pack* or *to_msgpack*:

```ruby
require 'msgpack'
msg = MessagePack.pack(obj) # or
msg = obj.to_msgpack
```

== Streaming serialization

Packer provides advanced API to serialize objects in streaming style:

```ruby
# serialize a 2-element array [e1, e2]
pk = MessagePack::Packer.new(io)
pk.write_array_header(2).write(e1).write(e2).flush
```

See [API reference][1] for details.

= Deserializing objects

Use *MessagePack.unpack*:

```ruby
require 'msgpack'
obj = MessagePack.unpack(msg)
```

== Streaming deserialization

Unpacker provides advanced API to deserialize objects in streaming style:

```ruby
# deserialize objects from an IO
u = MessagePack::Unpacker.new(io)
u.each do |obj|
  # ...
end
```

or event-driven style which works well with EventMachine:

```ruby
# event-driven deserialization
```

[1]: http://ruby.msgpack.org/MessagePack/Packer.html
def on_read(data)
    @u ||= MessagePack::Unpacker.new
    @u.feed_each(data) { |obj|
        # ...
    }
end


= Buffer API

MessagePack for Ruby provides a buffer API so that you can read or write data by hand, not via Packer or Unpacker API.

This {MessagePack::Buffer}[http://ruby.msgpack.org/MessagePack/Buffer.html] is backed with a fixed-length shared memory pool which is very fast for small data (<= 4KB), and has zero-copy capability which significantly affects performance to handle large binary data.

= How to build and run tests

Before building msgpack, you need to install bundler and dependencies.

gem install bundler

bundle install

Then, you can run the tasks as follows:

* Build

  bundle exec rake build

* Run tests

  bundle exec rake spec

* Generating docs

  bundle exec rake doc

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1.60 gopcua-opcua 0.2.3

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```xml
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-->

<opc:TypeDictionary
xmlns:opc="http://opcfoundation.org/BinarySchema/
xmlns:xsi=http://www.w3.org/2001/XMLSchema-instance
xmlns:ua="http://opcfoundation.org/UA/
xmlns:tns=http://opcfoundation.org/UA/
DefaultByteOrder="LittleEndian"
TargetNamespace="http://opcfoundation.org/UA/">

<opc:Import Namespace="http://opcfoundation.org/BinarySchema/" />

<opc:StructuredType Name="XmlElement">
<opc:Documentation>An XML element encoded as a UTF-8 string.</opc:Documentation>
<opc:Field Name="Length" TypeName="opc:Int32" />
```
<opc:Field Name="Value" TypeName="opc:Char" LengthField="Length" />
</opc:StructuredType>

<opc:EnumeratedType Name="NodeIdType" LengthInBits="6">
  <opc:Documentation>The possible encodings for a NodeId value.</opc:Documentation>
  <opc:EnumeratedValue Name="TwoByte" Value="0" />
  <opc:EnumeratedValue Name="FourByte" Value="1" />
  <opc:EnumeratedValue Name="Numeric" Value="2" />
  <opc:EnumeratedValue Name="String" Value="3" />
  <opc:EnumeratedValue Name="Guid" Value="4" />
  <opc:EnumeratedValue Name="ByteString" Value="5" />
</opc:EnumeratedType>

<opc:StructuredType Name="TwoByteNodeId">
  <opc:Field Name="Identifier" TypeName="opc:Byte" />
</opc:StructuredType>

<opc:StructuredType Name="FourByteNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:Byte" />
  <opc:Field Name="Identifier" TypeName="opc:UInt16" />
</opc:StructuredType>

<opc:StructuredType Name="NumericNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:UInt16" />
  <opc:Field Name="Identifier" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="StringNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:UInt16" />
  <opc:Field Name="Identifier" TypeName="opc:CharArray" />
</opc:StructuredType>

<opc:StructuredType Name="GuidNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:UInt16" />
  <opc:Field Name="Identifier" TypeName="opc:Guid" />
</opc:StructuredType>

<opc:StructuredType Name="ByteStringNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:UInt16" />
  <opc:Field Name="Identifier" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="NodeId">
  <opc:Documentation>An identifier for a node in a UA server address space.</opc:Documentation>
  <opc:Field Name="NodeIdType" TypeName="ua:NodeIdType" />
  <opc:Field Name="Reserved1" TypeName="opc:Bit" Length="2" />
  <opc:Field Name="TwoByte" Type="ua:TwoByteNodeId" SwitchField="NodeIdType" SwitchValue="0" />
  <opc:Field Name="FourByte" Type="ua:FourByteNodeId" SwitchField="NodeIdType" SwitchValue="1"
<opc:Field Name="VariantType" TypeName="opc:Bit" Length="6" />
<opc:Field Name="ArrayDimensionsSpecified" TypeName="opc:Bit" Length="1" />
<opc:Field Name="ArrayLengthSpecified" TypeName="opc:Bit" Length="1" />
<opc:Field Name="ArrayLength" TypeName="opc:Int32" SwitchField="ArrayLengthSpecified" />
<opc:Field Name="Boolean" TypeName="opc:Boolean" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="1" />
<opc:Field Name="SByte" TypeName="opc:SByte" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="2" />
<opc:Field Name="Byte" TypeName="opc:Byte" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="3" />
<opc:Field Name="Int16" TypeName="opc:Int16" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="4" />
<opc:Field Name="UInt16" TypeName="opc:UInt16" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="5" />
<opc:Field Name="Int32" TypeName="opc:Int32" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="6" />
<opc:Field Name="UInt32" TypeName="opc:UInt32" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="7" />
<opc:Field Name="Int64" TypeName="opc:Int64" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="8" />
<opc:Field Name="UInt64" TypeName="opc:UInt64" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="9" />
<opc:Field Name="Float" TypeName="opc:Float" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="10" />
<opc:Field Name="Double" TypeName="opc:Double" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="11" />
<opc:Field Name="String" TypeName="opc:CharArray" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="12" />
<opc:Field Name="DateTime" TypeName="opc:DateTime" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="13" />
<opc:Field Name="Guid" TypeName="opc:Guid" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="14" />
<opc:Field Name="ByteString" TypeName="opc:ByteString" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="15" />
<opc:Field Name="XmlElement" TypeName="ua:XmlElement" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="16" />
<opc:Field Name="NodeId" TypeName="ua:NodeId" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="17" />
<opc:Field Name="ExpandedNodeId" TypeName="ua:ExpandedNodeId" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="18" />
<opc:Field Name="StatusCode" TypeName="ua:StatusCode" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="19" />
<opc:Field Name="QualifiedName" TypeName="ua:QualifiedName" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="20" />
<opc:Field Name="LocalizedText" TypeName="ua:LocalizedText" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="21" />
<opc:Field Name="ExtensionObject" TypeName="ua:ExtensionObject" LengthField="ArrayLength" SwitchField="VariantType" SwitchValue="22" />
<opc:Field Name="DataValue" TypeName="ua:DataValue" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="23" />
<opc:Field Name="Variant" TypeName="ua:Variant" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="24" />
<opc:Field Name="DiagnosticInfo" TypeName="ua:DiagnosticInfo" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="25" />
<opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" SwitchField="ArrayDimensionsSpecified"
>
<opc:Field Name="ArrayDimensions" TypeName="opc:Int32" LengthField="NoOfArrayDimensions"
SwitchField="ArrayDimensionsSpecified" />
</opc:StructuredType>

<opc:EnumeratedType Name="NamingRuleType" LengthInBits="32">
<opc:EnumeratedValue Name="Mandatory" Value="1" />
<opc:EnumeratedValue Name="Optional" Value="2" />
<opc:EnumeratedValue Name="Constraint" Value="3" />
</opc:EnumeratedType>

<opc:OpaqueType Name="ImageBMP">
<opc:Documentation>An image encoded in BMP format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="ImageGIF">
<opc:Documentation>An image encoded in GIF format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="ImageJPG">
<opc:Documentation>An image encoded in JPEG format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="ImagePNG">
<opc:Documentation>An image encoded in PNG format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="AudioDataType">
<opc:Documentation>An image encoded in PNG format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="BitFieldMaskDataType">
<opc:Documentation>A mask of 32 bits that can be updated individually by using the top 32 bits as a
mask.</opc:Documentation>
</opc:OpaqueType>

<opc:StructuredType Name="KeyValuePair" BaseType="ua:ExtensionObject">
<opc:Field Name="Key" TypeName="ua:QualifiedName" />
<opc:Field Name="Value" TypeName="ua:Variant" />
</opc:StructuredType>
<opc:StructuredType Name="AdditionalParametersType" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfParameters" TypeName="opc:Int32" />
  <opc:Field Name="Parameters" TypeName="tns:KeyValuePair" LengthField="NoOfParameters" />
</opc:StructuredType>

<opc:StructuredType Name="EphemeralKeyType" BaseType="ua:ExtensionObject">
  <opc:Field Name="PublicKey" TypeName="opc:ByteString" />
  <opc:Field Name="Signature" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="EndpointType" BaseType="ua:ExtensionObject">
  <opc:Field Name="EndpointUrl" TypeName="opc:String" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
  <opc:Field Name="SecurityPolicyUri" TypeName="opc:String" />
  <opc:Field Name="TransportProfileUri" TypeName="opc:String" />
</opc:StructuredType>

<opc:EnumeratedType Name="OpenFileMode" LengthInBits="32">
  <opc:EnumeratedValue Name="Read" Value="1" />
  <opc:EnumeratedValue Name="Write" Value="2" />
  <opc:EnumeratedValue Name="EraseExisting" Value="4" />
  <opc:EnumeratedValue Name="Append" Value="8" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="IdentityCriteriaType" LengthInBits="32">
  <opc:EnumeratedValue Name="UserName" Value="1" />
  <opc:EnumeratedValue Name="Thumbprint" Value="2" />
  <opc:EnumeratedValue Name="Role" Value="3" />
  <opc:EnumeratedValue Name="GroupId" Value="4" />
  <opc:EnumeratedValue Name="Anonymous" Value="5" />
  <opc:EnumeratedValue Name="AuthenticatedUser" Value="6" />
</opc:EnumeratedType>

<opc:StructuredType Name="IdentityMappingRuleType" BaseType="ua:ExtensionObject">
  <opc:Field Name="CriteriaType" TypeName="tns:IdentityCriteriaType" />
  <opc:Field Name="Criteria" TypeName="opc:String" />
</opc:StructuredType>

<opc:EnumeratedType Name="TrustListMasks" LengthInBits="32">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="TrustedCertificates" Value="1" />
  <opc:EnumeratedValue Name="TrustedCrls" Value="2" />
  <opc:EnumeratedValue Name="IssuerCertificates" Value="4" />
  <opc:EnumeratedValue Name="IssuerCrls" Value="8" />
  <opc:EnumeratedValue Name="All" Value="15" />
</opc:EnumeratedType>
<opc:StructuredType Name="SimpleTypeDescription" BaseType="tns:DataTypeDescription">
  <opc:Field Name="DataTypeId" TypeName="ua:NodeId" SourceType="tns:DataTypeDescription" />
  <opc:Field Name="Name" TypeName="ua:QualifiedName" SourceType="tns:DataTypeDescription" />
  <opc:Field Name="BaseDataType" TypeName="ua:NodeId" />
  <opc:Field Name="BuiltInType" TypeName="opc:Byte" />
</opc:StructuredType>

<opc:StructuredType Name="UABinaryFileDataType" BaseType="tns:DataTypeSchemaHeader">
  <opc:Field Name="NoOfNamespaces" TypeName="opc:Int32" />
  <opc:Field Name="Namespaces" TypeName="opc:String" LengthField="NoOfNamespaces" />
  <opc:Field Name="NoOfStructureDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="StructureDataTypes" TypeName="tns:StructureDescription" LengthField="NoOfStructureDataTypes" />
  <opc:Field Name="NoOfEnumDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="EnumDataTypes" TypeName="tns:EnumDescription" LengthField="NoOfEnumDataTypes" />
  <opc:Field Name="NoOfSimpleDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="SimpleDataTypes" TypeName="tns:SimpleTypeDescription" LengthField="NoOfSimpleDataTypes" />
  <opc:Field Name="SchemaLocation" TypeName="opc:String" />
  <opc:Field Name="NoOfFileHeader" TypeName="opc:Int32" />
  <opc:Field Name="FileHeader" TypeName="tns:KeyValuePair" LengthField="NoOfFileHeader" />
  <opc:Field Name="Body" TypeName="ua:Variant" />
</opc:StructuredType>

<opc:EnumeratedType Name="PubSubState" LengthInBits="32">
  <opc:EnumeratedValue Name="Disabled" Value="0" />
  <opc:EnumeratedValue Name="Paused" Value="1" />
  <opc:EnumeratedValue Name="Operational" Value="2" />
  <opc:EnumeratedValue Name="Error" Value="3" />
</opc:EnumeratedType>

<opc:StructuredType Name="DataSetMetaDataType" BaseType="tns:DataTypeSchemaHeader">
  <opc:Field Name="NoOfNamespaces" TypeName="opc:Int32" />
  <opc:Field Name="Namespaces" TypeName="opc:String" LengthField="NoOfNamespaces" />
  <opc:Field Name="NoOfStructureDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="StructureDataTypes" TypeName="tns:StructureDescription" LengthField="NoOfStructureDataTypes" />
  <opc:Field Name="NoOfEnumDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="EnumDataTypes" TypeName="tns:EnumDescription" LengthField="NoOfEnumDataTypes" />
  <opc:Field Name="NoOfSimpleDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="SimpleDataTypes" TypeName="tns:SimpleTypeDescription" LengthField="NoOfSimpleDataTypes" />
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" />
  <opc:Field Name="NoOfFields" TypeName="opc:Int32" />
</opc:StructuredType>
<opc:Field Name="Fields" TypeName="tns:FieldMetaData" LengthField="NoOfFields" />
<opc:Field Name="DataSetClassId" TypeName="opc:Guid" />
<opc:Field Name="ConfigurationVersion" TypeName="tns:ConfigurationVersionDataType" />
</opc:StructuredType>

<opc:StructuredType Name="FieldMetaData" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" />
  <opc:Field Name="FieldFlags" TypeName="tns:DataSetFieldFlags" />
  <opc:Field Name="BuiltInType" TypeName="opc:Byte" />
  <opc:Field Name="DataType" TypeName="ua:NodeId" />
  <opc:Field Name="ValueRank" TypeName="opc:Int32" />
  <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
  <opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
  <opc:Field Name="MaxStringLength" TypeName="opc:UInt32" />
  <opc:Field Name="DataSetFieldId" TypeName="opc:Guid" />
  <opc:Field Name="NoOfProperties" TypeName="opc:Int32" />
  <opc:Field Name="Properties" TypeName="tns:KeyValuePair" LengthField="NoOfProperties" />
</opc:StructuredType>

<opc:EnumeratedType Name="DataSetFieldFlags" LengthInBits="16" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="PromotedField" Value="1" />
</opc:EnumeratedType>

<opc:StructuredType Name="ConfigurationVersionDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="MajorVersion" TypeName="opc:UInt32" />
  <opc:Field Name="MinorVersion" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="PublishedDataSetDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="NoOfDataSetFolder" TypeName="opc:Int32" />
  <opc:Field Name="DataSetFolder" TypeName="opc:String" LengthField="NoOfDataSetFolder" />
  <opc:Field Name="DataSetMetaData" TypeName="tns:DataSetMetaDataType" />
  <opc:Field Name="NoOfExtensionFields" TypeName="opc:Int32" />
  <opc:Field Name="ExtensionFields" TypeName="tns:KeyValuePair" LengthField="NoOfExtensionFields" />
  <opc:Field Name="DataSetSource" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="PublishedDataSetSourceDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="PublishedVariableDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="PublishedVariable" TypeName="ua:NodeId" />
  <opc:Field Name="AttributeId" TypeName="opc:UInt32" />
  <opc:Field Name="SamplingIntervalHint" TypeName="opc:Double" />
  <opc:Field Name="DeadbandType" TypeName="opc:UInt32" />
</opc:StructuredType>
<opc:StructuredType Name="DataSetWriterMessageDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="PubSubGroupDataType" BaseType="ua:ExtensionObject">
<opc:Field Name="Name" TypeName="opc:String" />
<opc:Field Name="Enabled" TypeName="opc:Boolean" />
<opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
<opc:Field Name="SecurityGroupId" TypeName="opc:String" />
<opc:Field Name="NoOfSecurityKeyServices" TypeName="opc:Int32" />
<opc:Field Name="SecurityKeyServices" TypeName="tns:EndpointDescription" LengthField="NoOfSecurityKeyServices" />
<opc:Field Name="MaxNetworkMessageSize" TypeName="opc:UInt32" />
<opc:Field Name="NoOfGroupProperties" TypeName="opc:Int32" />
<opc:Field Name="GroupProperties" TypeName="tns:KeyValuePair" LengthField="NoOfGroupProperties" />
<opc:Field Name="WriterGroupId" TypeName="opc:UInt16" />
<opc:Field Name="PublishingInterval" TypeName="opc:Double" />
<opc:Field Name="KeepAliveTime" TypeName="opc:Double" />
<opc:Field Name="Priority" TypeName="opc:Byte" />
<opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
<opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
<opc:Field Name="HeaderLayoutUri" TypeName="opc:String" />
<opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" />
<opc:Field Name="MessageSettings" TypeName="ua:ExtensionObject" />
<opc:Field Name="NoOfDataSetWriters" TypeName="opc:Int32" />
<opc:Field Name="DataSetWriters" TypeName="tns:DataSetWriterDataType" LengthField="NoOfDataSetWriters" />
</opc:StructuredType>

<opc:StructuredType Name="WriterGroupTransportDataType" BaseType="tns:PubSubGroupDataType">
<opc:Field Name="Name" TypeName="opc:String" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="Enabled" TypeName="opc:Boolean" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="SecurityGroupId" TypeName="opc:String" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="NoOfSecurityKeyServices" TypeName="opc:Int32" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="SecurityKeyServices" TypeName="tns:EndpointDescription" LengthField="NoOfSecurityKeyServices" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="MaxNetworkMessageSize" TypeName="opc:UInt32" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="NoOfGroupProperties" TypeName="opc:Int32" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="GroupProperties" TypeName="tns:KeyValuePair" LengthField="NoOfGroupProperties" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="PublishingInterval" TypeName="opc:Double" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="KeepAliveTime" TypeName="opc:Double" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="Priority" TypeName="opc:Byte" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="HeaderLayoutUri" TypeName="opc:String" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="MessageSettings" TypeName="ua:ExtensionObject" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="NoOfDataSetWriters" TypeName="opc:Int32" SourceType="tns:PubSubGroupDataType" />
<opc:Field Name="DataSetWriters" TypeName="tns:DataSetWriterDataType" SourceType="tns:PubSubGroupDataType" LengthField="NoOfDataSetWriters" SourceType="tns:PubSubGroupDataType" />
</opc:StructuredType>
<opc:StructuredType>

<opc:StructuredType Name="PubSubConnectionDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Enabled" TypeName="opc:Boolean" />
  <opc:Field Name="PublisherId" TypeName="ua:Variant" />
  <opc:Field Name="TransportProfileUri" TypeName="opc:String" />
  <opc:Field Name="Address" TypeName="ua:ExtensionObject" />
  <opc:Field Name="NoOfConnectionProperties" TypeName="opc:Int32" />
  <opc:Field Name="ConnectionProperties" TypeName="tns:KeyValuePair" LengthField="NoOfConnectionProperties" />
  <opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="NoOfWriterGroups" TypeName="opc:Int32" />
  <opc:Field Name="WriterGroups" TypeName="tns:WriterGroupDataType" LengthField="NoOfWriterGroups" />
  <opc:Field Name="NoOfReaderGroups" TypeName="opc:Int32" />
  <opc:Field Name="ReaderGroups" TypeName="tns:ReaderGroupDataType" LengthField="NoOfReaderGroups" />
</opc:StructuredType>

<opc:StructuredType Name="ConnectionTransportDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="NetworkAddressDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="NetworkInterface" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="NetworkAddressUrlDataType" BaseType="tns:NetworkAddressDataType">
  <opc:Field Name="NetworkInterface" TypeName="opc:String" SourceType="tns:NetworkAddressDataType" />
  <opc:Field Name="Url" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="ReaderGroupDataType" BaseType="tns:PubSubGroupDataType">
  <opc:Field Name="Name" TypeName="opc:String" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="Enabled" TypeName="opc:Boolean" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="SecurityGroupId" TypeName="opc:String" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="NoOfSecurityKeyServices" TypeName="opc:Int32" />
  <opc:Field Name="SecurityKeyServices" TypeName="tns:EndpointDescription" LengthField="NoOfSecurityKeyServices" />
  <opc:Field Name="MaxNetworkMessageSize" TypeName="opc:UInt32" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="NoOfGroupProperties" TypeName="opc:Int32" />
  <opc:Field Name="GroupProperties" TypeName="tns:KeyValuePair" LengthField="NoOfGroupProperties" />
  <opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="MessageSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="NoOfDataSetReaders" TypeName="opc:Int32" />
  <opc:Field Name="DataSetReaders" TypeName="tns:DataSetReaderDataType" />
</opc:StructuredType>
<opc:StructuredType Name="ReaderGroupTransportDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="ReaderGroupMessageDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="DataSetReaderDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Enabled" TypeName="opc:Boolean" />
  <opc:Field Name="PublisherId" TypeName="ua:Variant" />
  <opc:Field Name="WriterGroupId" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetWriterId" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetMetaData" TypeName="tns:DataSetMetaDataType" />
  <opc:Field Name="DataSetFieldContentMask" TypeName="tns:DataSetFieldContentMask" />
  <opc:Field Name="MessageReceiveTimeout" TypeName="opc:Double" />
  <opc:Field Name="KeyFrameCount" TypeName="opc:UInt32" />
  <opc:Field Name="HeaderLayoutUri" TypeName="opc:String" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
  <opc:Field Name="SecurityGroupId" TypeName="opc:String" />
  <opc:Field Name="NoOfSecurityKeyServices" TypeName="opc:Int32" />
  <opc:Field Name="SecurityKeyServices" TypeName="tns:EndpointDescription" LengthField="NoOfSecurityKeyServices" />
  <opc:Field Name="NoOfDataSetReaderProperties" TypeName="opc:Int32" />
  <opc:Field Name="DataSetReaderProperties" TypeName="tns:KeyValuePair" LengthField="NoOfDataSetReaderProperties" />
  <opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="MessageSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="SubscribedDataSet" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="DataSetReaderTransportDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="DataSetReaderMessageDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="SubscribedDataSetDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="TargetVariablesDataType" BaseType="tns:SubscribedDataSetDataType">
  <opc:Field Name="NoOfTargetVariables" TypeName="opc:Int32" />
  <opc:Field Name="TargetVariables" TypeName="tns:FieldTargetDataType" LengthField="NoOfTargetVariables" />
</opc:StructuredType>
<opc:StructuredType Name="FieldTargetDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="DataSetFieldId" TypeName="opc:Guid" />
  <opc:Field Name="ReceiverIndexRange" TypeName="opc:String" />
  <opc:Field Name="TargetNodeId" TypeName="ua:NodeId" />
  <opc:Field Name="AttributeId" TypeName="opc:UInt32" />
  <opc:Field Name="WriteIndexRange" TypeName="opc:String" />
  <opc:Field Name="overrideValueHandling" TypeName="tns:OverrideValueHandling" />
  <opc:Field Name="overrideValue" TypeName="ua:Variant" />
</opc:StructuredType>

<opc:EnumeratedType Name="overrideValueHandling" LengthInBits="32">
  <opc:EnumeratedValue Name="Disabled" Value="0" />
  <opc:EnumeratedValue Name="LastUsableValue" Value="1" />
  <opc:EnumeratedValue Name="OverrideValue" Value="2" />
</opc:EnumeratedType>

<opc:StructuredType Name="SubscribedDataSetMirrorDataType" BaseType="tns:SubscribedDataSetDataType">
  <opc:Field Name="ParentNodeName" TypeName="opc:String" />
  <opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
  <opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType" LengthField="NoOfRolePermissions" />
</opc:StructuredType>

<opc:StructuredType Name="PubSubConfigurationDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfPublishedDataSets" TypeName="opc:Int32" />
  <opc:Field Name="PublishedDataSets" TypeName="tns:PublishedDataSetDataType" LengthField="NoOfPublishedDataSets" />
  <opc:Field Name="NoOfConnections" TypeName="opc:Int32" />
  <opc:Field Name="Connections" TypeName="tns:PubSubConnectionDataType" LengthField="NoOfConnections" />
  <opc:Field Name="Enabled" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:EnumeratedType Name="DataSetOrderingType" LengthInBits="32">
  <opc:EnumeratedValue Name="Undefined" Value="0" />
  <opc:EnumeratedValue Name="AscendingWriterId" Value="1" />
  <opc:EnumeratedValue Name="AscendingWriterIdSingle" Value="2" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="UadpNetworkMessageContentMask" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="PublisherId" Value="1" />
  <opc:EnumeratedValue Name="GroupHeader" Value="2" />
  <opc:EnumeratedValue Name="WriterGroupId" Value="4" />
  <opc:EnumeratedValue Name="GroupVersion" Value="8" />
  <opc:EnumeratedValue Name="NetworkMessageNumber" Value="16" />
  <opc:EnumeratedValue Name="SequenceNumber" Value="32" />
  <opc:EnumeratedValue Name="PayloadHeader" Value="64" />
</opc:EnumeratedType>
<opc:EnumeratedValue Name="Timestamp" Value="128" />
<opc:EnumeratedValue Name="PicoSeconds" Value="256" />
<opc:EnumeratedValue Name="DataSetClassId" Value="512" />
<opc:EnumeratedValue Name="PromotedFields" Value="1024" />
</opc:EnumeratedType>

<opc:StructuredType Name="UadpWriterGroupMessageDataType" BaseType="tns:WriterGroupMessageDataType">
  <opc:Field Name="GroupVersion" TypeName="opc:UInt32" />
  <opc:Field Name="DataSetOrdering" TypeName="tns:DataSetOrderingType" />
  <opc:Field Name="NetworkMessageContentMask" TypeName="tns:UadpNetworkMessageContentMask" />
  <opc:Field Name="SamplingOffset" TypeName="opc:Double" />
  <opc:Field Name="NoOfPublishingOffset" TypeName="opc:UInt32" />
  <opc:Field Name="PublishingOffset" TypeName="opc:Double" LengthField="NoOfPublishingOffset" />
</opc:StructuredType>

<opc:EnumeratedType Name="UadpDataSetMessageContentMask" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="Timestamp" Value="1" />
  <opc:EnumeratedValue Name="PicoSeconds" Value="2" />
  <opc:EnumeratedValue Name="Status" Value="4" />
  <opc:EnumeratedValue Name="MajorVersion" Value="8" />
  <opc:EnumeratedValue Name="MinorVersion" Value="16" />
  <opc:EnumeratedValue Name="SequenceNumber" Value="32" />
</opc:EnumeratedType>

<opc:StructuredType Name="UadpDataSetWriterMessageDataType" BaseType="tns:DataSetWriterMessageDataType">
  <opc:Field Name="DataSetMessageContentMask" TypeName="tns:UadpDataSetMessageContentMask" />
  <opc:Field Name="ConfiguredSize" TypeName="opc:UInt16" />
  <opc:Field Name="NetworkMessageNumber" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetOffset" TypeName="opc:UInt16" />
</opc:StructuredType>

<opc:StructuredType Name="UadpDataSetReaderMessageDataType" BaseType="tns:DataSetReaderMessageDataType">
  <opc:Field Name="GroupVersion" TypeName="opc:UInt32" />
  <opc:Field Name="NetworkMessageNumber" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetOffset" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetClassId" TypeName="opc:Guid" />
  <opc:Field Name="NetworkMessageContentMask" TypeName="tns:UadpNetworkMessageContentMask" />
  <opc:Field Name="DataSetMessageContentMask" TypeName="tns:UadpDataSetMessageContentMask" />
  <opc:Field Name="PublishingInterval" TypeName="opc:Double" />
  <opc:Field Name="ReceiveOffset" TypeName="opc:Double" />
  <opc:Field Name="ProcessingOffset" TypeName="opc:Double" />
</opc:StructuredType>

<opc:EnumeratedType Name="JsonNetworkMessageContentMask" LengthInBits="32" IsOptionSet="true"
<opc:EnumeratedValue Name="None" Value="0" />
<opc:EnumeratedValue Name="NetworkMessageHeader" Value="1" />
<opc:EnumeratedValue Name="DataSetMessageHeader" Value="2" />
<opc:EnumeratedValue Name="SingleDataSetMessage" Value="4" />
<opc:EnumeratedValue Name="PublisherId" Value="8" />
<opc:EnumeratedValue Name="DataSetClassId" Value="16" />
<opc:EnumeratedValue Name="ReplyTo" Value="32" />
</opc:EnumeratedType>

<opc:StructuredType Name="JsonWriterGroupMessageDataType"
BaseType="tns:WriterGroupMessageDataType">
  <opc:Field Name="NetworkMessageContentMask" TypeName="tns:JsonNetworkMessageContentMask" />
</opc:StructuredType>

<opc:EnumeratedType Name="JsonDataSetMessageContentMask" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="DataSetWriterId" Value="1" />
  <opc:EnumeratedValue Name="MetaDataVersion" Value="2" />
  <opc:EnumeratedValue Name="SequenceNumber" Value="4" />
  <opc:EnumeratedValue Name="Timestamp" Value="8" />
  <opc:EnumeratedValue Name="Status" Value="16" />
</opc:EnumeratedType>

<opc:StructuredType Name="JsonDataSetWriterMessageDataType"
BaseType="tns:DataSetWriterMessageDataType">
  <opc:Field Name="DataSetMessageContentMask" TypeName="tns:JsonDataSetMessageContentMask" />
</opc:StructuredType>

<opc:StructuredType Name="JsonDataSetReaderMessageDataType"
BaseType="tns:DataSetReaderMessageDataType">
  <opc:Field Name="NetworkMessageContentMask" TypeName="tns:JsonNetworkMessageContentMask" />
  <opc:Field Name="DataSetMessageContentMask" TypeName="tns:JsonDataSetMessageContentMask" />
</opc:StructuredType>

<opc:StructuredType Name="DatagramConnectionTransportDataType"
BaseType="tns:ConnectionTransportDataType">
  <opc:Field Name="DiscoveryAddress" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="DatagramWriterGroupTransportDataType"
BaseType="tns:WriterGroupTransportDataType">
  <opc:Field Name="MessageRepeatCount" TypeName="opc:Byte" />
  <opc:Field Name="MessageRepeatDelay" TypeName="opc:Double" />
</opc:StructuredType>

<opc:StructuredType Name="BrokerConnectionTransportDataType"
BaseType="tns:ConnectionTransportDataType">
  <opc:Field Name="ResourceUri" TypeName="opc:String" />
</opc:StructuredType>
<opc:Field Name="AuthenticationProfileUri" TypeName="opc:String" />
</opc:StructuredType>

<opc:EnumeratedType Name="DiagnosticsLevel" LengthInBits="32">
<opc:EnumeratedValue Name="Basic" Value="0" />
<opc:EnumeratedValue Name="Advanced" Value="1" />
<opc:EnumeratedValue Name="Info" Value="2" />
<opc:EnumeratedValue Name="Log" Value="3" />
<opc:EnumeratedValue Name="Debug" Value="4" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="PubSubDiagnosticsCounterClassification" LengthInBits="32">
<opc:EnumeratedValue Name="Information" Value="0" />
</opc:EnumeratedType>
<opc:EnumeratedValue Name="Error" Value="1" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="IdType" LengthInBits="32">
<opc:Documentation>The type of identifier used in a node id.</opc:Documentation>
<opc:EnumeratedValue Name="Numeric" Value="0" />
<opc:EnumeratedValue Name="String" Value="1" />
<opc:EnumeratedValue Name="Guid" Value="2" />
<opc:EnumeratedValue Name="Opaque" Value="3" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="NodeClass" LengthInBits="32">
<opc:Documentation>A mask specifying the class of the node.</opc:Documentation>
<opc:EnumeratedValue Name="Unspecified" Value="0" />
<opc:EnumeratedValue Name="Object" Value="1" />
<opc:EnumeratedValue Name="Variable" Value="2" />
<opc:EnumeratedValue Name="Method" Value="4" />
<opc:EnumeratedValue Name="ObjectType" Value="8" />
<opc:EnumeratedValue Name="VariableType" Value="16" />
<opc:EnumeratedValue Name="ReferenceType" Value="32" />
<opc:EnumeratedValue Name="DataType" Value="64" />
<opc:EnumeratedValue Name="View" Value="128" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="PermissionType" LengthInBits="32" IsOptionSet="true">
<opc:EnumeratedValue Name="None" Value="0" />
<opc:EnumeratedValue Name="Browse" Value="1" />
<opc:EnumeratedValue Name="ReadRolePermissions" Value="2" />
<opc:EnumeratedValue Name="WriteAttribute" Value="4" />
<opc:EnumeratedValue Name="WriteRolePermissions" Value="8" />
<opc:EnumeratedValue Name="WriteHistorizing" Value="16" />
<opc:EnumeratedValue Name="Read" Value="32" />
<opc:EnumeratedValue Name="Write" Value="64" />
<opc:EnumeratedValue Name="ReadHistory" Value="128" />
<opc:EnumeratedValue Name="InsertHistory" Value="256" />
<opc:EnumeratedValue Name="ModifyHistory" Value="512" />
<opc:EnumeratedValue Name="DeleteHistory" Value="1024" />
<opc:EnumeratedValue Name="ReceiveEvents" Value="2048" />
<opc:EnumeratedValue Name="Call" Value="4096" />
<opc:EnumeratedValue Name="AddReference" Value="8192" />
<opc:EnumeratedValue Name="RemoveReference" Value="16384" />
<opc:EnumeratedValue Name="DeleteNode" Value="32768" />
<opc:EnumeratedValue Name="AddNode" Value="65536" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="AccessLevelType" LengthInBits="8" IsOptionSet="true">
<opc:EnumeratedValue Name="None" Value="0" />
<opc:EnumeratedValue Name="CurrentRead" Value="1" />
</opc:EnumeratedType>
<opc:EnumeratedValue Name="CurrentWrite" Value="2" />
<opc:EnumeratedValue Name="HistoryRead" Value="4" />
<opc:EnumeratedValue Name="HistoryWrite" Value="8" />
<opc:EnumeratedValue Name="SemanticChange" Value="16" />
<opc:EnumeratedValue Name="StatusWrite" Value="32" />
<opc:EnumeratedValue Name="TimestampWrite" Value="64" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="AccessLevelExType" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="CurrentRead" Value="1" />
  <opc:EnumeratedValue Name="CurrentWrite" Value="2" />
  <opc:EnumeratedValue Name="HistoryRead" Value="4" />
  <opc:EnumeratedValue Name="HistoryWrite" Value="8" />
  <opc:EnumeratedValue Name="SemanticChange" Value="16" />
  <opc:EnumeratedValue Name="StatusWrite" Value="32" />
  <opc:EnumeratedValue Name="TimestampWrite" Value="64" />
  <opc:EnumeratedValue Name="NonatomicRead" Value="256" />
  <opc:EnumeratedValue Name="NonatomicWrite" Value="512" />
  <opc:EnumeratedValue Name="WriteFullArrayOnly" Value="1024" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="EventNotifierType" LengthInBits="8" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="SubscribeToEvents" Value="1" />
  <opc:EnumeratedValue Name="HistoryRead" Value="4" />
  <opc:EnumeratedValue Name="HistoryWrite" Value="8" />
</opc:EnumeratedType>

<opc:StructuredType Name="RolePermissionType" BaseType="ua:ExtensionObject">
  <opc:Field Name="RoleId" TypeName="ua:NodeId" />
  <opc:Field Name="Permissions" TypeName="tns:PermissionType" />
</opc:StructuredType>

<opc:EnumeratedType Name="StructureType" LengthInBits="32">
  <opc:EnumeratedValue Name="Structure" Value="0" />
  <opc:EnumeratedValue Name="StructureWithOptionalFields" Value="1" />
  <opc:EnumeratedValue Name="Union" Value="2" />
</opc:EnumeratedType>

<opc:StructuredType Name="StructureField" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" />
  <opc:Field Name="DataType" TypeName="ua:NodeId" />
  <opc:Field Name="ValueRank" TypeName="opc:Int32" />
  <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
  <opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
  <opc:Field Name="MaxStringLength" TypeName="opc:UInt32" />
</opc:StructuredType>
<opc:Documentation>Specifies the attributes which belong to object type nodes.</opc:Documentation>
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserRolePermissions" TypeName="opc:RolePermissionType" LengthField="NoOfUserRolePermissions" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType" LengthField="NoOfUserRolePermissions" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="VariableNode" BaseType="tns:InstanceNode">
<opc:Documentation>Specifies the attributes which belong to variable nodes.</opc:Documentation>
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserRolePermissions" TypeName="opc:RolePermissionType" LengthField="NoOfUserRolePermissions" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType" LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>
<opc:StructuredType>

<opc:StructuredType Name="VariableTypeNode" BaseType="tns:TypeNode">
<opc:Documentation>Specifies the attributes which belong to variable type nodes.</opc:Documentation>
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType" LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType" LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
<opc:Field Name="Value" TypeName="ua:Variant" />
<opc:Field Name="DataType" TypeName="ua:NodeId" />
<opc:Field Name="ValueRank" TypeName="opc:Int32" />
<opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
<opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="ReferenceTypeNode" BaseType="tns:TypeNode">
<opc:Documentation>Specifies the attributes which belong to reference type nodes.</opc:Documentation>
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType" LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType" LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
<opc:Field Name="Value" TypeName="ua:Variant" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>
<opc:StructuredType Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType" LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType" LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
<opc:Field Name="DataTypeDefinition" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="ReferenceNode" BaseType="ua:ExtensionObject">
<opc:Documentation>Specifies a reference which belongs to a node. </opc:Documentation>
<opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
<opc:Field Name="IsInverse" TypeName="opc:Boolean" />
<opc:Field Name="TargetId" TypeName="ua:ExpandedNodeId" />
</opc:StructuredType>

<opc:StructuredType Name="Argument" BaseType="ua:ExtensionObject">
<opc:Documentation>An argument for a method. </opc:Documentation>
<opc:Field Name="Name" TypeName="opc:String" />
<opc:Field Name="DataType" TypeName="ua:NodeId" />
<opc:Field Name="ValueRank" TypeName="opc:Int32" />
<opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
<opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" />
</opc:StructuredType>

<opc:StructuredType Name="EnumValueType" BaseType="ua:ExtensionObject">
<opc:Documentation>A mapping between a value of an enumerated type and a name and description. </opc:Documentation>
<opc:Field Name="Value" TypeName="opc:Int64" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" />
</opc:StructuredType>

<opc:StructuredType Name="EnumField" BaseType="tns:EnumValueType">
<opc:Field Name="Value" TypeName="opc:Int64" SourceType="tns:EnumValueType" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:EnumValueType" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:EnumValueType" />
</opc:StructuredType>
<opc:StructuredType Name="OptionSet" BaseType="ua:ExtensionObject">
  <opc:Documentation>This abstract Structured DataType is the base DataType for all DataTypes representing a bit mask.</opc:Documentation>
  <opc:Field Name="Value" TypeName="opc:ByteString" />
  <opc:Field Name="ValidBits" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="Union" BaseType="ua:ExtensionObject">
  <opc:Documentation>This abstract DataType is the base DataType for all union DataTypes.</opc:Documentation>
</opc:StructuredType>

<opc:OpaqueType Name="NormalizedString">
  <opc:Documentation>A string normalized based on the rules in the unicode specification.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="DecimalString">
  <opc:Documentation>An arbitrary numeric value.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="DurationString">
  <opc:Documentation>A period of time formatted as defined in ISO 8601-2000.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="TimeString">
  <opc:Documentation>A time formatted as defined in ISO 8601-2000.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="DateString">
  <opc:Documentation>A date formatted as defined in ISO 8601-2000.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="Duration">
  <opc:Documentation>A period of time measured in milliseconds.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="UtcTime">
  <opc:Documentation>A date/time value specified in Universal Coordinated Time (UTC).</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="LocaleId">
  <opc:Documentation>An identifier for a user locale.</opc:Documentation>
</opc:OpaqueType>

<opc:StructuredType Name="TimeZoneDataType" BaseType="ua:ExtensionObject">
<opc:Field Name="Offset" TypeName="opc:Int16" />
<opc:Field Name="DaylightSavingInOffset" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:OpaqueType Name="Index">
    <opc:Documentation>This primitive data type is a UInt32 that identifies an element of an array.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="IntegerId">
    <opc:Documentation>A numeric identifier for an object.</opc:Documentation>
</opc:OpaqueType>

<opc:EnumeratedType Name="ApplicationType" LengthInBits="32">
    <opc:Documentation>The types of applications.</opc:Documentation>
    <opc:EnumeratedValue Name="Server" Value="0" />
    <opc:EnumeratedValue Name="Client" Value="1" />
    <opc:EnumeratedValue Name="ClientAndServer" Value="2" />
    <opc:EnumeratedValue Name="DiscoveryServer" Value="3" />
</opc:EnumeratedType>

<opc:StructuredType Name="ApplicationDescription" BaseType="ua:ExtensionObject">
    <opc:Documentation>Describes an application and how to find it.</opc:Documentation>
    <opc:Field Name="ApplicationUri" TypeName="opc:String" />
    <opc:Field Name="ProductUri" TypeName="opc:String" />
    <opc:Field Name="ApplicationName" TypeName="ua:LocalizedText" />
    <opc:Field Name="ApplicationType" TypeName="tns:ApplicationType" />
    <opc:Field Name="GatewayServerUri" TypeName="opc:String" />
    <opc:Field Name="DiscoveryProfileUri" TypeName="opc:String" />
    <opc:Field Name="NoOfDiscoveryUrls" TypeName="opc:Int32" />
    <opc:Field Name="DiscoveryUrls" TypeName="opc:String" LengthField="NoOfDiscoveryUrls" />
</opc:StructuredType>

<opc:StructuredType Name="RequestHeader" BaseType="ua:ExtensionObject">
    <opc:Documentation>The header passed with every server request.</opc:Documentation>
    <opc:Field Name="AuthenticationToken" TypeName="ua:NodeId" />
    <opc:Field Name="Timestamp" TypeName="opc:DateTime" />
    <opc:Field Name="RequestHandle" TypeName="opc:UInt32" />
    <opc:Field Name="ReturnDiagnostics" TypeName="opc:UInt32" />
    <opc:Field Name="AuditEntryId" TypeName="opc:String" />
    <opc:Field Name="TimeoutHint" TypeName="opc:UInt32" />
    <opc:Field Name="AdditionalHeader" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="ResponseHeader" BaseType="ua:ExtensionObject">
    <opc:Documentation>The header passed with every server response.</opc:Documentation>
    <opc:Field Name="Timestamp" TypeName="opc:DateTime" />
    <opc:Field Name="RequestHandle" TypeName="opc:UInt32" />
</opc:StructuredType>
<opc:Field Name="ServiceResult" TypeName="ua:StatusCode" />
<opc:Field Name="ServiceDiagnostics" TypeName="ua:DiagnosticInfo" />
<opc:Field Name="NoOfStringTable" TypeName="opc:Int32" />
<opc:Field Name="StringTable" TypeName="opc:String" LengthField="NoOfStringTable" />
<opc:Field Name="AdditionalHeader" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:OpaqueType Name="VersionTime">
</opc:OpaqueType>

<opc:StructuredType Name="ServiceFault" BaseType="ua:ExtensionObject">
<opc:Documentation>The response returned by all services when there is a service level error.</opc:Documentation>
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
</opc:StructuredType>

<opc:StructuredType Name="SessionlessInvokeRequestType" BaseType="ua:ExtensionObject">
<opc:Field Name="NoOfUrisVersion" TypeName="opc:Int32" />
<opc:Field Name="UrisVersion" TypeName="opc:UInt32" LengthField="NoOfUrisVersion" />
<opc:Field Name="NoOfNamespaceUris" TypeName="opc:Int32" />
<opc:Field Name="NamespaceUris" TypeName="opc:String" LengthField="NoOfNamespaceUris" />
<opc:Field Name="NoOfServerUris" TypeName="opc:Int32" />
<opc:Field Name="ServerUris" TypeName="opc:String" LengthField="NoOfServerUris" />
<opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
<opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
<opc:Field Name="ServiceId" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="SessionlessInvokeResponseType" BaseType="ua:ExtensionObject">
<opc:Field Name="NoOfNamespaceUris" TypeName="opc:Int32" />
<opc:Field Name="NamespaceUris" TypeName="opc:String" LengthField="NoOfNamespaceUris" />
<opc:Field Name="NoOfServerUris" TypeName="opc:Int32" />
<opc:Field Name="ServerUris" TypeName="opc:String" LengthField="NoOfServerUris" />
<opc:Field Name="ServiceId" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="FindServersRequest" BaseType="ua:ExtensionObject">
<opc:Documentation>Finds the servers known to the discovery server.</opc:Documentation>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="EndpointUrl" TypeName="opc:String" />
<opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
<opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
<opc:Field Name="NoOfServerUris" TypeName="opc:Int32" />
<opc:Field Name="ServerUris" TypeName="opc:String" LengthField="NoOfServerUris" />
</opc:StructuredType>

<opc:StructuredType Name="FindServersResponse" BaseType="ua:ExtensionObject">
<opc:Documentation>Finds the servers known to the discovery server.</opc:Documentation>
<opc:Field Name="FindServersRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="EndpointUrl" TypeName="opc:String" />
<opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
<opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
<opc:Field Name="NoOfServerUris" TypeName="opc:Int32" />
<opc:Field Name="ServerUris" TypeName="opc:String" LengthField="NoOfServerUris" />
</opc:StructuredType>

<opc:StructuredType Name="FindServersResponse" BaseType="ua:ExtensionObject">
<opc:Documentation>Finds the servers known to the discovery server.</opc:Documentation>
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfServers" TypeName="opc:Int32" />
<opc:Field Name="Servers" TypeName="tns:ApplicationDescription" LengthField="NoOfServers" />
</opc:StructuredType>

<opc:StructuredType Name="ServerOnNetwork" BaseType="ua:ExtensionObject">
  <opc:Field Name="RecordId" TypeName="opc:UInt32" />
  <opc:Field Name="ServerName" TypeName="opc:String" />
  <opc:Field Name="DiscoveryUrl" TypeName="opc:String" />
  <opc:Field Name="NoOfServerCapabilities" TypeName="opc:Int32" />
  <opc:Field Name="ServerCapabilities" TypeName="opc:String" LengthField="NoOfServerCapabilities" />
</opc:StructuredType>

<opc:StructuredType Name="FindServersOnNetworkRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="StartingRecordId" TypeName="opc:UInt32" />
  <opc:Field Name="MaxRecordsToReturn" TypeName="opc:UInt32" />
  <opc:Field Name="NoOfServerCapabilityFilter" TypeName="opc:Int32" />
  <opc:Field Name="ServerCapabilityFilter" TypeName="opc:String" LengthField="NoOfServerCapabilityFilter" />
</opc:StructuredType>

<opc:StructuredType Name="FindServersOnNetworkResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="LastCounterResetTime" TypeName="opc:DateTime" />
  <opc:Field Name="NoOfServers" TypeName="opc:Int32" />
  <opc:Field Name="Servers" TypeName="tns:ServerOnNetwork" LengthField="NoOfServers" />
</opc:StructuredType>

<opc:OpaqueType Name="ApplicationInstanceCertificate">
  <opc:Documentation>A certificate for an instance of an application. </opc:Documentation>
</opc:OpaqueType>

<opc:EnumeratedType Name="MessageSecurityMode" LengthInBits="32">
  <opc:Documentation>The type of security to use on a message. </opc:Documentation>
  <opc:EnumeratedValue Name="Invalid" Value="0" />
  <opc:EnumeratedValue Name="None" Value="1" />
  <opc:EnumeratedValue Name="Sign" Value="2" />
  <opc:EnumeratedValue Name="SignAndEncrypt" Value="3" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="UserTokenType" LengthInBits="32">
  <opc:Documentation>The possible user token types. </opc:Documentation>
  <opc:EnumeratedValue Name="Anonymous" Value="0" />
  <opc:EnumeratedValue Name="UserName" Value="1" />
  <opc:EnumeratedValue Name="Certificate" Value="2" />
  <opc:EnumeratedValue Name="IssuedToken" Value="3" />
</opc:EnumeratedType>
<opc:StructuredType Name="UserTokenPolicy" BaseType="ua:ExtensionObject">
    <opc:Documentation>Describes a user token that can be used with a server.</opc:Documentation>
    <opc:Field Name="PolicyId" TypeName="opc:String" />
    <opc:Field Name="TokenType" TypeName="tns:UserTokenType" />
    <opc:Field Name="IssuedTokenType" TypeName="opc:String" />
    <opc:Field Name="IssuerEndpointUrl" TypeName="opc:String" />
    <opc:Field Name="SecurityPolicyUri" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="EndpointDescription" BaseType="ua:ExtensionObject">
    <opc:Documentation>The description of a endpoint that can be used to access a server.</opc:Documentation>
    <opc:Field Name="EndpointUrl" TypeName="opc:String" />
    <opc:Field Name="Server" TypeName="tns:ApplicationDescription" />
    <opc:Field Name="ServerCertificate" TypeName="opc:ByteString" />
    <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
    <opc:Field Name="SecurityPolicyUri" TypeName="opc:String" />
    <opc:Field Name="NoOfUserIdentityTokens" TypeName="opc:Int32" LengthField="NoOfUserIdentityTokens" />
    <opc:Field Name="UserIdentityTokens" TypeName="tns:UserTokenPolicy"/>
    <opc:Field Name="TransportProfileUri" TypeName="opc:String" />
    <opc:Field Name="SecurityLevel" TypeName="opc:Byte" />
</opc:StructuredType>

<opc:StructuredType Name="GetEndpointsRequest" BaseType="ua:ExtensionObject">
    <opc:Documentation>Gets the endpoints used by the server.</opc:Documentation>
    <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
    <opc:Field Name="EndpointUrl" TypeName="opc:String" />
    <opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
    <opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
    <opc:Field Name="NoOfProfileUris" TypeName="opc:Int32" />
    <opc:Field Name="ProfileUris" TypeName="opc:String" LengthField="NoOfProfileUris" />
</opc:StructuredType>

<opc:StructuredType Name="GetEndpointsResponse" BaseType="ua:ExtensionObject">
    <opc:Documentation>Gets the endpoints used by the server.</opc:Documentation>
    <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
    <opc:Field Name="NoOfEndpoints" TypeName="opc:Int32" />
    <opc:Field Name="Endpoints" TypeName="tns:EndpointDescription" LengthField="NoOfEndpoints" />
</opc:StructuredType>

<opc:StructuredType Name="RegisteredServer" BaseType="ua:ExtensionObject">
    <opc:Documentation>The information required to register a server with a discovery server.</opc:Documentation>
    <opc:Field Name="ServerUri" TypeName="opc:String" />
    <opc:Field Name="ProductUri" TypeName="opc:String" />
    <opc:Field Name="NoOfServerNames" TypeName="opc:Int32" />
    <opc:Field Name="ServerNames" TypeName="tns:LocalizedText" LengthField="NoOfServerNames" />
    <opc:Field Name="ServerType" TypeName="tns:ApplicationType" />
</opc:StructuredType>
<opc:Field Name="GatewayServerUri" TypeName="opc:String" />
<opc:Field Name="NoOfDiscoveryUrls" TypeName="opc:Int32" />
<opc:Field Name="DiscoveryUrls" TypeName="opc:String" LengthField="NoOfDiscoveryUrls" />
<opc:Field Name="SemaphoreFilePath" TypeName="opc:String" />
<opc:Field Name="IsOnline" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="RegisterServerRequest" BaseType="ua:ExtensionObject">
<opc:Documentation>Registers a server with the discovery server.</opc:Documentation>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="Server" TypeName="tns:RegisteredServer" />
</opc:StructuredType>

<opc:StructuredType Name="RegisterServerResponse" BaseType="ua:ExtensionObject">
<opc:Documentation>Registers a server with the discovery server.</opc:Documentation>
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
</opc:StructuredType>

<opc:StructuredType Name="DiscoveryConfiguration" BaseType="ua:ExtensionObject">
<opc:Documentation>A base type for discovery configuration information.</opc:Documentation>
</opc:StructuredType>

<opc:StructuredType Name="MdnsDiscoveryConfiguration" BaseType="tns:DiscoveryConfiguration">
<opc:Documentation>The discovery information needed for mDNS registration.</opc:Documentation>
<opc:Field Name="MdnsServerName" TypeName="opc:String" />
<opc:Field Name="NoOfServerCapabilities" TypeName="opc:Int32" />
<opc:Field Name="ServerCapabilities" TypeName="opc:String" LengthField="NoOfServerCapabilities" />
</opc:StructuredType>

<opc:StructuredType Name="RegisterServer2Request" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="Server" TypeName="tns:RegisteredServer" />
<opc:Field Name="NoOfDiscoveryConfiguration" TypeName="opc:Int32" />
<opc:Field Name="DiscoveryConfiguration" TypeName="ua:ExtensionObject" LengthField="NoOfDiscoveryConfiguration" />
</opc:StructuredType>

<opc:StructuredType Name="RegisterServer2Response" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfConfigurationResults" TypeName="opc:Int32" />
<opc:Field Name="ConfigurationResults" TypeName="ua:StatusCode" LengthField="NoOfConfigurationResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:EnumeratedType Name="SecurityTokenRequestType" LengthInBits="32">
<opc:Documentation>Indicates whether a token is being created or renewed.</opc:Documentation>
</opc:EnumeratedType>
<opc:EnumeratedValue Name="Issue" Value="0" /> 
<opc:EnumeratedValue Name="Renew" Value="1" /> 
</opc:EnumeratedType>

<opc:StructuredType Name="ChannelSecurityToken" BaseType="ua:ExtensionObject">
  <opc:Documentation>The token that identifies a set of keys for an active secure channel.</opc:Documentation>
  <opc:Field Name="ChannelId" TypeName="opc:UInt32" />
  <opc:Field Name="TokenId" TypeName="opc:UInt32" />
  <opc:Field Name="CreatedAt" TypeName="opc:DateTime" />
  <opc:Field Name="RevisedLifetime" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="OpenSecureChannelRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Creates a secure channel with a server.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="ClientProtocolVersion" TypeName="opc:UInt32" />
  <opc:Field Name="RequestType" TypeName="tns:SecurityTokenRequestType" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
  <opc:Field Name="ClientNonce" TypeName="opc:ByteString" />
  <opc:Field Name="RequestedLifetime" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="OpenSecureChannelResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Creates a secure channel with a server.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="ServerProtocolVersion" TypeName="opc:UInt32" />
  <opc:Field Name="SecurityToken" TypeName="tns:ChannelSecurityToken" />
  <opc:Field Name="ServerNonce" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="CloseSecureChannelRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Closes a secure channel.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
</opc:StructuredType>

<opc:StructuredType Name="CloseSecureChannelResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Closes a secure channel.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
</opc:StructuredType>

<opc:StructuredType Name="SignedSoftwareCertificate" BaseType="ua:ExtensionObject">
  <opc:Documentation>A software certificate with a digital signature.</opc:Documentation>
  <opc:Field Name="CertificateData" TypeName="opc:ByteString" />
  <opc:Field Name="Signature" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:OpaqueType Name="SessionAuthenticationToken">
  <opc:Documentation>A unique identifier for a session used to authenticate requests.</opc:Documentation>
</opc:OpaqueType>
<opc:StructuredType Name="SignatureData" BaseType="ua:ExtensionObject">
  <opc:Documentation>A digital signature.</opc:Documentation>
  <opc:Field Name="Algorithm" TypeName="opc:String" />
  <opc:Field Name="Signature" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="CreateSessionRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Creates a new session with the server.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="ClientDescription" TypeName="tns:ApplicationDescription" />
  <opc:Field Name="ServerUri" TypeName="opc:String" />
  <opc:Field Name="EndpointUrl" TypeName="opc:String" />
  <opc:Field Name="SessionName" TypeName="opc:String" />
  <opc:Field Name="ClientNonce" TypeName="opc:ByteString" />
  <opc:Field Name="ClientCertificate" TypeName="opc:ByteString" />
  <opc:Field Name="RequestedSessionTimeout" TypeName="opc:Double" />
  <opc:Field Name="MaxResponseMessageSize" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="CreateSessionResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Creates a new session with the server.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="SessionId" TypeName="ua:NodeId" />
  <opc:Field Name="AuthenticationToken" TypeName="ua:NodeId" />
  <opc:Field Name="RevisedSessionTimeout" TypeName="opc:Double" />
  <opc:Field Name="ServerNonce" TypeName="opc:ByteString" />
  <opc:Field Name="ServerCertificate" TypeName="opc:ByteString" />
  <opc:Field Name="NoOfServerEndpoints" TypeName="opc:Int32" />
  <opc:Field Name="ServerEndpoints" TypeName="tns:EndpointDescription" LengthField="NoOfServerEndpoints" />
  <opc:Field Name="NoOfServerSoftwareCertificates" TypeName="opc:Int32" />
  <opc:Field Name="ServerSoftwareCertificates" TypeName="tns:SignedSoftwareCertificate" LengthField="NoOfServerSoftwareCertificates" />
  <opc:Field Name="ServerSignature" TypeName="tns:SignatureData" />
  <opc:Field Name="MaxRequestMessageSize" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="UserIdentityToken" BaseType="ua:ExtensionObject">
  <opc:Documentation>A base type for a user identity token.</opc:Documentation>
  <opc:Field Name="PolicyId" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="AnonymousIdentityToken" BaseType="tns:UserIdentityToken">
  <opc:Documentation>A token representing an anonymous user.</opc:Documentation>
  <opc:Field Name="PolicyId" TypeName="opc:String" SourceType="tns:UserIdentityToken" />
</opc:StructuredType>
<opc:StructuredType Name="UserNameIdentityToken" BaseType="tns:UserIdentityToken">
    <opc:Documentation>A token representing a user identified by a user name and password.</opc:Documentation>
    <opc:Field Name="PolicyId" TypeName="opc:String" SourceType="tns:UserIdentityToken" />
    <opc:Field Name="UserName" TypeName="opc:String" />
    <opc:Field Name="Password" TypeName="opc:ByteString" />
    <opc:Field Name="EncryptionAlgorithm" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="X509IdentityToken" BaseType="tns:UserIdentityToken">
    <opc:Documentation>A token representing a user identified by an X509 certificate.</opc:Documentation>
    <opc:Field Name="PolicyId" TypeName="opc:String" SourceType="tns:UserIdentityToken" />
    <opc:Field Name="CertificateData" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="IssuedIdentityToken" BaseType="tns:UserIdentityToken">
    <opc:Documentation>A token representing a user identified by a WS-Security XML token.</opc:Documentation>
    <opc:Field Name="PolicyId" TypeName="opc:String" SourceType="tns:UserIdentityToken" />
    <opc:Field Name="TokenData" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:OpaqueType Name="RsaEncryptedSecret" />
</opc:OpaqueType>

<opc:OpaqueType Name="EccEncryptedSecret" />
</opc:OpaqueType>

<opc:StructuredType Name="ActivateSessionRequest" BaseType="ua:ExtensionObject">
    <opc:Documentation>Activates a session with the server.</opc:Documentation>
    <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
    <opc:Field Name="ClientSignature" TypeName="tns:SignatureData" />
    <opc:Field Name="NoOfClientSoftwareCertificates" TypeName="opc:Int32" LengthField="NoOfClientSoftwareCertificates" />
    <opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
    <opc:Field Name="UserIdentityToken" TypeName="ua:ExtensionObject" />
    <opc:Field Name="UserTokenSignature" TypeName="tns:SignatureData" />
</opc:StructuredType>

<opc:StructuredType Name="ActivateSessionResponse" BaseType="ua:ExtensionObject">
    <opc:Documentation>Activates a session with the server.</opc:Documentation>
    <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
    <opc:Field Name="ServerNonce" TypeName="opc:ByteString" />
    <opc:Field Name="NoOfResults" TypeName="opc:Int32" LengthField="NoOfResults" />
</opc:StructuredType>
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="CloseSessionRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Closes a session with the server.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="DeleteSubscriptions" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="CloseSessionResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Closes a session with the server.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
</opc:StructuredType>

<opc:StructuredType Name="CancelRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Cancels an outstanding request.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="RequestHandle" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="CancelResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Cancels an outstanding request.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="CancelCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:EnumeratedType Name="NodeAttributesMask" LengthInBits="32">
  <opc:Documentation>The bits used to specify default attributes for a new node.</opc:Documentation>
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="AccessLevel" Value="1" />
  <opc:EnumeratedValue Name="ArrayDimensions" Value="2" />
  <opc:EnumeratedValue Name="BrowseName" Value="4" />
  <opc:EnumeratedValue Name="ContainsNoLoops" Value="8" />
  <opc:EnumeratedValue Name="DataType" Value="16" />
  <opc:EnumeratedValue Name="Description" Value="32" />
  <opc:EnumeratedValue Name="DisplayName" Value="64" />
  <opc:EnumeratedValue Name="EventNotifier" Value="128" />
  <opc:EnumeratedValue Name="Executable" Value="256" />
  <opc:EnumeratedValue Name="Historizing" Value="512" />
  <opc:EnumeratedValue Name="InverseName" Value="1024" />
  <opc:EnumeratedValue Name="IsAbstract" Value="2048" />
  <opc:EnumeratedValue Name="MinimumSamplingInterval" Value="4096" />
  <opc:EnumeratedValue Name="NodeClass" Value="8192" />
  <opc:EnumeratedValue Name="NodeId" Value="16384" />
  <opc:EnumeratedValue Name="Symmetric" Value="32768" />
  <opc:EnumeratedValue Name="UserAccessLevel" Value="65536" />
  <opc:EnumeratedValue Name="UserExecutable" Value="131072" />
  <opc:EnumeratedValue Name="UserWriteMask" Value="262144" />
</opc:EnumeratedType>
<opc:EnumeratedValue Name="ValueRank" Value="524288"/>
<opc:EnumeratedValue Name="WriteMask" Value="1048576"/>
<opc:EnumeratedValue Name="Value" Value="2097152"/>
<opc:EnumeratedValue Name="DataTypeDefinition" Value="4194304"/>
<opc:EnumeratedValue Name="RolePermissions" Value="8388608"/>
<opc:EnumeratedValue Name="AccessRestrictions" Value="16777216"/>
<opc:EnumeratedValue Name="All" Value="33554431"/>
<opc:EnumeratedValue Name="BaseNode" Value="26501220"/>
<opc:EnumeratedValue Name="Object" Value="26501348"/>
<opc:EnumeratedValue Name="ObjectType" Value="26503268"/>
<opc:EnumeratedValue Name="Variable" Value="26571383"/>
<opc:EnumeratedValue Name="VariableType" Value="28600438"/>
<opc:EnumeratedValue Name="Method" Value="26632548"/>
<opc:EnumeratedValue Name="ReferenceType" Value="26537060"/>
<opc:EnumeratedValue Name="View" Value="26501356"/>
</opc:EnumeratedType>

<opc:StructuredType Name="NodeAttributes" BaseType="ua:ExtensionObject">
<opc:Documentation>The base attributes for all nodes.</opc:Documentation>
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32"/>
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText"/>
<opc:Field Name="Description" TypeName="ua:LocalizedText"/>
<opc:Field Name="WriteMask" TypeName="opc:UInt32"/>
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32"/>
</opc:StructuredType>

<opc:StructuredType Name="ObjectAttributes" BaseType="tns:NodeAttributes">
<opc:Documentation>The attributes for an object node.</opc:Documentation>
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes"/>
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes"/>
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes"/>
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes"/>
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes"/>
<opc:Field Name="EventNotifier" TypeName="opc:Byte"/>
</opc:StructuredType>

<opc:StructuredType Name="VariableAttributes" BaseType="tns:NodeAttributes">
<opc:Documentation>The attributes for a variable node.</opc:Documentation>
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes"/>
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes"/>
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes"/>
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes"/>
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes"/>
<opc:Field Name="Value" TypeName="ua:Variant"/>
<opc:Field Name="DataType" TypeName="ua:NodeId"/>
<opc:Field Name="ValueRank" TypeName="opc:Int32"/>
<opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32"/>
<opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions"/>
<opc:StructuredType Name="AccessLevel" TypeName="opc:Byte" />
<opc:StructuredType Name="UserAccessLevel" TypeName="opc:Byte" />
<opc:StructuredType Name="MinimumSamplingInterval" TypeName="opc:Double" />
<opc:StructuredType Name="Historizing" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="MethodAttributes" BaseType="tns:NodeAttributes">
<opc:Documentation>The attributes for a method node.</opc:Documentation>
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="Executable" TypeName="opc:Boolean" />
<opc:Field Name="UserExecutable" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="ObjectTypeAttributes" BaseType="tns:NodeAttributes">
<opc:Documentation>The attributes for an object type node.</opc:Documentation>
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="VariableTypeAttributes" BaseType="tns:NodeAttributes">
<opc:Documentation>The attributes for a variable type node.</opc:Documentation>
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="Value" TypeName="ua:Variant" />
<opc:Field Name="DataType" TypeName="ua:NodeId" />
<opc:Field Name="ValueRank" TypeName="opc:Int32" />
<opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
<opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="ReferenceTypeAttributes" BaseType="tns:NodeAttributes">
<opc:Documentation>The attributes for a reference type node.</opc:Documentation>
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
</opc:StructuredType>
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
<opc:Field Name="Symmetric" TypeName="opc:Boolean" />
<opc:Field Name="InverseName" TypeName="ua:LocalizedText" />
</opc:StructuredType>

<opc:StructuredType Name="DataTypeAttributes" BaseType="tns:NodeAttributes">
<opc:Documentation>The attributes for a data type node.</opc:Documentation>
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="ViewAttributes" BaseType="tns:NodeAttributes">
<opc:Documentation>The attributes for a view node.</opc:Documentation>
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="ContainsNoLoops" TypeName="opc:Boolean" />
<opc:Field Name="EventNotifier" TypeName="opc:Byte" />
</opc:StructuredType>

<opc:StructuredType Name="GenericAttributeValue" BaseType="ua:ExtensionObject">
<opc:Field Name="AttributeId" TypeName="opc:UInt32" />
<opc:Field Name="Value" TypeName="ua:Variant" />
</opc:StructuredType>

<opc:StructuredType Name="GenericAttributes" BaseType="tns:NodeAttributes">
<opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
<opc:Field Name="NoOfAttributeValues" TypeName="opc:Int32" />
<opc:Field Name="AttributeValues" TypeName="tns:GenericAttributeValue" LengthField="NoOfAttributeValues" />
</opc:StructuredType>

<opc:StructuredType Name="AddNodesItem" BaseType="ua:ExtensionObject">
<opc:Documentation>A request to add a node to the server address space.</opc:Documentation>
<opc:Field Name="ParentNodeId" TypeName="ua:ExpandedNodeId" />
<opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
<opc:Field Name="RequestedNewNodeId" TypeName="ua:ExpandedNodeId" />
</opc:StructuredType>
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" />
<opc:Field Name="NodeAttributes" TypeName="ua:ExtensionObject" />
<opc:Field Name="TypeDefinition" TypeName="ua:ExpandedNodeId" />
</opc:StructuredType>

<opc:StructuredType Name="AddNodesResult" BaseType="ua:ExtensionObject">
<opc:Documentation>A result of an add node operation.</opc:Documentation>
<opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
<opc:Field Name="AddedNodeId" TypeName="ua:NodeId" />
</opc:StructuredType>

<opc:StructuredType Name="AddNodesRequest" BaseType="ua:ExtensionObject">
<opc:Documentation>Adds one or more nodes to the server address space.</opc:Documentation>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="NoOfNodesToAdd" TypeName="opc:Int32" />
<opc:Field Name="NodesToAdd" TypeName="tns:AddNodesItem" LengthField="NoOfNodesToAdd" />
</opc:StructuredType>

<opc:StructuredType Name="AddNodesResponse" BaseType="ua:ExtensionObject">
<opc:Documentation>Adds one or more nodes to the server address space.</opc:Documentation>
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="tns:AddNodesResult" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="AddReferencesItem" BaseType="ua:ExtensionObject">
<opc:Documentation>A request to add a reference to the server address space.</opc:Documentation>
<opc:Field Name="SourceNodeId" TypeName="ua:NodeId" />
<opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
<opc:Field Name="IsForward" TypeName="opc:Boolean" />
<opc:Field Name="TargetServerUri" TypeName="opc:String" />
<opc:Field Name="TargetNodeId" TypeName="ua:ExpandedNodeId" />
<opc:Field Name="TargetNodeClass" TypeName="tns:NodeClass" />
</opc:StructuredType>

<opc:StructuredType Name="AddReferencesRequest" BaseType="ua:ExtensionObject">
<opc:Documentation>Adds one or more references to the server address space.</opc:Documentation>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="NoOfReferencesToAdd" TypeName="opc:Int32" />
<opc:Field Name="ReferencesToAdd" TypeName="tns:AddReferencesItem" LengthField="NoOfReferencesToAdd" />
</opc:StructuredType>

<opc:StructuredType Name="AddReferencesResponse" BaseType="ua:ExtensionObject">
<opc:Documentation>Adds one or more references to the server address space.</opc:Documentation>
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="tns:AddReferencesResult" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>
<opc:Field Name="ViewId" TypeName="ua:NodeId" />
<opc:Field Name="Timestamp" TypeName="opc:DateTime" />
<opc:Field Name="ViewVersion" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="BrowseDescription" BaseType="ua:ExtensionObject">
<opc:Documentation>A request to browse the references from a node. </opc:Documentation>
<opc:Field Name="NodeId" TypeName="ua:NodeId" />
<opc:Field Name="BrowseDirection" TypeName="tns:BrowseDirection" />
<opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
<opc:Field Name="IncludeSubtypes" TypeName="opc:Boolean" />
<opc:Field Name="NodeClassMask" TypeName="opc:UInt32" />
<opc:Field Name="ResultMask" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:EnumeratedType Name="BrowseResultMask" LengthInBits="32">
<opc:Documentation>A bit mask which specifies what should be returned in a browse response. </opc:Documentation>
<opc:EnumeratedValue Name="None" Value="0" />
<opc:EnumeratedValue Name="ReferenceTypeId" Value="1" />
<opc:EnumeratedValue Name="IsForward" Value="2" />
<opc:EnumeratedValue Name="NodeClass" Value="4" />
<opc:EnumeratedValue Name="BrowseName" Value="8" />
<opc:EnumeratedValue Name="DisplayName" Value="16" />
<opc:EnumeratedValue Name="TypeDefinition" Value="32" />
<opc:EnumeratedValue Name="All" Value="63" />
<opc:EnumeratedValue Name="ReferenceTypeInfo" Value="3" />
<opc:EnumeratedValue Name="TargetInfo" Value="60" />
</opc:EnumeratedType>

<opc:StructuredType Name="ReferenceDescription" BaseType="ua:ExtensionObject">
<opc:Documentation>The description of a reference. </opc:Documentation>
<opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
<opc:Field Name="IsForward" TypeName="opc:Boolean" />
<opc:Field Name="NodeId" TypeName="ua:ExpandedNodeId" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" />
<opc:Field Name="TypeDefinition" TypeName="ua:ExpandedNodeId" />
</opc:StructuredType>

<opc:OpaqueType Name="ContinuationPoint">
<opc:Documentation>An identifier for a suspended query or browse operation. </opc:Documentation>
</opc:OpaqueType>

<opc:StructuredType Name="BrowseResult" BaseType="ua:ExtensionObject">
<opc:Documentation>The result of a browse operation. </opc:Documentation>
<opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
</opc:StructuredType>
<opc:Field Name="ContinuationPoint" TypeName="opc:ByteString" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceDescription" LengthField="NoOfReferences" />
</opc:StructuredType>

<opc:StructuredType Name="BrowseRequest" BaseType="ua:ExtensionObject">
<opc:Documentation>Browse the references for one or more nodes from the server address
space.</opc:Documentation>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="View" TypeName="tns:ViewDescription" />
<opc:Field Name="RequestedMaxReferencesPerNode" TypeName="opc:UInt32" />
<opc:Field Name="NoOfNodesToBrowse" TypeName="opc:Int32" />
</opc:StructuredType>

<opc:StructuredType Name="BrowseResponse" BaseType="ua:ExtensionObject">
<opc:Documentation>Browse the references for one or more nodes from the server address
space.</opc:Documentation>
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="tns:BrowseResult" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
</opc:StructuredType>

<opc:StructuredType Name="BrowseNextRequest" BaseType="ua:ExtensionObject">
<opc:Documentation>Continues one or more browse operations.</opc:Documentation>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="ReleaseContinuationPoints" TypeName="opc:Boolean" />
<opc:Field Name="NoOfContinuationPoints" TypeName="opc:Int32" />
</opc:StructuredType>

<opc:StructuredType Name="BrowseNextResponse" BaseType="ua:ExtensionObject">
<opc:Documentation>Continues one or more browse operations.</opc:Documentation>
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="tns:BrowseResult" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
</opc:StructuredType>

<opc:StructuredType Name="RelativePathElement" BaseType="ua:ExtensionObject">
<opc:Documentation>An element in a relative path.</opc:Documentation>
<opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
<opc:Field Name="IsInverse" TypeName="opc:Boolean" />
<opc:Field Name="IncludeSubtypes" TypeName="opc:Boolean" />
</opc:StructuredType>
<opc:Field Name="TargetName" TypeName="ua:QualifiedName" />
</opc:StructuredType>

<opc:StructuredType Name="RelativePath" BaseType="ua:ExtensionObject">
  <opc:Documentation>A relative path constructed from reference types and browse names.</opc:Documentation>
  <opc:Field Name="NoOfElements" TypeName="opc:Int32" />
  <opc:Field Name="Elements" TypeName="tns:RelativePathElement" LengthField="NoOfElements" />
</opc:StructuredType>

<opc:StructuredType Name="BrowsePath" BaseType="ua:ExtensionObject">
  <opc:Documentation>A request to translate a path into a node id.</opc:Documentation>
  <opc:Field Name="StartingNode" TypeName="ua:NodeId" />
  <opc:Field Name="RelativePath" TypeName="tns:RelativePath" />
</opc:StructuredType>

<opc:StructuredType Name="BrowsePathTarget" BaseType="ua:ExtensionObject">
  <opc:Documentation>The target of the translated path.</opc:Documentation>
  <opc:Field Name="TargetId" TypeName="ua:ExpandedNodeId" />
  <opc:Field Name="RemainingPathIndex" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="BrowsePathResult" BaseType="ua:ExtensionObject">
  <opc:Documentation>The result of a translate operation.</opc:Documentation>
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="NoOfTargets" TypeName="opc:Int32" />
  <opc:Field Name="Targets" TypeName="tns:BrowsePathTarget" LengthField="NoOfTargets" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="TranslateBrowsePathsToNodeIdsRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Translates one or more paths in the server address space.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfBrowsePaths" TypeName="opc:Int32" />
  <opc:Field Name="BrowsePaths" TypeName="tns:BrowsePath" LengthField="NoOfBrowsePaths" />
</opc:StructuredType>

<opc:StructuredType Name="TranslateBrowsePathsToNodeIdsResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Translates one or more paths in the server address space.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:BrowsePathResult" LengthField="NoOfResults" />
</opc:StructuredType>

<opc:StructuredType Name="RegisterNodesRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Registers one or more nodes for repeated use within a session.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfNodesToRegister" TypeName="opc:Int32" />
</opc:StructuredType>
<opc:StructuredType Name="RegisterNodesResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Registers one or more nodes for repeated use within a session.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfRegisteredNodeIds" TypeName="opc:Int32" />
  <opc:Field Name="RegisteredNodeIds" TypeName="ua:NodeId" LengthField="NoOfRegisteredNodeIds" />
</opc:StructuredType>

<opc:StructuredType Name="UnregisterNodesRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Unregisters one or more previously registered nodes.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfNodesToUnregister" TypeName="opc:Int32" />
  <opc:Field Name="NodesToUnregister" TypeName="ua:NodeId" LengthField="NoOfNodesToUnregister" />
</opc:StructuredType>

<opc:StructuredType Name="UnregisterNodesResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Unregisters one or more previously registered nodes.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
</opc:StructuredType>

<opc:OpaqueType Name="Counter">
  <opc:Documentation>A monotonically increasing value.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="NumericRange">
  <opc:Documentation>Specifies a range of array indexes.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="Time">
  <opc:Documentation>A time value specified as HH:MM:SS.SSS.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="Date">
  <opc:Documentation>A date value.</opc:Documentation>
</opc:OpaqueType>

<opc:StructuredType Name="EndpointConfiguration" BaseType="ua:ExtensionObject">
  <opc:Field Name="OperationTimeout" TypeName="opc:Int32" />
  <opc:Field Name="UseBinaryEncoding" TypeName="opc:Boolean" />
  <opc:Field Name="MaxStringLength" TypeName="opc:Int32" />
  <opc:Field Name="MaxByteStringLength" TypeName="opc:Int32" />
  <opc:Field Name="MaxArrayLength" TypeName="opc:Int32" />
  <opc:Field Name="MaxMessageSize" TypeName="opc:Int32" />
  <opc:Field Name="MaxBufferSize" TypeName="opc:Int32" />
  <opc:Field Name="ChannelLifetime" TypeName="opc:Int32" />
  <opc:Field Name="SecurityTokenLifetime" TypeName="opc:Int32" />
</opc:StructuredType>
<opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
<opc:Field Name="ContinuationPoint" TypeName="opc:ByteString" />
<opc:Field Name="HistoryData" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryReadDetails" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="ReadEventDetails" BaseType="tns:HistoryReadDetails">
<opc:Field Name="NumValuesPerNode" TypeName="opc:UInt32" />
<opc:Field Name="StartTime" TypeName="opc:DateTime" />
<opc:Field Name="EndTime" TypeName="opc:DateTime" />
<opc:Field Name="Filter" TypeName="tns:EventFilter" />
</opc:StructuredType>

<opc:StructuredType Name="ReadRawModifiedDetails" BaseType="tns:HistoryReadDetails">
<opc:Field Name="IsReadModified" TypeName="opc:Boolean" />
<opc:Field Name="StartTime" TypeName="opc:DateTime" />
<opc:Field Name="EndTime" TypeName="opc:DateTime" />
<opc:Field Name="NumValuesPerNode" TypeName="opc:UInt32" />
<opc:Field Name="ReturnBounds" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="ReadProcessedDetails" BaseType="tns:HistoryReadDetails">
<opc:Field Name="StartTime" TypeName="opc:DateTime" />
<opc:Field Name="EndTime" TypeName="opc:DateTime" />
<opc:Field Name="ProcessingInterval" TypeName="opc:Double" />
<opc:Field Name="NoOfAggregateType" TypeName="opc:UInt32" />
<opc:Field Name="AggregateType" TypeName="ua:NodeId" LengthField="NoOfAggregateType" />
<opc:Field Name="AggregateConfiguration" TypeName="tns:AggregateConfiguration" />
</opc:StructuredType>

<opc:StructuredType Name="ReadAtTimeDetails" BaseType="tns:HistoryReadDetails">
<opc:Field Name="NoOfReqTimes" TypeName="opc:UInt32" />
<opc:Field Name="ReqTimes" TypeName="opc:DateTime" LengthField="NoOfReqTimes" />
<opc:Field Name="UseSimpleBounds" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryData" BaseType="ua:ExtensionObject">
<opc:Field Name="NoOfDataValues" TypeName="opc:UInt32" />
<opc:Field Name="DataValues" TypeName="ua:DataValue" LengthField="NoOfDataValues" />
</opc:StructuredType>

<opc:StructuredType Name="ModificationInfo" BaseType="ua:ExtensionObject">
<opc:Field Name="ModificationTime" TypeName="opc:DateTime" />
<opc:Field Name="UpdateType" TypeName="tns:HistoryUpdateType" />
<opc:Field Name="UserName" TypeName="opc:String" />
</opc:StructuredType>
<opc:StructuredType Name="HistoryModifiedData" BaseType="tns:HistoryData">
  <opc:Field Name="NoOfDataValues" TypeName="opc:Int32" />
  <opc:Field Name="DataValues" TypeName="ua:DataValue" LengthField="NoOfDataValues" />
  <opc:Field Name="NoOfModificationInfos" TypeName="opc:Int32" />
  <opc:Field Name="ModificationInfos" TypeName="tns:ModificationInfo" LengthField="NoOfModificationInfos" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryEvent" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfEvents" TypeName="opc:Int32" />
  <opc:Field Name="Events" TypeName="tns:HistoryEventFieldList" LengthField="NoOfEvents" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryReadRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="HistoryReadDetails" TypeName="ua:ExtensionObject" />
  <opc:Field Name="TimestampsToReturn" TypeName="tns:TimestampsToReturn" />
  <opc:Field Name="ReleaseContinuationPoints" TypeName="opc:Boolean" />
  <opc:Field Name="NoOfNodesToRead" TypeName="opc:Int32" />
  <opc:Field Name="NodesToRead" TypeName="tns:HistoryReadValueId" LengthField="NoOfNodesToRead" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryReadResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:HistoryReadResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="WriteValue" BaseType="ua:ExtensionObject">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" />
  <opc:Field Name="AttributeId" TypeName="opc:UInt32" />
  <opc:Field Name="IndexRange" TypeName="opc:String" />
  <opc:Field Name="Value" TypeName="ua:DataValue" />
</opc:StructuredType>

<opc:StructuredType Name="WriteRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfNodesToWrite" TypeName="opc:Int32" />
  <opc:Field Name="NodesToWrite" TypeName="tns:WriteValue" LengthField="NoOfNodesToWrite" />
</opc:StructuredType>

<opc:StructuredType Name="WriteResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
</opc:StructuredType>
<opc:StructuredType Name="HistoryUpdateDetails" BaseType="ua:ExtensionObject">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" />
</opc:StructuredType>

<opc:EnumeratedType Name="HistoryUpdateType" LengthInBits="32">
  <opc:EnumeratedValue Name="Insert" Value="1" />
  <opc:EnumeratedValue Name="Replace" Value="2" />
  <opc:EnumeratedValue Name="Update" Value="3" />
  <opc:EnumeratedValue Name="Delete" Value="4" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="PerformUpdateType" LengthInBits="32">
  <opc:EnumeratedValue Name="Insert" Value="1" />
  <opc:EnumeratedValue Name="Replace" Value="2" />
  <opc:EnumeratedValue Name="Update" Value="3" />
  <opc:EnumeratedValue Name="Remove" Value="4" />
</opc:EnumeratedType>

<opc:StructuredType Name="UpdateDataDetails" BaseType="tns:HistoryUpdateDetails">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />
  <opc:Field Name="PerformInsertReplace" TypeName="tns:PerformUpdateType" />
  <opc:Field Name="NoOfUpdateValues" TypeName="opc:Int32" />
  <opc:Field Name="UpdateValues" TypeName="tns:DataValue" LengthField="NoOfUpdateValues" />
</opc:StructuredType>

<opc:StructuredType Name="UpdateStructureDataDetails" BaseType="tns:HistoryUpdateDetails">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />
  <opc:Field Name="PerformInsertReplace" TypeName="tns:PerformUpdateType" />
  <opc:Field Name="NoOfUpdateValues" TypeName="opc:Int32" />
  <opc:Field Name="UpdateValues" TypeName="tns:DataValue" LengthField="NoOfUpdateValues" />
</opc:StructuredType>

<opc:StructuredType Name="UpdateEventDetails" BaseType="tns:HistoryUpdateDetails">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />
  <opc:Field Name="PerformInsertReplace" TypeName="tns:PerformUpdateType" />
  <opc:Field Name="Filter" TypeName="tns:EventFilter" />
  <opc:Field Name="NoOfEventData" TypeName="opc:Int32" />
  <opc:Field Name="EventData" TypeName="tns:HistoryEventFieldList" LengthField="NoOfEventData" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteRawModifiedDetails" BaseType="tns:HistoryUpdateDetails">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />
  <opc:Field Name="IsDeleteModified" TypeName="opc:Boolean" />
  <opc:Field Name="StartTime" TypeName="opc:DateTime" />
</opc:StructuredType>
<opc:Field Name="EndTime" TypeName="opc:DateTime" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteAtTimeDetails" BaseType="tns:HistoryUpdateDetails">
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />
<opc:Field Name="NoOfReqTimes" TypeName="opc:Int32" />
<opc:Field Name="ReqTimes" TypeName="opc:DateTime" LengthField="NoOfReqTimes" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteEventDetails" BaseType="tns:HistoryUpdateDetails">
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />
<opc:Field Name="NoOfEventIds" TypeName="opc:Int32" />
<opc:Field Name="EventIds" TypeName="opc:ByteString" LengthField="NoOfEventIds" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryUpdateResult" BaseType="ua:ExtensionObject">
<opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
<opc:Field Name="NoOfOperationResults" TypeName="opc:Int32" />
<opc:Field Name="OperationResults" TypeName="ua:StatusCode" LengthField="NoOfOperationResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryUpdateRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestId" TypeName="tns:RequestHeader" />
<opc:Field Name="NoOfHistoryUpdateDetails" TypeName="opc:Int32" />
<opc:Field Name="HistoryUpdateDetails" TypeName="ua:ExtensionObject" LengthField="NoOfHistoryUpdateDetails" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryUpdateResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="tns:HistoryUpdateResult" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="CallMethodRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="ObjectId" TypeName="ua:NodeId" />
<opc:Field Name="MethodId" TypeName="ua:NodeId" />
<opc:Field Name="NoOfInputArguments" TypeName="opc:Int32" />
<opc:Field Name="InputArguments" TypeName="ua:Variant" LengthField="NoOfInputArguments" />
</opc:StructuredType>

<opc:StructuredType Name="CallMethodResult" BaseType="ua:ExtensionObject">
<opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
<opc:Field Name="NoOfInputArgumentResults" TypeName="opc:Int32" />
</opc:StructuredType>
<opc:Field Name="InputArgumentResults" TypeName="ua:StatusCode" LengthField="NoOfInputArgumentResults" />
<opc:Field Name="NoOfInputArgumentDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="InputArgumentDiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfInputArgumentDiagnosticInfos" />
<opc:Field Name="NoOfOutputArguments" TypeName="opc:Int32" />
<opc:Field Name="OutputArguments" TypeName="ua:Variant" LengthField="NoOfOutputArguments" />
</opc:StructuredType>

<opc:StructuredType Name="CallRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="NoOfMethodsToCall" TypeName="opc:Int32" />
<opc:Field Name="MethodsToCall" TypeName="tns:CallMethodRequest" LengthField="NoOfMethodsToCall" />
</opc:StructuredType>

<opc:StructuredType Name="CallResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="tns:CallMethodResult" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:EnumeratedType Name="MonitoringMode" LengthInBits="32">
<opc:EnumeratedValue Name="Disabled" Value="0" />
<opc:EnumeratedValue Name="Sampling" Value="1" />
<opc:EnumeratedValue Name="Reporting" Value="2" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="DataChangeTrigger" LengthInBits="32">
<opc:EnumeratedValue Name="Status" Value="0" />
<opc:EnumeratedValue Name="StatusValue" Value="1" />
<opc:EnumeratedValue Name="StatusValueTimestamp" Value="2" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="DeadbandType" LengthInBits="32">
<opc:EnumeratedValue Name="None" Value="0" />
<opc:EnumeratedValue Name="Absolute" Value="1" />
<opc:EnumeratedValue Name="Percent" Value="2" />
</opc:EnumeratedType>

<opc:StructuredType Name="MonitoringFilter" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="DataChangeFilter" BaseType="tns:MonitoringFilter">
<opc:Field Name="Trigger" TypeName="tns:DataChangeTrigger" />
<opc:Field Name="DeadbandType" TypeName="opc:UInt32" />
</opc:StructuredType>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
<opc:Field Name="TimestampsToReturn" TypeName="tns:TimestampsToReturn" />
<opc:Field Name="NoOfItemsToModify" TypeName="opc:Int32" />
<opc:Field Name="ItemsToModify" TypeName="tns:MonitoredItemModifyRequest" LengthField="NoOfItemsToModify" />
</opc:StructuredType>

<opc:StructuredType Name="ModifyMonitoredItemsResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="tns:MonitoredItemModifyResult" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="SetMonitoringModeRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
<opc:Field Name="MonitoringMode" TypeName="tns:MonitoringMode" />
<opc:Field Name="NoOfMonitoredItemIds" TypeName="opc:Int32" />
<opc:Field Name="MonitoredItemIds" TypeName="opc:UInt32" LengthField="NoOfMonitoredItemIds" />
</opc:StructuredType>

<opc:StructuredType Name="SetMonitoringModeResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="SetTriggeringRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
<opc:Field Name="TriggeringItemId" TypeName="opc:UInt32" />
<opc:Field Name="NoOfLinksToAdd" TypeName="opc:Int32" />
<opc:Field Name="LinksToAdd" TypeName="opc:UInt32" LengthField="NoOfLinksToAdd" />
<opc:Field Name="NoOfLinksToRemove" TypeName="opc:Int32" />
<opc:Field Name="LinksToRemove" TypeName="opc:UInt32" LengthField="NoOfLinksToRemove" />
</opc:StructuredType>

<opc:StructuredType Name="SetTriggeringResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfAddResults" TypeName="opc:Int32" />
<opc:Field Name="AddResults" TypeName="ua:StatusCode" LengthField="NoOfAddResults" />
<opc:Field Name="NoOfAddDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="AddDiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfAddDiagnosticInfos" />
</opc:StructuredType>
<opc:Field Name="NoOfAddDiagnosticInfos" />
<opc:Field Name="NoOfRemoveResults" TypeName="opc:Int32" />
<opc:Field Name="RemoveResults" TypeName="ua:StatusCode" LengthField="NoOfRemoveResults" />
<opc:Field Name="NoOfRemoveDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="RemoveDiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfRemoveDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteMonitoredItemsRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
<opc:Field Name="NoOfMonitoredItemIds" TypeName="opc:Int32" />
<opc:Field Name="MonitoredItemIds" TypeName="opc:UInt32" LengthField="NoOfMonitoredItemIds" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteMonitoredItemsResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="CreateSubscriptionRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="RequestedPublishingInterval" TypeName="opc:Double" />
<opc:Field Name="RequestedLifetimeCount" TypeName="opc:UInt32" />
<opc:Field Name="RequestedMaxKeepAliveCount" TypeName="opc:UInt32" />
<opc:Field Name="MaxNotificationsPerPublish" TypeName="opc:UInt32" />
<opc:Field Name="PublishingEnabled" TypeName="opc:Boolean" />
<opc:Field Name="Priority" TypeName="opc:Byte" />
</opc:StructuredType>

<opc:StructuredType Name="CreateSubscriptionResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
<opc:Field Name="RevisedPublishingInterval" TypeName="opc:Double" />
<opc:Field Name="RevisedLifetimeCount" TypeName="opc:UInt32" />
<opc:Field Name="RevisedMaxKeepAliveCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="ModifySubscriptionRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
<opc:Field Name="RequestedPublishingInterval" TypeName="opc:Double" />
<opc:Field Name="RequestedLifetimeCount" TypeName="opc:UInt32" />
<opc:Field Name="RequestedMaxKeepAliveCount" TypeName="opc:UInt32" />
<opc:Field Name="MaxNotificationsPerPublish" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="ModifySubscriptionResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
<opc:Field Name="RevisedPublishingInterval" TypeName="opc:Double" />
<opc:Field Name="RevisedLifetimeCount" TypeName="opc:UInt32" />
<opc:Field Name="RevisedMaxKeepAliveCount" TypeName="opc:UInt32" />
</opc:StructuredType>
<opc:Field Name="Priority" TypeName="opc:Byte" />
</opc:StructuredType>

<opc:StructuredType Name="ModifySubscriptionResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="RevisedPublishingInterval" TypeName="opc:Double" />
<opc:Field Name="RevisedLifetimeCount" TypeName="opc:UInt32" />
<opc:Field Name="RevisedMaxKeepAliveCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="SetPublishingModeRequest" BaseType="ua:ExtensionObject">
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="PublishingEnabled" TypeName="opc:Boolean" />
<opc:Field Name="NoOfSubscriptionIds" TypeName="opc:Int32" />
<opc:Field Name="SubscriptionIds" TypeName="opc:UInt32" LengthField="NoOfSubscriptionIds" />
</opc:StructuredType>

<opc:StructuredType Name="SetPublishingModeResponse" BaseType="ua:ExtensionObject">
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="NotificationMessage" BaseType="ua:ExtensionObject">
<opc:Field Name="SequenceNumber" TypeName="opc:UInt32" />
<opc:Field Name="PublishTime" TypeName="opc:DateTime" />
<opc:Field Name="NoOfNotificationData" TypeName="opc:Int32" />
<opc:Field Name="NotificationData" TypeName="ua:ExtensionObject" LengthField="NoOfNotificationData" />
</opc:StructuredType>

<opc:StructuredType Name="NotificationData" BaseType="ua:ExtensionObject">
<opc:Field Name="ClientHandle" TypeName="opc:UInt32" />
<opc:Field Name="Value" TypeName="ua:DataValue" />
</opc:StructuredType>

<opc:StructuredType Name="DataChangeNotification" BaseType="tns:NotificationData">
<opc:Field Name="NoOfMonitoredItems" TypeName="opc:Int32" />
<opc:Field Name="MonitoredItems" TypeName="tns:MonitoredItemNotification" LengthField="NoOfMonitoredItems" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="MonitoredItemNotification" BaseType="ua:ExtensionObject">
<opc:Field Name="ClientHandle" TypeName="opc:UInt32" />
<opc:Field Name="Value" TypeName="ua:DataValue" />
</opc:StructuredType>
<opc:StructuredType Name="EventNotificationList" BaseType="tns:NotificationData">
    <opc:Field Name="NoOfEvents" TypeName="opc:Int32" />
    <opc:Field Name="Events" TypeName="tns:EventFieldList" LengthField="NoOfEvents" />
</opc:StructuredType>

<opc:StructuredType Name="EventFieldList" BaseType="ua:ExtensionObject">
    <opc:Field Name="ClientHandle" TypeName="opc:UInt32" />
    <opc:Field Name="NoOfEventFields" TypeName="opc:Int32" />
    <opc:Field Name="EventFields" TypeName="ua:Variant" LengthField="NoOfEventFields" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryEventFieldList" BaseType="ua:ExtensionObject">
    <opc:Field Name="NoOfEventFields" TypeName="opc:Int32" />
    <opc:Field Name="EventFields" TypeName="ua:Variant" LengthField="NoOfEventFields" />
</opc:StructuredType>

<opc:StructuredType Name="StatusChangeNotification" BaseType="tns:NotificationData">
    <opc:Field Name="Status" TypeName="ua:StatusCode" />
    <opc:Field Name="DiagnosticInfo" TypeName="ua:DiagnosticInfo" />
</opc:StructuredType>

<opc:StructuredType Name="SubscriptionAcknowledgement" BaseType="ua:ExtensionObject">
    <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
    <opc:Field Name="SequenceNumber" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="PublishRequest" BaseType="ua:ExtensionObject">
    <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
    <opc:Field Name="NoOfSubscriptionAcknowledgements" TypeName="opc:Int32" />
    <opc:Field Name="SubscriptionAcknowledgements" TypeName="tns:SubscriptionAcknowledgement" LengthField="NoOfSubscriptionAcknowledgements" />
</opc:StructuredType>

<opc:StructuredType Name="PublishResponse" BaseType="ua:ExtensionObject">
    <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
    <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
    <opc:Field Name="NoOfAvailableSequenceNumbers" TypeName="opc:Int32" />
    <opc:Field Name="AvailableSequenceNumbers" TypeName="opc:UInt32" LengthField="NoOfAvailableSequenceNumbers" />
    <opc:Field Name="MoreNotifications" TypeName="opc:Boolean" />
    <opc:Field Name="NotificationMessage" TypeName="tns:NotificationMessage" />
    <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
    <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
    <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
    <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="RepublishRequest" BaseType="ua:ExtensionObject">
<opc:StructuredType Name="RepublishResponse" BaseType="ua:ExtensionObject">
    <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
    <opc:Field Name="NotificationMessage" TypeName="tns:NotificationMessage" />
</opc:StructuredType>

<opc:StructuredType Name="TransferResult" BaseType="ua:ExtensionObject">
    <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
    <opc:Field Name="NoOfAvailableSequenceNumbers" TypeName="opc:Int32" LengthField="NoOfAvailableSequenceNumbers" />
</opc:StructuredType>

<opc:StructuredType Name="TransferSubscriptionsRequest" BaseType="ua:ExtensionObject">
    <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
    <opc:Field Name="NoOfSubscriptionIds" TypeName="opc:Int32" />
    <opc:Field Name="SubscriptionIds" TypeName="opc:UInt32" LengthField="NoOfSubscriptionIds" />
    <opc:Field Name="SendInitialValues" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="TransferSubscriptionsResponse" BaseType="ua:ExtensionObject">
    <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
    <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
    <opc:Field Name="Results" TypeName="tns:TransferResult" LengthField="NoOfResults" />
    <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
    <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteSubscriptionsRequest" BaseType="ua:ExtensionObject">
    <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
    <opc:Field Name="NoOfSubscriptionIds" TypeName="opc:Int32" />
    <opc:Field Name="SubscriptionIds" TypeName="opc:UInt32" LengthField="NoOfSubscriptionIds" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteSubscriptionsResponse" BaseType="ua:ExtensionObject">
    <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
    <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
    <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
    <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
    <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="BuildInfo" BaseType="ua:ExtensionObject">
    <opc:Field Name="ProductUri" TypeName="opc:String" />
</opc:StructuredType>
<opc:Field Name="MaxMonitoredItemCount" TypeName="opc:UInt32" />
<opc:Field Name="DisabledMonitoredItemCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="ServerDiagnosticsSummaryDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="ServerViewCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentSessionCount" TypeName="opc:UInt32" />
  <opc:Field Name="CumulatedSessionCount" TypeName="opc:UInt32" />
  <opc:Field Name="SecurityRejectedSessionCount" TypeName="opc:UInt32" />
  <opc:Field Name="RejectedSessionCount" TypeName="opc:UInt32" />
  <opc:Field Name="SessionTimeoutCount" TypeName="opc:UInt32" />
  <opc:Field Name="SessionAbortCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentSubscriptionCount" TypeName="opc:UInt32" />
  <opc:Field Name="CumulatedSubscriptionCount" TypeName="opc:UInt32" />
  <opc:Field Name="PublishingIntervalCount" TypeName="opc:UInt32" />
  <opc:Field Name="SecurityRejectedRequestsCount" TypeName="opc:UInt32" />
  <opc:Field Name="RejectedRequestsCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="ServerStatusDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="StartTime" TypeName="opc:DateTime" />
  <opc:Field Name="CurrentTime" TypeName="opc:DateTime" />
  <opc:Field Name="State" TypeName="tns:ServerState" />
  <opc:Field Name="BuildInfo" TypeName="tns:BuildInfo" />
  <opc:Field Name="SecondsTillShutdown" TypeName="opc:UInt32" />
  <opc:Field Name="ShutdownReason" TypeName="ua:LocalizedText" />
</opc:StructuredType>

<opc:StructuredType Name="SessionDiagnosticsDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="SessionId" TypeName="ua:NodeId" />
  <opc:Field Name="SessionName" TypeName="opc:String" />
  <opc:Field Name="ClientDescription" TypeName="tns:ApplicationDescription" />
  <opc:Field Name="ServerUri" TypeName="opc:String" />
  <opc:Field Name="EndpointUrl" TypeName="opc:String" />
  <opc:Field Name="NoOfLocaleIds" TypeName="opc:UInt32" />
  <opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
  <opc:Field Name="ActualSessionTimeout" TypeName="opc:Double" />
  <opc:Field Name="MaxResponseMessageSize" TypeName="opc:UInt32" />
  <opc:Field Name="ClientConnectionTime" TypeName="opc:DateTime" />
  <opc:Field Name="ClientLastContactTime" TypeName="opc:DateTime" />
  <opc:Field Name="CurrentSubscriptionsCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentMonitoredItemsCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentPublishRequestsInQueue" TypeName="opc:UInt32" />
  <opc:Field Name="TotalRequestCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="UnauthorizedRequestCount" TypeName="opc:UInt32" />
  <opc:Field Name="ReadCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="HistoryReadCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="WriteCount" TypeName="tns:ServiceCounterDataType" />
</opc:StructuredType>
<opc:StructuredType Name="SessionSecurityDiagnosticsDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="SessionId" TypeName="ua:NodeId" />
  <opc:Field Name="ClientUserIdOfSession" TypeName="opc:String" />
  <opc:Field Name="NoOfClientUserIdHistory" TypeName="opc:Int32" />
  <opc:Field Name="ClientUserIdHistory" TypeName="opc:String" LengthField="NoOfClientUserIdHistory" />
  <opc:Field Name="AuthenticationMechanism" TypeName="opc:String" />
  <opc:Field Name="Encoding" TypeName="opc:String" />
  <opc:Field Name="TransportProtocol" TypeName="opc:String" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
  <opc:Field Name="SecurityPolicyUri" TypeName="opc:String" />
  <opc:Field Name="ClientCertificate" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="ServiceCounterDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="TotalCount" TypeName="opc:UInt32" />
  <opc:Field Name="ErrorCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="StatusResult" BaseType="ua:ExtensionObject">
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="DiagnosticInfo" TypeName="ua:DiagnosticInfo" />
</opc:StructuredType>
<opc:StructuredType Name="SubscriptionDiagnosticsDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="SessionId" TypeName="ua:NodeId" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="Priority" TypeName="opc:Byte" />
  <opc:Field Name="PublishingInterval" TypeName="opc:Double" />
  <opc:Field Name="MaxKeepAliveCount" TypeName="opc:UInt32" />
  <opc:Field Name="MaxLifet imeCount" TypeName="opc:UInt32" />
  <opc:Field Name="MaxNotificationsPerPublish" TypeName="opc:UInt32" />
  <opc:Field Name="PublishingEnabled" TypeName="opc:Boolean" />
  <opc:Field Name="ModifyCount" TypeName="opc:UInt32" />
  <opc:Field Name="EnableCount" TypeName="opc:UInt32" />
  <opc:Field Name="DisableCount" TypeName="opc:UInt32" />
  <opc:Field Name="RepublishRequestCount" TypeName="opc:UInt32" />
  <opc:Field Name="RepublishMessageRequestCount" TypeName="opc:UInt32" />
  <opc:Field Name="RepublishMessageCount" TypeName="opc:UInt32" />
  <opc:Field Name="TransferRequestCount" TypeName="opc:UInt32" />
  <opc:Field Name="TransferredToAltClientCount" TypeName="opc:UInt32" />
  <opc:Field Name="TransferredToSameClientCount" TypeName="opc:UInt32" />
  <opc:Field Name="PublishRequestCount" TypeName="opc:UInt32" />
  <opc:Field Name="DataChangeNotificationsCount" TypeName="opc:UInt32" />
  <opc:Field Name="EventNotificationsCount" TypeName="opc:UInt32" />
  <opc:Field Name="NotificationsCount" TypeName="opc:UInt32" />
  <opc:Field Name="LatePublishRequestCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentKeepAliveCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentLifet imeCount" TypeName="opc:UInt32" />
  <opc:Field Name="UnacknowledgedMessageCount" TypeName="opc:UInt32" />
  <opc:Field Name="DiscardedMessageCount" TypeName="opc:UInt32" />
  <opc:Field Name="MonitoredItemCount" TypeName="opc:UInt32" />
  <opc:Field Name="DisabledMonitoredItemCount" TypeName="opc:UInt32" />
  <opc:Field Name="MonitoringQueueOverflowCount" TypeName="opc:UInt32" />
  <opc:Field Name="NextSequenceNumber" TypeName="opc:UInt32" />
  <opc:Field Name="EventQueueOverFlowCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:EnumeratedType Name="ModelChangeStructureVerbMask" LengthInBits="32">
  <opc:EnumeratedValue Name="NodeAdded" Value="1" />
  <opc:EnumeratedValue Name="NodeDeleted" Value="2" />
  <opc:EnumeratedValue Name="ReferenceAdded" Value="4" />
  <opc:EnumeratedValue Name="ReferenceDeleted" Value="8" />
  <opc:EnumeratedValue Name="DataTypeChanged" Value="16" />
</opc:EnumeratedType>

<opc:StructuredType Name="ModelChangeStructureDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Affected" TypeName="ua:NodeId" />
  <opc:Field Name="AffectedType" TypeName="ua:NodeId" />
  <opc:Field Name="Verb" TypeName="opc:Byte" />
</opc:StructuredType>
<opc:StructuredType Name="SemanticChangeStructureDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Affected" TypeName="ua:NodeId" />
  <opc:Field Name="AffectedType" TypeName="ua:NodeId" />
</opc:StructuredType>

<opc:StructuredType Name="Range" BaseType="ua:ExtensionObject">
  <opc:Field Name="Low" TypeName="opc:Double" />
  <opc:Field Name="High" TypeName="opc:Double" />
</opc:StructuredType>

<opc:StructuredType Name="EUInformation" BaseType="ua:ExtensionObject">
  <opc:Field Name="NamespaceUri" TypeName="opc:String" />
  <opc:Field Name="UnitId" TypeName="opc:Int32" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" />
</opc:StructuredType>

<opc:EnumeratedType Name="AxisScaleEnumeration" LengthInBits="32">
  <opc:EnumeratedValue Name="Linear" Value="0" />
  <opc:EnumeratedValue Name="Log" Value="1" />
  <opc:EnumeratedValue Name="Ln" Value="2" />
</opc:EnumeratedType>

<opc:StructuredType Name="ComplexNumberType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Real" TypeName="opc:Float" />
  <opc:Field Name="Imaginary" TypeName="opc:Float" />
</opc:StructuredType>

<opc:StructuredType Name="DoubleComplexNumberType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Real" TypeName="opc:Double" />
  <opc:Field Name="Imaginary" TypeName="opc:Double" />
</opc:StructuredType>

<opc:StructuredType Name="AxisInformation" BaseType="ua:ExtensionObject">
  <opc:Field Name="EngineeringUnits" TypeName="tns:EUInformation" />
  <opc:Field Name="EURange" TypeName="tns:Range" />
  <opc:Field Name="Title" TypeName="ua:LocalizedText" />
  <opc:Field Name="AxisScaleType" TypeName="tns:AxisScaleEnumeration" />
  <opc:Field Name="NoOfAxisSteps" TypeName="opc:Int32" />
  <opc:Field Name="AxisSteps" TypeName="opc:Double" LengthField="NoOfAxisSteps" />
</opc:StructuredType>

<opc:StructuredType Name="XVType" BaseType="ua:ExtensionObject">
  <opc:Field Name="X" TypeName="opc:Double" />
  <opc:Field Name="Value" TypeName="opc:Float" />
</opc:StructuredType>
<opc:StructuredType Name="ProgramDiagnosticDataType" BaseType="ua:ExtensionObject">
    <opc:Field Name="CreateSessionId" TypeName="ua:NodeId" />
    <opc:Field Name="CreateClientName" TypeName="opc:String" />
    <opc:Field Name="InvocationCreationTime" TypeName="opc:DateTime" />
    <opc:Field Name="LastTransitionTime" TypeName="opc:DateTime" />
    <opc:Field Name="LastMethodCall" TypeName="opc:String" />
    <opc:Field Name="LastMethodSessionId" TypeName="ua:NodeId" />
    <opc:Field Name="NoOfLastMethodInputArguments" TypeName="opc:UInt32" LengthField="NoOfLastMethodInputArguments" />
    <opc:Field Name="LastMethodInputArguments" TypeName="tns:Argument" />
    <opc:Field Name="NoOfLastMethodOutputArguments" TypeName="opc:UInt32" LengthField="NoOfLastMethodOutputArguments" />
    <opc:Field Name="LastMethodOutputArguments" TypeName="tns:Argument" />
    <opc:Field Name="LastMethodCallTime" TypeName="opc:DateTime" />
    <opc:Field Name="LastMethodReturnStatus" TypeName="tns:StatusResult" />
</opc:StructuredType>

<opc:StructuredType Name="ProgramDiagnostic2DataType" BaseType="ua:ExtensionObject">
    <opc:Field Name="CreateSessionId" TypeName="ua:NodeId" />
    <opc:Field Name="CreateClientName" TypeName="opc:String" />
    <opc:Field Name="InvocationCreationTime" TypeName="opc:DateTime" />
    <opc:Field Name="LastTransitionTime" TypeName="opc:DateTime" />
    <opc:Field Name="LastMethodCall" TypeName="opc:String" />
    <opc:Field Name="LastMethodSessionId" TypeName="ua:NodeId" />
    <opc:Field Name="NoOfLastMethodInputArguments" TypeName="opc:UInt32" LengthField="NoOfLastMethodInputArguments" />
    <opc:Field Name="LastMethodInputArguments" TypeName="tns:Argument" />
    <opc:Field Name="NoOfLastMethodOutputArguments" TypeName="opc:UInt32" LengthField="NoOfLastMethodOutputArguments" />
    <opc:Field Name="LastMethodOutputArguments" TypeName="tns:Argument" />
    <opc:Field Name="NoOfLastMethodInputValues" TypeName="opc:UInt32" LengthField="NoOfLastMethodInputValues" />
    <opc:Field Name="LastMethodInputValues" TypeName="ua:Variant" />
    <opc:Field Name="NoOfLastMethodOutputValues" TypeName="opc:UInt32" LengthField="NoOfLastMethodOutputValues" />
    <opc:Field Name="LastMethodOutputValues" TypeName="ua:Variant" />
    <opc:Field Name="LastMethodCallTime" TypeName="opc:DateTime" />
    <opc:Field Name="LastMethodReturnStatus" TypeName="tns:StatusResult" />
</opc:StructuredType>

<opc:StructuredType Name="Annotation" BaseType="ua:ExtensionObject">
    <opc:Field Name="Message" TypeName="opc:String" />
    <opc:Field Name="UserName" TypeName="opc:String" />
    <opc:Field Name="AnnotationTime" TypeName="opc:DateTime" />
</opc:StructuredType>

<opc:EnumeratedType Name="ExceptionDeviationFormat" LengthInBits="32">
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* /opt/ws_local/PERMITS_SQL/1023201257_1591382095.57/0/reflection-0-9-12-sources-
jar/com/nu/art/reflection/injector/AnnotatbleInjector.java
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* /opt/ws_local/PERMITS_SQL/1023201257_1591382095.57/0/reflection-0-9-12-sources-jar/com/nu/art/reflection/tools/ART_Tools.java
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1.66 python-linux-procfs 0.6.3-1.el8

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jar/com/thoughtworks/paranamer/DefaultParanamer.java
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fields:
  site: string
  author: root

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Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that companies distributing free software will individually obtain patent licenses, thus in effect transforming the program into proprietary software. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which was designed for utility programs. This license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don’t assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while
preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does
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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

   a) The modified work must itself be a software library.

   b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

   c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

   d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

      (For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based
on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and
therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

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a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

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Version 2.1, February 1999

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We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many
libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

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   b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

   c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany
it with the complete corresponding machine-readable source code, which
must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
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Otherwise, if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or
link a "work that uses the Library" with the Library to produce a
work containing portions of the Library, and distribute that work
under terms of your choice, provided that the terms permit
modification of the work for the customer's own use and reverse
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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

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/*
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1.79 portalocker 2.2.0

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1.80 jackson-xc 2.12.3
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1.81 perl-uri 1.73-3.el8

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1.82 influxdata-wlog 0.0.0-20160411224016-7c63b0a71ef8

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1.83 kernel-tools 4.18.0-348.20.1.el8_5

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```
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That's all there is to it!
/* nicstar.c v0.22 Jawaid Bazyar (bazyar@hypermall.com) */
* nicstar.c, M. Welsh (matt.welsh@cl.cam.ac.uk)

* Hacked October, 1997 by Jawaid Bazyar, Interlink Advertising Services Inc.
* http://www.hypermall.com/
* 10/1/97 - commented out CFG_PHYIE bit - we don't care when the PHY interrupts us (except possibly for removal/insertion of the cable?)
* 10/4/97 - began heavy inline documentation of the code. Corrected typos
* and spelling mistakes.
* 10/5/97 - added code to handle PHY interrupts, disable PHY on loss of link, and correctly re-enable PHY when link is re-established. (put back CFG_PHYIE)
*
* Modified to work with the IDT7721 nicstar -- AAL5 (tested) only.
*
* R. D. Rechenmacher <ron@fnal.gov>, Aug. 6, 1997
*
* Linux driver for the IDT77201 NICStAR PCI ATM controller.
* PHY component is expected to be 155 Mbps S/UNI-Lite or IDT 77155;
* see init_nicstar() for PHY initialization to change this. This driver
* expects the Linux ATM stack to support scatter-gather lists
* (skb->atm.iovcnt != 0) for Rx skb's passed to vcc->push.
*
* Implementing minimal-copy of received data:
* IDT always receives data into a small buffer, then large buffers
* as needed. This means that data must always be copied to create
* the linear buffer needed by most non-ATM protocol stacks (e.g. IP)
* Fix is simple: make large buffers large enough to hold entire
* SDU, and leave <small_buffer_data> bytes empty at the start. Then
* copy small buffer contents to head of large buffer.
* Trick is to avoid fragmenting Linux, due to need for a lot of large
* buffers. This is done by 2 things:
* 1) skb->destructor / skb->atm.recycle_buffer
* combined, allow nicstar_free_rx_skb to be called to
* recycle large data buffers
* 2) skb_clone of received buffers
* See nicstar_free_rx_skb and linearize_buffer for implementation
* details.
*
*
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*
* M. Welsh, 6 July 1996
*
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A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting
Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands
as a successor of a language called ABC. Guido remains Python’s
principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for
National Research Initiatives (CNRI, see http://www.cnri.reston.va.us)
in Reston, Virginia where he released several versions of the
software.

In May 2000, Guido and the Python core development team moved to
BeOpen.com to form the BeOpen PythonLabs team. In October of the same
year, the PythonLabs team moved to Digital Creations (now Zope
Corporation, see http://www.zope.com). In 2001, the Python Software
Foundation (PSF, see http://www.python.org/psf/) was formed, a
non-profit organization created specifically to own Python-related
Intellectual Property. Zope Corporation is a sponsoring member of
the PSF.

All Python releases are Open Source (see http://www.opensource.org for
the Open Source Definition). Historically, most, but not all, Python
releases have also been GPL-compatible; the table below summarizes
the various releases.

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This package contains a modified version of ca-bundle.crt:

cacert.cacert -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#
This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:
It contains the certificates in PEM format and therefore
can be directly used with curl / libcurl / php_curl, or with
an Apache+mod_ssl webserver for SSL client authentication.
Just configure this file as the SSLCACertificateFile.

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A. HISTORY OF THE SOFTWARE
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Python was created in the early 1990s by Guido van Rossum at Stichting
Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands
as a successor of a language called ABC. Guido remains Python's
principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for
National Research Initiatives (CNRI, see http://www.cnri.reston.va.us)
in Reston, Virginia where he released several versions of the
software.

In May 2000, Guido and the Python core development team moved to
BeOpen.com to form the BeOpen PythonLabs team. In October of the same
year, the PythonLabs team moved to Digital Creations (now Zope
Corporation, see http://www.zope.com). In 2001, the Python Software
Foundation (PSF, see http://www.python.org/psf/) was formed, a
non-profit organization created specifically to own Python-related
Intellectual Property. Zope Corporation is a sponsoring member of
the PSF.

All Python releases are Open Source (see http://www.opensource.org for
the Open Source Definition). Historically, most, but not all, Python
releases have also been GPL-compatible; the table below summarizes
the various releases.

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3.1.2  3.1  2010  PSF  yes
3.2  3.1  2010  PSF  yes

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(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

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History
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18. freebrocolo/atom-language-swift (https://github.com/freebrocolo/atom-language-swift)
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Found in path(s):
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/tools/rmi/Proxy.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ast/Visitor.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ast/Member.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/tools/reflect/CannotInvokeException.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/CtNewWrappedConstructor.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/LoaderClassPath.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/tools/rmi/AppletServer.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/CtConstructor.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/tools/rmi/ObjectNotFoundException.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ArrayInit.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/Parser.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/Mnemonic.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/CtNewClass.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/SignatureAttribute.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/convert/TransformNewClass.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/Parser.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/ExceptionTable.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/FieldInfo.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/CodeGen.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/CodeAnalyzer.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/IntQueue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/FieldInfo.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/CodeGen.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/CodeAnalyzer.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/IntQueue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/RuntimeDotClass.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/URLClassPath.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/Bytecode/ProxyObjectInputStream.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/ClassFile.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/CtMethod.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ast/CondExpr.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/scopedpool/ScopedClassPool.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ast/NewExpr.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/tools/reflect/CannotCreateException.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/EnclosingMethodAttribute.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ast/BinExpr.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/SourceFileAttribute.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/util/proxy/SecurityActions.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/ClassMap.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/TypeChecker.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ast/FieldDecl.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/tools/reflect/CodeConverter.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/tools/reflect/ClassMetaobject.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/NestHostAttribute.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/AccessFlag.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ast/ASTree.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/bytecode/StackMap.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/NotFindedException.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/tools/reflect/Metalevel.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ast/Variable.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/tools/reflect/Sample.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1.jar/javassist/compiler/ast/Stmt.java

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jar/javassist/compiler/NoFieldException.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/compiler/SyntaxError.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/compiler/TokenId.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/util/proxy/RuntimeSupport.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/convert/TransformWriteField.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/CtNewConstructor.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/ConstPool.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/MemberValue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/EnumMemberValue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/ByteMemberValue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/ClassMemberValue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/MemberValueVisitor.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/FloatMemberValue.java

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* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/MemberValue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/EnumMemberValue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/ByteMemberValue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/ClassMemberValue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/MemberValueVisitor.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-jar/javassist/bytecode/annotation/FloatMemberValue.java
* /opt/cola/permits/1135872664_1613621010.52/0/javassist-3-27-0-ga-sources-1-
1.90 jline-remote-telnet 3.12.1

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* /opt/cola/permits/1260642975_1643189505.05/0/jline-remote-telnet-3-12-1-sources-
  jar/org/jline/builtins/telnet/TelnetIO.java
* /opt/cola/permits/1260642975_1643189505.05/0/jline-remote-telnet-3-12-1-sources-
  jar/org/jline/builtins/telnet/PortListener.java
* /opt/cola/permits/1260642975_1643189505.05/0/jline-remote-telnet-3-12-1-sources-
  jar/org/jline/builtins/telnet/ConnectionEvent.java
* /opt/cola/permits/1260642975_1643189505.05/0/jline-remote-telnet-3-12-1-sources-
  jar/org/jline/builtins/telnet/ConnectionManager.java
* /opt/cola/permits/1260642975_1643189505.05/0/jline-remote-telnet-3-12-1-sources-
  jar/org/jline/builtins/telnet/ConnectionData.java
* /opt/cola/permits/1260642975_1643189505.05/0/jline-remote-telnet-3-12-1-sources-
  jar/org/jline/builtins/telnet/Connection.java

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  * /opt/cola/permits/1260642975_1643189505.05/0/jline-remote-telnet-3-12-1-sources-jar/org/jline/builtins/telnet/ConnectionListener.java

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[PCRE]

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---------------------------------------------------------------------------

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---------------------------------------------------------------------------

[zlib]

/*/ zlib.h -- interface of the 'zlib' general purpose compression library  
version 1.2.3, July 18th, 2005  

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Jean-loup Gailly    Mark Adler
jloup@gzip.org      madler@alumni.caltech.edu

The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files http://www.ietf.org/rfc/rfc1950.txt (zlib format), rfc1951.txt (deflate format) and rfc1952.txt (gzip format).

*******************************************************************************
[dialyzer]

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[hipe]

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Julian Seward, jseward@acm.org
bzip2/libbzip2 version 1.0.8 of 13 July 2019

1.100 jinja2 3.0.3

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[metadata]
name = Jinja2
version = attr: jinja2.__version__
url = https://palletsprojects.com/p/jinja/
project_urls =
  Donate = https://palletsprojects.com/donate
  Documentation = https://jinja.palletsprojects.com/
  Changes = https://jinja.palletsprojects.com/changes/
  Source Code = https://github.com/pallets/jinja/
  Issue Tracker = https://github.com/pallets/jinja/issues/
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license = BSD-3-Clause
license_files = LICENSE.rst
author = Armin Ronacher
author_email = armin.ronacher@active-4.com
maintainer = Pallets
maintainer_email = contact@palletsprojects.com
description = A very fast and expressive template engine.
long_description = file: README.rst
long_description_content_type = text/x-rst
classifiers =
  Development Status :: 5 - Production/Stable
  Environment :: Web Environment
  Intended Audience :: Developers
  License :: OSI Approved :: BSD License
Operating System :: OS Independent
Programming Language :: Python
Topic :: Internet :: WWW/HTTP :: Dynamic Content
Topic :: Text Processing :: Markup :: HTML

[options]
packages = find:
    package_dir = = src
    include_package_data = true
    python_requires = >= 3.6

[options.packages.find]
where = src

[options.entry_points]
babel.extractors =
jinja2 = jinja2.ext:babel_extract[i18n]

[tool:pytest]
testpaths = tests
filterwarnings =
    error
    ignore:The loop argument:DeprecationWarning:asyncio[.]base_events:542

[coverage:run]
branch = True
source =
jinja2
tests

[coverage:paths]
source =
    src
    */site-packages

[flake8]
select = B, E, F, W, B9, ISC
ignore =
    E203
    E501
    E722
    W503
max-line-length = 80
per-file-ignores =
    src/jinja2/__init__.py: F401

[mypy]
files = src/jinja2
python_version = 3.6
disallow_subclassing_any = True
disallow_untyped_calls = True
disallow_untyped_defs = True
disallow_incomplete_defs = True
no_implicit_optional = True
local_partial_types = True
no_implicit_reexport = True
strict_equality = True
warn_redundant_casts = True
warn_unused_configs = True
warn_unused_ignores = True
warn_return_any = True
warn_unreachable = True

[mypy-jinja2.defaults]
no_implicit_reexport = False

[mypy-markupsafe]
no_implicit_reexport = False

[egg_info]
tag_build =
tag_date = 0

Found in path(s):
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Metadata-Version: 2.1
Name: Jinja2
Version: 3.0.3
Summary: A very fast and expressive template engine.
Home-page: https://palletsprojects.com/p/jinja/
Author: Armin Ronacher
Author-email: armin.ronacher@active-4.com
Maintainer: Pallets
Maintainer-email: contact@palletsprojects.com
License: BSD-3-Clause
Project-URL: Changes, https://jinja.palletsprojects.com/changes/
Project-URL: Twitter, https://twitter.com/PalletsTeam
Project-URL: Chat, https://discord.gg/pallets
Platform: UNKNOWN
Classifier: Development Status :: 5 - Production/ Stable
Jinja

Jinja is a fast, expressive, extensible templating engine. Special placeholders in the template allow writing code similar to Python syntax. Then the template is passed data to render the final document.

It includes:

- Template inheritance and inclusion.
- Define and import macros within templates.
- HTML templates can use autoescaping to prevent XSS from untrusted user input.
- A sandboxed environment can safely render untrusted templates.
- AsyncIO support for generating templates and calling async functions.
- I18N support with Babel.
- Templates are compiled to optimized Python code just-in-time and cached, or can be compiled ahead-of-time.
- Exceptions point to the correct line in templates to make debugging easier.
- Extensible filters, tests, functions, and even syntax.

Jinja's philosophy is that while application logic belongs in Python if possible, it shouldn't make the template designer's job difficult by restricting functionality too much.

Installing

--------

Install and update using `pip`:

.. code-block:: text

    $ pip install -U Jinja2
In A Nutshell
-------------

.. code-block:: jinja

{% extends "base.html" %}
{% block title %}Members{% endblock %}
{% block content %}
<ul>
{% for user in users %}
<li><a href="{{ user.url }}">{{ user.username }}</a></li>
{% endfor %}
</ul>
{% endblock %}

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.. _please donate today: https://palletsprojects.com/donate

Links
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- Documentation: https://jinja.palletsprojects.com/
- Changes: https://jinja.palletsprojects.com/changes/
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- Source Code: https://github.com/pallets/jinja/
- Issue Tracker: https://github.com/pallets/jinja/issues/
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* /opt/cola/permits/1226358395_1636965021.11/0/jinja2-3-0-3-tar-gz/Jinja2-3.0.3/PKG-INFO

1.101 network-manager 1.32.10-4.el8

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1.106 opensaml-profile-impl 3.4.5

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/** Message channel confidentiality flag. */
/**
 * Get whether message channel confidentiality is active.
 *
 * @return Returns the confidentialityActive.
 */
/**
 * Set whether message channel confidentiality is active.
 *
 * @param flag The confidentialityActive to set.
 */

1.107 pyyaml 5.4.1
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1.108 libxrender 0.9.10 7.el8

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 */

For lib/py/compat/win32/stdint.h

// ISO C9x compliant stdint.h for Microsoft Visual Studio
// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124
//
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1.115 libusb 1.0.23-4.el8

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Thanks to the following people for their input:
Mike Belshe (mbelshe@netscape.com)
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--------------------------------------------------------------------------

1.118 tdb 1.45.6
1.118.1 Available under license:

This is the Debian GNU/Linux prepackaged version of the static EXT2 file system consistency checker (e2fsck.static). The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

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#
# This is a Makefile stub which handles the creation of BSD shared libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#
all:: image

real-subdirs:: Makefile
@echo "MKDIR pic"
@mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:$(BSD_LIB)

$(BSD_LIB): $(OBJS)
(cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
$(MV) pic/$(BSD_LIB) .
$(RM) -f ../$(BSD_LIB)
(cd ..; $(LN) $(LINK_BUILD_FLAGS) `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
@echo "INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
@$(INSTALL_PROGRAM) $(BSD_LIB) \


$(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
@-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
$(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
$(RM) -rf pic
$(RM) -f $(BSD_LIB)
$(RM) -f../$(BSD_LIB)

This package was added to the e2fsprogs debian source package by
Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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Index: tdbsa/tdb.c

--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
 */
 /*
 - Unix SMB/CIFS implementation.
 + trivial database library - standalone version
 
 - trivial database library - private includes
 -
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package are flexible, if you give me enough lead time.

Theodore Ts'o
23-June-2007

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Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards
changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

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"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library
creates an executable that is a derivative of the Library (because it
contains portions of the Library), rather than a "work that uses the
library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file
that is part of the Library, the object code for the work may be a
derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
file is unrestricted, regardless of whether it is legally a derivative
work. (Executables containing this object code plus portions of the
Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or
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a) Accompany the work with the complete corresponding
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uses the Library", as object code and/or source code, so that the
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That's all there is to it!
This package was added to the e2fsprogs debian source package by
Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

http://sourceforge.net/projects/e2fsprogs

Upstream Author: Theodore Ts'o <tytso@mit.edu>

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This is the Debian GNU/Linux prepackaged version of the ss
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This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
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1.123 go-grpc-prometheus 1.2.0

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1.129 pika 0.13.0
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1.130 ydk-models-ietf 0.1.5.post2
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```python
from collections import OrderedDict
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class WithDefaultsMode(Enum):
    
    WithDefaultsMode (Enum Class)
    
    Possible modes to report default data.

    .. data:: report_all = 0
    
    All default data is reported.

    .. data:: report_all_tagged = 1
```
All default data is reported.

Any nodes considered to be default data

will contain a ‘default’ XML attribute,

set to ‘true’ or ‘1’.

.. data:: trim = 2

Values are not reported if they contain the default.

.. data:: explicit = 3

Report values that contain the definition of

explicitly set data.

```python
report_all = Enum.YLeaf(0, "report-all")
report_all_tagged = Enum.YLeaf(1, "report-all-tagged")
trim = Enum.YLeaf(2, "trim")
explicit = Enum.YLeaf(3, "explicit")
```

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_netconf_with_defaults.py

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---

This module contains a collection of YANG definitions for configuring diffserv specification implementations.

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```python
from collections import OrderedDict
from ydk.types import Entity, EntityPath, Identity, Enum, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class Direction(Identity):
    """
    This is identity of traffic direction
    """

    _prefix = 'target'
    _revision = '2015-04-07'

        super(Direction, self).__init__(ns, pref, tag)

class Inbound(Direction):
    """
    Direction of traffic coming into the network entry
    """

    _prefix = 'target'
    _revision = '2015-04-07'

        super(Inbound, self).__init__(ns, pref, tag)
```
class Outbound(Direction):
    
    Direction of traffic going out of the network entry

    

    _prefix = 'target'
    _revision = '2015-04-07'

        super(Outbound, self).__init__(ns, pref, tag)

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_diffserv_target.py
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module ietf-yang-smiv2 {
    namespace "urn:ietf:params:xml:ns:yang:ietf-yang-smiv2";
    prefix smiv2;

    organization
        "IETF NETMOD (NETCONF Data Modeling Language) Working Group";
    contact
        "WG Web: <http://tools.ietf.org/wg/netmod/>
            WG List: <mailto:netmod@ietf.org>
            WG Chair: David Kessens
                <mailto:david.kessens@nsn.com>
            WG Chair: Juergen Schoenwaelder
                <mailto:j.schoenwaelder@jacobs-university.de>
            Editor: Juergen Schoenwaelder
                <mailto:j.schoenwaelder@jacobs-university.de>";
    description
        "This module defines YANG extensions that are used to translate
            SMIv2 concepts into YANG."

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revision 2012-06-22 {
  description
    "Initial revision.";
  reference
    "RFC 6643: Translation of Structure of Management Information
    Version 2 (SMIv2) MIB Modules to YANG Modules";
}

extension display-hint {
  argument format;
  description
    "The display-hint statement takes as an argument the DISPLAY-HINT
    assigned to an SMIv2 textual convention.";
  reference "RFC 2579: Textual Conventions for SMIv2";
}

extension max-access {
  argument access;
  description
    "The max-access statement takes as an argument the MAX-ACCESS
    assigned to an SMIv2 object definition.

    The MAX-ACCESS value is SMIv2 specific and has no impact on
    the access provided to YANG objects through protocols such
    as NETCONF.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

extension defval {
  argument value;
  description
    "The defval statement takes as an argument a default value
    defined by an SMIv2 DEFVAL clause. Note that the value is in
    the SMIv2 value space defined by the SMIv2 syntax of the
    corresponding object and not in the YANG value space
    defined by the corresponding YANG data type.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

extension implied {
  argument implied;
}
"If an SMIv2 INDEX object is preceded by the IMPLIED keyword, then the implied statement is present in the YANG module and takes as an argument the name of the IMPLIED index object."
reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)"

extension alias {
  argument descriptor;
  description
  "The alias statement introduces an SMIv2 descriptor. The body of the alias statement is expected to contain an oid statement that provides the numeric OID associated with the descriptor.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)"
}

extension oid {
  argument value;
  description
  "The oid statement takes as an argument the object identifier assigned to an SMIv2 definition. The object identifier value is written in decimal dotted notation.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)"
}

extension subid {
  argument value;
  description
  "The subid statement takes as an argument the last sub-identifier of the object identifier assigned to an SMIv2 definition. The sub-identifier value is a single positive decimal natural number. The subid statement may not be used as a substatement to any top-level node in a YANG document. The subid substatement may be used only as a substatement to a node having a parent node defined with either an smiv2:oid or smiv2:subid substatement.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)"
}

identity object-identity {
  description
  "Base identity for all SMIv2 OBJECT-IDENTITYs."
}

typedef opaque {
  type binary;
  description
  "The Opaque type supports the capability to pass arbitrary ASN.1 syntax. A value is encoded using the ASN.1 Basic Encoding Rules

into a string of octets. This, in turn, is encoded as an OCTET STRING, in effect 'double-wrapping' the original ASN.1 value.

In the value set and its semantics, this type is equivalent to the Opaque type of the SMIv2. This type exists in the SMIv2 solely for backward-compatibility reasons and this is also true for this YANG data type.

reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";

module ietf-netconf-monitoring {
    prefix ncm;

    import ietf-yang-types {
        prefix yang;
    }
    import ietf-inet-types {
        prefix inet;
    }

    organization
        "IETF NETCONF (Network Configuration) Working Group";
    contact
        "WG Web: <http://tools.ietf.org/wg/netconf/>
        WG List: <mailto:netconf@ietf.org>
        WG Chair: Mehmet Ersue <mailto:mehmet.ersue@nsn.com>
        WG Chair: Bert Wijnen <mailto:bertietf@bwijnen.net>
        Editor: Mark Scott <mailto:mark.scott@ericsson.com>
        Editor: Martin Bjorklund <mailto:mbj@tail-f.com>";
    description
        "NETCONF Monitoring Module.
        All elements in this module are read-only."
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revision 2010-10-04 {
  description
    "Initial revision.";
  reference "RFC 6022: YANG Module for NETCONF Monitoring";
}

identity transport {
  description
    "Base identity for NETCONF transport types.";
}

identity netconf-ssh {
  base transport;
  description
    "NETCONF over Secure Shell (SSH).";
  reference
    "RFC 4742: Using the NETCONF Configuration Protocol over Secure SHEll (SSH)";
}

identity netconf-soap-over-beep {
  base transport;
  description
    "NETCONF over Simple Object Access Protocol (SOAP) over Blocks Extensible Exchange Protocol (BEEP).";
  reference
    "RFC 4743: Using NETCONF over the Simple Object Access Protocol (SOAP)";
}

identity netconf-soap-over-https {
  base transport;
  description
    "NETCONF over Simple Object Access Protocol (SOAP) over Hypertext Transfer Protocol Secure (HTTPS).";
}
identity netconf-beep {
    base transport;
    description
        "NETCONF over Blocks Extensible Exchange Protocol (BEEP).";
    reference
        "RFC 4744: Using the NETCONF Protocol over the
        Blocks Extensible Exchange Protocol (BEEP)";
}

identity netconf-tls {
    base transport;
    description
        "NETCONF over Transport Layer Security (TLS).";
    reference "RFC 5539: NETCONF over Transport Layer Security (TLS)";
}

identity schema-format {
    description
        "Base identity for data model schema languages.";
}

identity xsd {
    base schema-format;
    description
        "W3C XML Schema Definition.";
    reference
        "W3C REC REC-xmlschema-1-20041028:
        XML Schema Part 1: Structures";
}

identity yang {
    base schema-format;
    description
        "The YANG data modeling language for NETCONF.";
    reference
        "RFC 6020: YANG - A Data Modeling Language for the
        Network Configuration Protocol (NETCONF)";
}

identity yin {
    base schema-format;
    description
        "The YIN syntax for YANG.";
}
typedef netconf-datastore-type {
    type enumeration {
        enum "running";
        enum "candidate";
        enum "startup";
    }
    description
        "Enumeration of possible NETCONF datastore types.";
    reference "RFC 4741: NETCONF Configuration Protocol";
}

grouping common-counters {
    description
        "Counters that exist both per session, and also globally, accumulated from all sessions.";
    leaf in-rpcs {
        type yang:zero-based-counter32;
        description
            "Number of correct <rpc> messages received.";
    }
    leaf in-bad-rpcs {
        type yang:zero-based-counter32;
        description
            "Number of messages received when an <rpc> message was expected, that were not correct <rpc> messages. This includes XML parse errors and errors on the rpc layer.";
    }
    leaf out-rpc-errors {
        type yang:zero-based-counter32;
    }
}
description
  "Number of <rpc-reply> messages sent that contained an
  <rpc-error> element."
};
}
leaf out-notifications {
  type yang:zero-based-counter32;
  description
    "Number of <notification> messages sent.";
}
}

rpc get-schema {
  description
    "This operation is used to retrieve a schema from the
    NETCONF server.

  Positive Response:
    The NETCONF server returns the requested schema.

  Negative Response:
    If requested schema does not exist, the <error-tag> is
    'invalid-value'.

    If more than one schema matches the requested parameters, the
    <error-tag> is 'operation-failed', and <error-app-tag> is
    'data-not-unique'."
  input {
    leaf identifier {
      type string;
      mandatory true;
      description
        "Identifier for the schema list entry."
    }
    leaf version {
      type string;
      description
        "Version of the schema requested. If this parameter is not
        present, and more than one version of the schema exists on
        the server, a 'data-not-unique' error is returned, as
        described above.";
    }
    leaf format {
      type identityref {
        base schema-format;
      }
      description
        "The data modeling language of the schema. If this
        parameter is not present, and more than one formats of
the schema exists on the server, a 'data-not-unique' error
is returned, as described above.";
}
}
output {
 anyxml data {
   description
   "Contains the schema content.";
 }
}
}
container netconf-state {
 config false;
 description
 "The netconf-state container is the root of the monitoring
data model.";
 container capabilities {
   description
   "Contains the list of NETCONF capabilities supported by the
   server.";
   leaf-list capability {
     type inet:uri;
     description
     "List of NETCONF capabilities supported by the server.";
   }
 }
}
container datastores {
 description
 "Contains the list of NETCONF configuration datastores.";
 list datastore {
   key "name";
   description
   "List of NETCONF configuration datastores supported by
   the NETCONF server and related information.";
   leaf name {
     type netconf-datastore-type;
     description
     "Name of the datastore associated with this list entry.";
   }
 }
 container locks {
   presence
   "This container is present only if the datastore
   is locked.";
   description
   "The NETCONF <lock> and <partial-lock> operations allow
   a client to lock specific resources in a datastore. The
   NETCONF server will prevent changes to the locked
   resources by all sessions except the one that acquired

---

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Monitoring information is provided for each datastore entry including details such as the session that acquired the lock, the type of lock (global or partial) and the list of locked resources. Multiple locks per datastore are supported.

```xml
<grouping lock-info {
  description "Lock related parameters, common to both global and partial locks.";
  leaf locked-by-session {
    type uint32;
    mandatory true;
    description "The session ID of the session that has locked this resource. Both a global lock and a partial lock MUST contain the NETCONF session-id.

    If the lock is held by a session that is not managed by the NETCONF server (e.g., a CLI session), a session id of 0 (zero) is reported.";
    reference "RFC 4741: NETCONF Configuration Protocol";
  }
  leaf locked-time {
    type yang:date-and-time;
    mandatory true;
    description "The date and time of when the resource was locked.";
  }
}

<choice lock-type {
  description "Indicates if a global lock or a set of partial locks are set.";
  container global-lock {
    description "Present if the global lock is set.";
    uses lock-info;
  }
  list partial-lock {
    key "lock-id";
    description "List of partial locks."
    reference "RFC 5717: Partial Lock Remote Procedure Call (RPC) for
```
leaf lock-id {
  type uint32;
  description
    "This is the lock id returned in the <partial-lock>
     response.";
}

uses lock-info;

leaf-list select {
  type yang:xpath1.0;
  min-elements 1;
  description
    "The xpath expression that was used to request
     the lock. The select expression indicates the
     original intended scope of the lock.";
}

leaf-list locked-node {
  type instance-identifier;
  description
    "The list of instance-identifiers (i.e., the
     locked nodes).

    The scope of the partial lock is defined by the list
    of locked nodes.";
}

container schemas {
  description
    "Contains the list of data model schemas supported by the
     server.";
  list schema {
    key "identifier version format";
    description
      "List of data model schemas supported by the server.";
    leaf identifier {
      type string;
      description
        "Identifier to uniquely reference the schema. The
         identifier is used in the <get-schema> operation and may
         be used for other purposes such as file retrieval.

         For modeling languages that support or require a data
         model name (e.g., YANG module name) the identifier MUST
         match that name. For YANG data models, the identifier is";
the name of the module or submodule. In other cases, an identifier such as a filename MAY be used instead.

}
leaf version {
    type string;
    description
    "Version of the schema supported. Multiple versions MAY be supported simultaneously by a NETCONF server. Each version MUST be reported individually in the schema list, i.e., with same identifier, possibly different location, but different version.

For YANG data models, version is the value of the most recent YANG 'revision' statement in the module or submodule, or the empty string if no 'revision' statement is present."

}
leaf format {
    type identityref {
        base schema-format;
    }
    description
    "The data modeling language the schema is written in (currently xsd, yang, yin, rng, or rnc). For YANG data models, 'yang' format MUST be supported and 'yin' format MAY also be provided."

}
leaf namespace {
    type inet:uri;
    mandatory true;
    description
    "The XML namespace defined by the data model.

For YANG data models, this is the module's namespace. If the list entry describes a submodule, this field contains the namespace of the module to which the submodule belongs."

}
leaf-list location {
    type union {
        type enumeration {
            enum "NETCONF";
        }
        type inet:uri;
    }
    description
    "One or more locations from which the schema can be retrieved. This list SHOULD contain at least one
entry per schema.

A schema entry may be located on a remote file system (e.g., reference to file system for ftp retrieval) or retrieved directly from a server supporting the <get-schema> operation (denoted by the value 'NETCONF').

} }
}
}

container sessions {
  description
  "The sessions container includes session-specific data for NETCONF management sessions. The session list MUST include all currently active NETCONF sessions."

  list session {
    key "session-id";
    description
    "All NETCONF sessions managed by the NETCONF server MUST be reported in this list."

    leaf session-id {
      type uint32 {
        range "1..max";
      }
      description
      "Unique identifier for the session. This value is the NETCONF session identifier, as defined in RFC 4741."
      reference "RFC 4741: NETCONF Configuration Protocol"
    }
    leaf transport {
      type identityref {
        base transport;
      }
      mandatory true;
      description
      "Identifies the transport for each session, e.g., 'netconf-ssh', 'netconf-soap', etc.";
    }
    leaf username {
      type string;
      mandatory true;
      description
      "The username is the client identity that was authenticated by the NETCONF transport protocol. The algorithm used to derive the username is NETCONF transport protocol specific and in addition specific to the authentication mechanism used by the NETCONF transport protocol."
    }
    leaf source-host {
type inet:host;

description
"Host identifier of the NETCONF client. The value
returned is implementation specific (e.g., hostname,
IPv4 address, IPv6 address);"
}
leaf login-time {

type yang:date-and-time;

mandatory true;

description
"Time at the server at which the session was established.";
}
uses common-counters {

description
"Per-session counters. Zero based with following reset
behaviour:
- at start of a session
- when max value is reached";
}
}
}
}
container statistics {

description
"Statistical data pertaining to the NETCONF server.";
leaf netconf-start-time {

type yang:date-and-time;

description
"Date and time at which the management subsystem was
started.";
}
leaf in-bad-hellos {

type yang:zero-based-counter32;

description
"Number of sessions silently dropped because an
invalid <hello> message was received. This includes <hello>
messages with a 'session-id' attribute, bad namespace, and
bad capability declarations.";
}
leaf in-sessions {

type yang:zero-based-counter32;

description
"Number of sessions started. This counter is incremented
when a <hello> message with a <session-id> is sent.

'in-sessions' - 'in-bad-hellos' =
'number of correctly started netconf sessions'";
}
leaf dropped-sessions{
type yang:zero-based-counter32;
description
"Number of sessions that were abnormally terminated, e.g.,
due to idle timeout or transport close. This counter is not
incremented when a session is properly closed by a
<close-session> operation, or killed by a <kill-session>
operation."
}
}
uses common-counters {

description
"Global counters, accumulated from all sessions.
Zero based with following reset behaviour:
- re-initialization of NETCONF server
- when max value is reached"
}
}

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2.tar-gz/ydk-models-ietf-
0.1.5.post2/ydk/models/ietf/_yang/ietf-netconf-monitoring.yang
No license file was found, but licenses were detected in source scan.

=== ietf_yang_smiv2

This module defines YANG extensions that are used to translate
SMIv2 concepts into YANG.

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This version of this YANG module is part of RFC 6643; see
the RFC itself for full legal notices.

===
from collections import OrderedDict

from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits,
Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class ObjectIdentity(Identity):
    """
    Base identity for all SMIv2 OBJECT-IDENTITYs.
    """

    _prefix = 'smiv2'
    _revision = '2012-06-22'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:ietf-yang-smiv2", pref="ietf-yang-smiv2", tag="ietf-yang-
smiv2:object-identity"):  
        super(ObjectIdentity, self).__init__(ns, pref, tag)

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_yang_smiv2.py
No license file was found, but licenses were detected in source scan.

"""

This module contains monitoring information about the YANG modules and submodules that are used within a YANG-based server.
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This version of this YANG module is part of RFC 7895; see the RFC itself for full legal notices.

"""

from collections import OrderedDict
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class ModulesState(Entity):
    """
    Contains YANG module monitoring information.
    
    .. attribute:: module_set_id

    Contains a server-specific identifier representing the current set of modules and submodules. The server MUST
    change the value of this leaf if the information represented by the 'module' list instances has changed
    
    **type**: str
    **mandatory**: True

    .. attribute:: module

    Each entry represents one revision of one module currently supported by the server
    
    **type**: list of :py:class:`Module <ydk.models.ietf.ietf_yang_library.ModulesState.Module>`
    
    """

    _prefix = 'yanglib'
    _revision = '2016-06-21'

def __init__(self):
    super(ModulesState, self).__init__()
    self._top_entity = None

    self.yang_name = "modules-state"
    self.yang_parent_name = "ietf-yang-library"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([("module", ("module", ModulesState.Module))])
    self._leafs = OrderedDict(["module_set_id", ("module_set_id", YLeaf(YType.str, 'module-set-id'), ['str'])),
    ])
    self.module_set_id = None

    self.module = YList(self)
    self._segment_path = lambda: "ietf-yang-library:modules-state"
    self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(ModulesState, ['module_set_id'], name, value)

class Module(Entity):
    
    Each entry represents one revision of one module
currently supported by the server.

    .. attribute:: name  (key)

    The YANG module or submodule name
    **type**: str

    **pattern**: [a-zA-Z0-9_][a-zA-Z0-9\-\_\-\_.]*

    .. attribute:: revision  (key)

    The YANG module or submodule revision date. A zero-length string is used if no revision statement is present
    in the YANG module or submodule
    **type**: union of the below types:

    **type**: str

    **pattern**: \d{4}-\d{2}-\d{2}

    **type**: str

    **length**: 0

    .. attribute:: schema

    Contains a URL that represents the YANG schema resource for this module or submodule. This leaf will only
    be present if there is a URL available for retrieval of the schema for this entry
    **type**: str

    .. attribute:: namespace

    The XML namespace identifier for this module
    **type**: str

    **mandatory**: True

    .. attribute:: feature

    List of YANG feature names from this module that are supported by the server, regardless of whether they are
deefined in the module or any included submodule
.. attribute:: deviation

List of YANG deviation module names and revisions used by this server to modify the conformance of the module associated with this entry. Note that the same module can be used for deviations for multiple modules, so the same entry MAY appear within multiple 'module' entries. The deviation module MUST be present in the 'module' list, with the same name and revision values. The 'conformance-type' value will be 'implement' for the deviation module

.. attribute:: conformance_type

Indicates the type of conformance the server is claiming for the YANG module identified by this entry

.. attribute:: submodule

Each entry represents one submodule within the parent module

---

_prefix = 'yanglib'
_revision = '2016-06-21'

def __init__(self):
    super(ModulesState.Module, self).__init__()

    self.yang_name = "module"
    self.yang_parent_name = "modules-state"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.leaflet_key_names = ['name','revision']
    self._child_classes = OrderedDict(
        [('deviation', ('deviation', ModulesState.Module.Deviation)),
         ('submodule', ('submodule', ModulesState.Module.Submodule))])

    self._leafs = OrderedDict([
        ('name', (YLeaf(YType.str, 'name'), ['str'])),
        ('revision', (YLeaf(YType.str, 'revision'), ['str','str'])),
        ('schema', (YLeaf(YType.str, 'schema'), ['str'])),
    ])

---
class ConformanceType(Enum):
    "implement",
    ConformanceType (Enum Class)

    Indicates the type of conformance the server is claiming

    for the YANG module identified by this entry.

    .. data:: implement = 0

    Indicates that the server implements one or more

    protocol-accessible objects defined in the YANG module

    identified in this entry. This includes deviation

    statements defined in the module.

    For YANG version 1.1 modules, there is at most one

    module entry with conformance type 'implement' for a

    particular module name, since YANG 1.1 requires that,

    at most, one revision of a module is implemented.
For YANG version 1 modules, there SHOULD NOT be more
than one module entry for a particular module name.

.. data:: import_ = 1

Indicates that the server imports reusable definitions
from the specified revision of the module but does
not implement any protocol-accessible objects from
this revision.

Multiple module entries for the same module name MAY
exist. This can occur if multiple modules import the
same module but specify different revision dates in
the import statements.

"""

implement = Enum.YLeaf(0, "implement")

import_ = Enum.YLeaf(1, "import")

"""

class Deviation(Entity):

"""

List of YANG deviation module names and revisions
used by this server to modify the conformance of
the module associated with this entry. Note that
the same module can be used for deviations for
multiple modules, so the same entry MAY appear
within multiple 'module' entries.
The deviation module MUST be present in the 'module'
list, with the same name and revision values.
The 'conformance\-type' value will be 'implement' for
the deviation module.

.. attribute:: name (key)

The YANG module or submodule name
**type**\*: str
The YANG module or submodule revision date. A zero-length string is used if no revision statement is present in the YANG module or submodule

**type**: union of the below types:

**type**: str

**pattern**: \d{4}-\d{2}-\d{2}

**type**: str

**length**: 0

```python
_prefix = 'yanglib'
_revision = '2016-06-21'
def __init__(self):
    super(ModulesState.Module.Deviation, self).__init__()

    self.yang_name = "deviation"
    self.yang_parent_name = "module"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = ['name', 'revision']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('name', YLeaf(YType.str, 'name')),
        ('revision', YLeaf(YType.str, 'revision'))
    )
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(ModulesState.Module.Deviation, ['name', 'revision'], name, value)

class Submodule(Entity):
```
Each entry represents one submodule within the parent module.

.. attribute:: name (key)

The YANG module or submodule name

**type**: str

**pattern**: [a-zA-Z0-9\-_]*

.. attribute:: revision (key)

The YANG module or submodule revision date. A zero-length string is used if no revision statement is present in the YANG module or submodule

**type**: union of the below types:

**type**: str

**pattern**: \d{4}-\d{2}-\d{2}

**type**: str

**length**: 0

.. attribute:: schema

Contains a URL that represents the YANG schema resource for this module or submodule. This leaf will only be present if there is a URL available for retrieval of the schema for this entry

**type**: str


```

_prefix = 'yanglib'
_revision = '2016-06-21'

def __init__(self):
    super(ModulesState.Module.Submodule, self).__init__()

    self.yang_name = "submodule"
    self.yang_parent_name = "module"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yslist_key_names = ['name','revision']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(["name" : str(''),
"revision" : str(''),
"schema" : str('')])

```
('name', (YLeaf(YType.str, 'name'), ['str'])),
('revision', (YLeaf(YType.str, 'revision'), ['str','str'])),
('schema', (YLeaf(YType.str, 'schema'), ['str'])),
]
self.name = None
self.revision = None
self.schema = None
self._segment_path = lambda: "submodule" + "[name='" + str(self.name) + "']" + "[revision='" + str(self.revision) + "']"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(ModulesState.Module.Submodule, ['name', 'revision', 'schema'], name, value)

def clone_ptr(self):
    self._top_entity = ModulesState()
    return self._top_entity

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_yang_library.py
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Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/setup.py
No license file was found, but licenses were detected in source scan.

```motif

This module contains a collection of YANG definitions for
managing network interfaces.

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(http://trustee.ietf.org/license-info).
```
This version of this YANG module is part of RFC 7223; see the RFC itself for full legal notices.

```python
from collections import OrderedDict
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class InterfaceType(Identity):
    
    Base identity from which specific interface types are derived.

    ...

    _prefix = 'if'
    _revision = '2014-05-08'

        super(InterfaceType, self).__init__(ns, pref, tag)


class Interfaces(Entity):
    
    Interface configuration parameters.

    .. attribute:: interface

    The list of configured interfaces on the device. The operational state of an interface is available in the /interfaces\-state/interface list. If the configuration of a system\-controlled interface cannot be used by the system (e.g., the interface hardware present does not match the interface type), then the configuration is not applied to the system\-controlled interface shown in the /interfaces\-state/interface list. If the configuration of a user\-controlled interface cannot be used by the system, the configured interface is not instantiated in the /interfaces\-state/interface list

    **type**: list of :py:class:`Interface <ydk.models.ietf.ietf_interfaces.Interfaces.Interface>`
```
```python
_prefix = 'if'
_revision = '2014-05-08'

def __init__(self):
    super(Interfaces, self).__init__()
    self._top_entity = None
    self.yang_name = "interfaces"
    self.yang_parent_name = "ietf-interfaces"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.yang_names = []
    self._child_classes = OrderedDict([("interface", Interfaces.Interface)])
    self._leafs = OrderedDict()
    self.interface = YList(self)
    self._segment_path = lambda: "ietf-interfaces:interfaces"
    self._is_frozen = True

def _setattr__(self, name, value):
    self._perform_setattr(Interfaces, [], name, value)

class Interface(Entity):
    
    The list of configured interfaces on the device.

    The operational state of an interface is available in the
    /interfaces-state/interface list. If the configuration of a
    system-controlled interface cannot be used by the system
    (e.g., the interface hardware present does not match the
    interface type), then the configuration is not applied to
    the system-controlled interface shown in the
    /interfaces-state/interface list. If the configuration
    of a user-controlled interface cannot be used by the system,
    the configured interface is not instantiated in the
    /interfaces-state/interface list.

    .. attribute:: name (key)

    The name of the interface. A device MAY restrict the allowed values for this leaf, possibly depending on the
    type of the interface. For system-controlled interfaces, this leaf is the device-specific name of the interface. The
    'config false' list /interfaces-state/interface contains the currently existing interfaces on the device. If a client tries to
    create configuration for a system-controlled interface that is not present in the /interfaces-state/interface list, the
    server MAY reject the request if the implementation does not support pre-provisioning of interfaces or if the name
    refers to an interface that can never exist in the system. A NETCONF server MUST reply with an rpc-error with
```

---

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the error-tag 'invalid-value' in this case. If the device supports pre-provisioning of interface configuration, the 'pre-provisioning' feature is advertised. If the device allows arbitrarily named user-controlled interfaces, the 'arbitrary-names' feature is advertised. When a configured user-controlled interface is created by the system, it is instantiated with the same name in the /interface-state/interface list

**type**: str

.. attribute:: description

A textual description of the interface. A server implementation MAY map this leaf to the ifAlias MIB object. Such an implementation needs to use some mechanism to handle the differences in size and characters allowed between this leaf and ifAlias. The definition of such a mechanism is outside the scope of this document. Since ifAlias is defined to be stored in non-volatile storage, the MIB implementation MUST map ifAlias to the value of 'description' in the persistently stored datastore. Specifically, if the device supports ':startup', when ifAlias is read the device MUST return the value of 'description' in the 'startup' datastore, and when it is written, it MUST be written to the 'running' and 'startup' datastores. Note that it is up to the implementation to decide whether to modify this single leaf in 'startup' or perform an implicit copy-config from 'running' to 'startup'. If the device does not support ':startup', ifAlias MUST be mapped to the 'description' leaf in the 'running' datastore

**type**: str

.. attribute:: type

The type of the interface. When an interface entry is created, a server MAY initialize the type leaf with a valid value, e.g., if it is possible to derive the type from the name of the interface. If a client tries to set the type of an interface to a value that can never be used by the system, e.g., if the type is not supported or if the type does not match the name of the interface, the server MUST reject the request. A NETCONF server MUST reply with an rpc-error with the error-tag 'invalid-value' in this case

**type**: :py:class:`InterfaceType <ydk.models.ietf.ietf_interfaces.InterfaceType>`

**mandatory**: True

.. attribute:: enabled

This leaf contains the configured, desired state of the interface. Systems that implement the IF-MIB use the value of this leaf in the 'running' datastore to set IF-MIB.ifAdminStatus to 'up' or 'down' after an ifEntry has been initialized, as described in RFC 2863. Changes in this leaf in the 'running' datastore are reflected in ifAdminStatus, but if ifAdminStatus is changed over SNMP, this leaf is not affected

**type**: bool

**default value**: true

.. attribute:: link_up_down_trap_enable

Controls whether linkUp/linkDown SNMP notifications should be generated for this interface. If this node is not configured, the value 'enabled' is operationally used by the server for interfaces that do not operate on top of any other interface (i.e., there are no 'lower-layer-if' entries), and 'disabled' otherwise

**type**: :py:class:`LinkUpDownTrapEnable <ydk.models.ietf.ietf_interfaces.Interfaces.Interface.LinkUpDownTrapEnable>`
Parameters for the IPv4 address family

**type**

**presence node**
: True

Parameters for the IPv6 address family

**type**

**presence node**
: True

.. attribute:: diffserv_target_entry

    policy target for inbound or outbound direction

    **type**
    : list of `py:class:` DiffservTargetEntry

<
ydk.models.ietf.ietf_interfaces.Interfaces.Interface.DiffservTargetEntry>

---

_prefix = 'if'
_revision = '2014-05-08'

def __init__(self):
    super(Interfaces.Interface, self).__init__()

    self.yang_name = "interface"
    self.yang_parent_name = "interfaces"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yang_key_names = ['name']

    self._leafs = OrderedDict([  
        ('name', (YLeaf(YType.str, 'name'), ['str'])),  
        ('description', (YLeaf(YType.str, 'description'), ['str'])),  
        ('type', (YLeaf(YType.identityref, 'type'), ['ydk.models.ietf.ietf_interfaces', 'InterfaceType'])),  
        ('enabled', (YLeaf(YType.bool, 'enabled'), ['bool'])),  
        ('link_up_down_trap_enable', (YLeaf(YType.enumeration, 'link-up-down-trap-enable'), ['ydk.models.ietf.ietf_interfaces', 'Interface.LinkUpDownTrapEnable'])),
    ])  

    self.name = None
    self.description = None
self.type = None
self.enabled = None
self.link_up_down_trap_enable = None

self.ipv4 = None
self._children_name_map["ipv4"] = "ietf-ip:ipv4"

self.ipv6 = None
self._children_name_map["ipv6"] = "ietf-ip:ipv6"

self.diffserv_target_entry = YList(self)
self._segment_path = lambda: "interface" + "[name='" + str(self.name) + "]"
self._absolute_path = lambda: "ietf-interfaces:interfaces/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Interfaces.Interface, [u'name', u'description', u'type', u'enabled', u$link_up_down_trap_enable'], name, value)

class LinkUpDownTrapEnable(Enum):
    """
    LinkUpDownTrapEnable (Enum Class)
    
    Controls whether linkUp/linkDown SNMP notifications should be generated for this interface.
    
    If this node is not configured, the value 'enabled' is operationally used by the server for interfaces that do not operate on top of any other interface (i.e., there are no 'lower-layer-if' entries), and 'disabled' otherwise.
    """

    enabled = Enum.YLeaf(1, "enabled")
    disabled = Enum.YLeaf(2, "disabled")

class Ipv4(Entity):
Parameters for the IPv4 address family.

.. attribute:: enabled

Controls whether IPv4 is enabled or disabled on this interface. When IPv4 is enabled, this interface is connected to an IPv4 stack, and the interface can send and receive IPv4 packets

**type**: bool

**default value**: true

.. attribute:: forwarding

Controls IPv4 packet forwarding of datagrams received by, but not addressed to, this interface. IPv4 routers forward datagrams. IPv4 hosts do not (except those source-routed via the host)

**type**: bool

**default value**: false

.. attribute:: mtu

The size, in octets, of the largest IPv4 packet that the interface will send and receive. The server may restrict the allowed values for this leaf, depending on the interface's type. If this leaf is not configured, the operationally used MTU depends on the interface's type

**type**: int

**range**: 68..65535

**units**: octets

.. attribute:: address

The list of configured IPv4 addresses on the interface


.. attribute:: neighbor

A list of mappings from IPv4 addresses to link-layer addresses. Entries in this list are used as static entries in the ARP Cache


This class is a :ref:`presence class<presence-class>`

```
_prefix = 'ip'
```
def __init__(self):
    super(Interfaces.Interface.Ipv4, self).__init__()

    self.yang_name = "ipv4"
    self.yang_parent_name = "interface"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        ("address", "ietf-ip:Address"),
        ("neighbor", "ietf-ip:Neighbor")))
    self.is_presence_container = True
    self._leafs = OrderedDict(
        ("enabled", (YLeaf(YType.boolean, 'enabled'), ["bool"])),
        ("forwarding", (YLeaf(YType.boolean, 'forwarding'), ["bool"])),
        ("mtu", (YLeaf(YType.uint16, 'mtu'), ["int"])),
    )
    self.enabled = None
    self.forwarding = None
    self.mtu = None

    self.address = YList(self)
    self.neighbor = YList(self)
    self._segment_path = lambda: "ietf-ip:ipv4"
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Interfaces.Interface.Ipv4, ["enabled", "forwarding", "mtu"], name, value)

class Address(Entity):
    """
    The list of configured IPv4 addresses on the interface.
    .. attribute:: ip  (key)
        The IPv4 address on the interface
    """
    .. attribute:: prefix_length
        The length of the subnet prefix

    **type**: int
class Address(Entity):
    
    .. attribute:: ip

        The subnet specified as a netmask

    .. attribute:: prefix_length

        **type**

        .. attribute:: netmask

        **type**

        **pattern**

        .. _prefix = 'ip'

        .. _revision = '2014-06-16'

        def __init__(self):
            super(Interfaces.Interface.Ipv4.Address, self).__init__()

            self.yang_name = "address"
            self.yang_parent_name = "ipv4"
            self.is_top_level_class = False
            self.has_list_ancestor = True
            self.is_key = False
            self.is_container = False
            self.is_composite_key = False

            self._child_classes = OrderedDict({})
            self._leafs = OrderedDict({
                'ip': (YLeaf(YType.str, 'ip'), ['str']),
                'prefix_length': (YLeaf(YType.uint8, 'prefix-length'), ['int']),
                'netmask': (YLeaf(YType.str, 'netmask'), ['str'])
            })

            self.ip = None
            self.prefix_length = None
            self.netmask = None

    class Neighbor(Entity):
        
        .. _prefix = 'ip'

        .. _revision = '2014-06-16'

        def __init__(self):
            super(Interfaces.Interface.Ipv4.Address, self).__init__()

            self.yang_name = "address"
            self.yang_parent_name = "ipv4"
            self.is_top_level_class = False
            self.has_list_ancestor = True
            self.is_key = False
            self.is_container = False
            self.is_composite_key = False

            self._child_classes = OrderedDict({})
            self._leafs = OrderedDict({
                'ip': (YLeaf(YType.str, 'ip'), ['str']),
                'prefix_length': (YLeaf(YType.uint8, 'prefix-length'), ['int']),
                'netmask': (YLeaf(YType.str, 'netmask'), ['str'])
            })

            self.ip = None
            self.prefix_length = None
            self.netmask = None

        def __setattr__(self, name, value):
            self._perform_setattr(Interfaces.Interface.Ipv4.Address, ['ip'], name, value)

        class Neighbor(Entity):
            
            .. _prefix = 'ip'

            .. _revision = '2014-06-16'

            def __init__(self):
                super(Interfaces.Interface.Ipv4.Address, self).__init__()

                self.yang_name = "address"
                self.yang_parent_name = "ipv4"
                self.is_top_level_class = False
                self.has_list_ancestor = True
                self.is_key = False
                self.is_container = False
                self.is_composite_key = False

                self._child_classes = OrderedDict({})
                self._leafs = OrderedDict({
                    'ip': (YLeaf(YType.str, 'ip'), ['str']),
                    'prefix_length': (YLeaf(YType.uint8, 'prefix-length'), ['int']),
                    'netmask': (YLeaf(YType.str, 'netmask'), ['str'])
                })

                self.ip = None
                self.prefix_length = None
                self.netmask = None

            def __setattr__(self, name, value):
                self._perform_setattr(Interfaces.Interface.Ipv4.Address, ['ip'], name, value)
.. attribute:: ip (key)

The IPv4 address of the neighbor node
**type**: str


.. attribute:: link_layer_address

The link-layer address of the neighbor node
**type**: str

**pattern**: ([0-9a-fA-F]{2}(:[0-9a-fA-F]{2})*)?

**mandatory**: True

```python

_prefix = 'ip'
_revision = '2014-06-16'

def __init__(self):
    super(Interfaces.Interface.Ipv4.Neighbor, self).__init__()

    self.yang_name = "neighbor"
    self.yang_parent_name = "ipv4"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['ip']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        (u'ip', (YLeaf(YType.str, 'ip'), [u'str'])),
        (u'link_layer_address', (YLeaf(YType.str, 'link-layer-address'), [u'str'])),
    )
    self.ip = None
    self.link_layer_address = None
    self._segment_path = lambda: "neighbor" + 
        "[ip='" + str(self.ip) + '""
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Interfaces.Interface.Ipv4.Neighbor, [u'ip', u'link_layer_address'], name, value)

class Ipv6(Entity):
    
```
Parameters for the IPv6 address family.

.. attribute:: enabled

Controls whether IPv6 is enabled or disabled on this interface. When IPv6 is enabled, this interface is connected to an IPv6 stack, and the interface can send and receive IPv6 packets

**type**: bool

**default value**: true

.. attribute:: forwarding

Controls IPv6 packet forwarding of datagrams received by, but not addressed to, this interface. IPv6 routers forward datagrams. IPv6 hosts do not (except those source-routed via the host)

**type**: bool

**default value**: false

.. attribute:: mtu

The size, in octets, of the largest IPv6 packet that the interface will send and receive. The server may restrict the allowed values for this leaf, depending on the interface's type. If this leaf is not configured, the operationally used MTU depends on the interface's type

**type**: int

**range**: 1280..4294967295

**units**: octets

.. attribute:: address

The list of configured IPv6 addresses on the interface


.. attribute:: neighbor

A list of mappings from IPv6 addresses to link-layer addresses. Entries in this list are used as static entries in the Neighbor Cache


.. attribute:: dup_addr_detect_transmits

The number of consecutive Neighbor Solicitation messages sent while performing Duplicate Address Detection on a tentative address. A value of zero indicates that Duplicate Address Detection is not performed on tentative addresses. A value of one indicates a single transmission with no follow-up retransmissions

**type**: int

**range**: 0..4294967295
Parameters to control the autoconfiguration of IPv6 addresses, as described in RFC 4862

**default value**: 1

.. attribute:: autoconf

  Parameters to control the autoconfiguration of IPv6 addresses, as described in RFC 4862

**type**:


.. attribute:: ipv6_router_advertisements

  Configuration of IPv6 Router Advertisements

**type**:


This class is a :ref:`presence class<presence-class>`

..."""

_prefix = 'ip'
_revision = '2014-06-16'

def __init__(self):
    super(Interfaces.Interface.Ipv6, self).__init__()

    self.yang_name = "ipv6"
    self.yang_parent_name = "interface"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ystl_key_names = []
    self._child_classes =OrderedDict([("address", Interfaces.Interface.Ipv6.Address)),
    ("autoconf", Interfaces.Interface.Ipv6.Autocof),
    self.is_presence_container = True
    self._leafs =OrderedDict(]
      ('enabled', (YLeaf(YType.boolean, 'enabled'), ['bool'])),
      ('forwarding', (YLeaf(YType.boolean, 'forwarding'), ['bool'])),
      ('mtu', (YLeaf(YType.uint32, 'mtu'), ['int'])),
      ('dup_addr_detect_transmits', (YLeaf(YType.uint32, 'dup-addr-detect-transmits'), ['int'])),
    ])
    self.enabled = None
    self.forwarding = None
    self.mtu = None
    self.dup_addr_detect_transmits = None

    self.autoconf = Interfaces.Interface.Ipv6.Autocof()
self.autoconf.parent = self
self._children_name_map["autoconf"] = "autoconf"

self.ipv6_router_advertisements.parent = self
self._children_name_map["ipv6_router_advertisements"] = "ietf-ipv6-unicast-routing:ipv6-router-advertisements"

self.address = YList(self)
sel.neighbor = YList(self)
sel._segment_path = lambda: "ietf-ip:ipv6"
sel._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Interfaces.Interface.Ipv6, [u'enabled', u'forwarding', u'mtu',
    u'dup_addr_detect_transmits'], name, value)

class Address(Entity):
    ""
    The list of configured IPv6 addresses on the interface.
    .. attribute:: ip  (key)
        The IPv6 address on the interface
        **type**: str
        **pattern**: ((\:\|\[0-9a-fA-F]{0,4})\:\\[(0-9a-fA-F]{0,4}\:\]){0,5}(((0-9a-fA-F]{0,4}\:\\[0-9a-
fA-F]{0,4})\:\\[(25[0-5]|2[0-4]\[0-9]|[01]?\[0-9]\?0-9])\:\\[3(25[0-5]|2[0-4]\[0-9]|01]?[0-9]\?0-
9)))%(\p{N}\p{L}+)?
    
    .. attribute:: prefix_length
        The length of the subnet prefix
        **type**: int
        **range**: 0..128
        **mandatory***: True

    ""

    _prefix = 'ip'
    _revision = '2014-06-16'

def __init__(self):
super(Interfaces.Interface.Ipv6.Address, self).__init__()
self.yang_name = "address"
self.yang_parent_name = "ipv6"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['ip']
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([
('ip', (YLeaf(YType.str, 'ip'), ['str'])),
('prefix_length', (YLeaf(YType.uint8, 'prefix-length'), ['int'])),
])
self.ip = None
self.prefix_length = None
self._segment_path = lambda: "address" + "[ip='" + str(self.ip) + "']"
self._is_frozen = True
def __setattr__(self, name, value):
self._perform_setattr(Interfaces.Interface.Ipv6.Address, [u'ip', u'prefix_length'], name, value)

class Neighbor(Entity):
"""
A list of mappings from IPv6 addresses to
link\-layer addresses.
Entries in this list are used as static entries in the
Neighbor Cache.
.. attribute:: ip (key)
The IPv6 address of the neighbor node
**type**\: str
**pattern:** ((\:\|[0\-9a\-fA\-F]{0,4})\:)([0\-9a\-fA\-F]{0,4}\:){0,5}((([0\-9a\-fA\-F]{0,4}\:)?(\:\|[0\-9a\fA\-F]{0,4}))\|(((25[0\-5]\|2[0\-4][0\-9]\|[01]?[0\-9]?[0\-9])\\.){3}(25[0\-5]\|2[0\-4][0\-9]\|[01]?[0\-9]?[0\9])))(%[\\p{N}\\p{L}]+)?
.. attribute:: link_layer_address
The link\-layer address of the neighbor node
**type**\: str
**pattern:** ([0\-9a\-fA\-F]{2}(\:[0\-9a\-fA\-F]{2})\*)?
**mandatory**\: True

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def __init__(self):
    super(Interfaces.Interface.Ipv6.Neighbor, self).__init__()
    self.yang_name = "neighbor"
    self.yang_parent_name = "ipv6"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['ip']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict([ ('ip', (YLeaf(YType.str, 'ip'), ['str'])), ('link_layer_address', (YLeaf(YType.str, 'link-layer-address'), ['str'])), ])
    self.ip = None
    self.link_layer_address = None
    self._segment_path = lambda: "neighbor" + "[ip='" + str(self.ip) + "']"
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Interfaces.Interface.Ipv6.Neighbor, ['ip', 'link_layer_address'], name, value)

class Autoconf(Entity):
    Parameters to control the autoconfiguration of IPv6 addresses, as described in RFC 4862.
    .. attribute:: create_global_addresses
        If enabled, the host creates global addresses as described in RFC 4862
        **type**: bool
        **default value**: true

    .. attribute:: create_temporary_addresses
        If enabled, the host creates temporary addresses as described in RFC 4941
        **type**: bool
        **default value**: false

    .. attribute:: temporary_valid_lifetime
The time period during which the temporary address is valid
**type**: int

**range**: 0..4294967295

**units**: seconds

**default value**: 604800

.. attribute:: temporary_preferred_lifetime

The time period during which the temporary address is preferred
**type**: int

**range**: 0..4294967295

**units**: seconds

**default value**: 86400

```python
_.. _prefix = 'ip'
_revision = '2014-06-16'

def __init__(self):
    super(Interfaces.Interface.Ipv6.Autoconf, self).__init__()

    self.yang_name = "autoconf"
    self.yang_parent_name = "ipv6"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('create_global_addresses', (YLeaf(YType.boolean, 'create-global-addresses'), ['bool']))),
        ('create_temporary_addresses', (YLeaf(YType.boolean, 'create-temporary-addresses'), ['bool']))),
        ('temporary_valid_lifetime', (YLeaf(YType.uint32, 'temporary-valid-lifetime'), ['int']))),
        ('temporary_preferred_lifetime', (YLeaf(YType.uint32, 'temporary-preferred-lifetime'), ['int']))),
    )
    self.create_global_addresses = None
    self.create_temporary_addresses = None
    self.temporary_valid_lifetime = None
    self.temporary_preferred_lifetime = None
    self._segment_path = lambda: "autoconf"
    self._is_frozen = True
```
def __setattr__(self, name, value):
    self._perform_setattr(Interfaces.Interface.Ipv6.Autoconf, ['create_global_addresses',
    'create_temporary_addresses', 'temporary_valid_lifetime', 'temporary_preferred_lifetime'], name, value)

class Ipv6RouterAdvertisements(Entity):
    
    Configuration of IPv6 Router Advertisements.
    
    .. attribute:: send_advertisements

    A flag indicating whether or not the router sends periodic Router Advertisements and responds to Router Solicitations
    **type**: bool
    **default value**: false

    .. attribute:: max_rtr_adv_interval

    The maximum time allowed between sending unsolicited multicast Router Advertisements from the interface
    **type**: int
    **range**: 4..1800
    **units**: seconds
    **default value**: 600

    .. attribute:: min_rtr_adv_interval

    The minimum time allowed between sending unsolicited multicast Router Advertisements from the interface. The default value to be used operationally if this leaf is not configured is determined as follows:
    - if max\-rtr\-adv\-interval >= 9 seconds, the default value is 0.33 * max\-rtr\-adv\-interval;
    - otherwise it is 0.75 * max\-rtr\-adv\-interval
    **type**: int
    **range**: 3..1350
    **units**: seconds

    .. attribute:: managed_flag

    The value to be placed in the 'Managed address configuration' flag field in the Router Advertisement
    **type**: bool
    **default value**: false
.. attribute:: other_config_flag

The value to be placed in the 'Other configuration' flag field in the Router Advertisement

**type**: bool

**default value**: false

.. attribute:: link_mtu

The value to be placed in MTU options sent by the router. A value of zero indicates that no MTU options are sent

**type**: int

**range**: 0..4294967295

**default value**: 0

.. attribute:: reachable_time

The value to be placed in the Reachable Time field in the Router Advertisement messages sent by the router. A value of zero means unspecified (by this router)

**type**: int

**range**: 0..3600000

**units**: milliseconds

**default value**: 0

.. attribute:: retrans_timer

The value to be placed in the Retrans Timer field in the Router Advertisement messages sent by the router. A value of zero means unspecified (by this router)

**type**: int

**range**: 0..4294967295

**units**: milliseconds

**default value**: 0

.. attribute:: cur_hop_limit

The value to be placed in the Cur Hop Limit field in the Router Advertisement messages sent by the router. A value of zero means unspecified (by this router). If this parameter is not configured, the device SHOULD use the value specified in IANA Assigned Numbers that was in effect at the time of implementation

**type**: int
.. attribute:: default_lifetime

The value to be placed in the Router Lifetime field of Router Advertisements sent from the interface, in seconds. It MUST be either zero or between max-rtr-adv-interval and 9000 seconds. A value of zero indicates that the router is not to be used as a default router. These limits may be overridden by specific documents that describe how IPv6 operates over different link layers. If this parameter is not configured, the device SHOULD use a value of 3 * max-rtr-adv-interval

**type:** int

**range:** 0..9000

**units:** seconds

.. attribute:: prefix_list

Configuration of prefixes to be placed in Prefix Information options in Router Advertisement messages sent from the interface. Prefixes that are advertised by default but do not have their entries in the child 'prefix' list are advertised with the default values of all parameters. The link-local prefix SHOULD NOT be included in the list of advertised prefixes

**type:** :py:class:`PrefixList`


...
('link_mtu', (YLeaf(YType.uint32, 'link-mtu'), ['int'])),
('reachable_time', (YLeaf(YType.uint32, 'reachable-time'), ['int'])),
('retrans_timer', (YLeaf(YType.uint32, 'retrans-timer'), ['int'])),
('cur_hop_limit', (YLeaf(YType.uint8, 'cur-hop-limit'), ['int'])),
('default_lifetime', (YLeaf(YType.uint16, 'default-lifetime'), ['int']))),
]
self.send_advertisements = None
self.max_rtr_adv_interval = None
self.min_rtr_adv_interval = None
self.managed_flag = None
self.other_config_flag = None
self.link_mtu = None
self.reachable_time = None
self.retrans_timer = None
self.cur_hop_limit = None
self.default_lifetime = None

self.prefix_list.parent = self
self._children_name_map['prefix_list'] = "prefix-list"
self._segment_path = lambda: "ietf-ipv6-unicast-routing:ipv6-router-advertisements"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Interfaces.Interface.Ipv6.Ipv6RouterAdvertisements, ['send_advertisements',
'\'max_rtr_adv_interval', \'min_rtr_adv_interval', \'managed_flag', \'other_config_flag', \'link_mtu', \'reachable_time',
\'retrans_timer', \'cur_hop_limit', \'default_lifetime\'], name, value)

class PrefixList(Entity):
    ""
    Configuration of prefixes to be placed in Prefix
    Information options in Router Advertisement messages sent
    from the interface.

    Prefixes that are advertised by default but do not have
    their entries in the child 'prefix' list are advertised
    with the default values of all parameters.

    The link-local prefix SHOULD NOT be included in the list
    of advertised prefixes.

    .. attribute:: prefix

    Configuration of an advertised prefix entry

    **type**: list of :py:class:`Prefix`

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...  

_prefix = 'v6ur'
_revision = '2015-05-25'

def __init__(self):

    self.yang_name = "prefix-list"
    self.yang_parent_name = "ipv6-router-advertisements"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._leafs = OrderedDict()
    self.prefix = YList(self)
    self._segment_path = lambda: "prefix-list"
    self._is_frozen = True

def __setattr__(self, name, value):

class Prefix(Entity):
    ...  
    Configuration of an advertised prefix entry.

    .. attribute:: prefix_spec  (key)

    IPv6 address prefix
    **type**:  str

    **pattern**: (\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])\1(\[0-9a-fA-F]{0,4}\])
    .. attribute:: no_advertise

    The prefix will not be advertised. This can be used for removing the prefix from the default set of advertised prefixes
    **type**:  :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: valid_lifetime

    ...
The value to be placed in the Valid Lifetime in the Prefix Information option. The designated value of all 1’s (0xffffffff) represents infinity

**type**: int

**range**: 0..4294967295

**units**: seconds

**default value**: 2592000

.. attribute:: on_link_flag

The value to be placed in the on-link flag ('L-bit') field in the Prefix Information option

**type**: bool

**default value**: true

.. attribute:: preferred_lifetime

The value to be placed in the Preferred Lifetime in the Prefix Information option. The designated value of all 1’s (0xffffffff) represents infinity

**type**: int

**range**: 0..4294967295

**units**: seconds

**default value**: 604800

.. attribute:: autonomous_flag

The value to be placed in the Autonomous Flag field in the Prefix Information option

**type**: bool

**default value**: true

```python
_prefix = 'v6ur'
_revision = '2015-05-25'

def __init__(self):
    self.yang_name = "prefix"
    self.yang_parent_name = "prefix-list"
```
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['prefix_spec']
self._child_classes = OrderedDict()
self._leafs = OrderedDict(
    ('prefix_spec', (YLeaf(YType.str, 'prefix-spec'), ['str'])),
    ('no_advertise', (YLeaf(YType.empty, 'no-advertise'), ['Empty'])),
    ('valid_lifetime', (YLeaf(YType.uint32, 'valid-lifetime'), ['int'])),
    ('on_link_flag', (YLeaf(YType.boolean, 'on-link-flag'), ['bool'])),
    ('preferred_lifetime', (YLeaf(YType.uint32, 'preferred-lifetime'), ['int'])),
    ('autonomous_flag', (YLeaf(YType.boolean, 'autonomous-flag'), ['bool']))
)
self.prefix_spec = None
self.no_advertise = None
self.valid_lifetime = None
self.on_link_flag = None
self.preferred_lifetime = None
self.autonomous_flag = None
self._segment_path = lambda: "prefix" + "[prefix-spec='" + str(self.prefix_spec) + "]"
self._is_frozen = True

def __setattr__(self, name, value):
        ['prefix_spec', 'no_advertise', 'valid_lifetime', 'on_link_flag', 'preferred_lifetime', 'autonomous_flag'], name, value)

class DiffservTargetEntry(Entity):
    """
    policy target for inbound or outbound direction

    .. attribute:: direction  (key)

    Direction fo the traffic flow either inbound or outbound
    **type**:: :py:class:`Direction <ydk.models.ietf.ietf_diffserv_target.Direction>`

    .. attribute:: policy_name  (key)

    Policy entry name
    **type**:: str

    """

    _prefix = 'target'
    _revision = '2015-04-07'

def __init__(self):
    
    .. _prefix = 'target'
    _revision = '2015-04-07'

    def __init__(self):
super(Interfaces.Interface.DiffservTargetEntry, self).__init__()

self.yang_name = "diffserv-target-entry"
self.yang_parent_name = "interface"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['direction', 'policy_name']
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([('direction', (YLeaf(YType.identityref, 'direction'), [YLeaf(YType.str, 'direction'), ['str']]),)),
('policy_name', (YLeaf(YType.str, 'policy-name'), ['str'])),
])
self.direction = None
self.policy_name = None

self._segment_path = lambda: "ietf-diffserv-target:diffserv-target-entry" + "[direction='" + str(self.direction) + "']" + "[policy-name='" + str(self.policy_name) + "]"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Interfaces.Interface.DiffservTargetEntry, ['direction', 'policy_name'], name, value)

def clone_ptr(self):
    self._top_entity = Interfaces()
    return self._top_entity

class InterfacesState(Entity):
    """
    Data nodes for the operational state of interfaces.
    """

    .. attribute:: interface

        The list of interfaces on the device. System-controlled interfaces created by the system are always present in this list, whether they are configured or not

        **type**: list of :py:class:`Interface <ydk.models.ietf.ietf_interfaces.InterfacesState.Interface>`

    ..

    _prefix = 'if'
    _revision = '2014-05-08'

    def __init__(self):
        super(InterfacesState, self).__init__()
        self._top_entity = None

        self.yang_name = "interfaces-state"
        self.yang_parent_name = "ietf-interfaces"
The list of interfaces on the device.

System-controlled interfaces created by the system are always present in this list, whether they are configured or not.

.. attribute:: name  (key)

The name of the interface. A server implementation MAY map this leaf to the ifName MIB object. Such an implementation needs to use some mechanism to handle the differences in size and characters allowed between this leaf and ifName. The definition of such a mechanism is outside the scope of this document

**type**: str

.. attribute:: type

The type of the interface

**type**: :py:class:`InterfaceType <ydk.models.ietf.ietf_interfaces.InterfaceType>`

**mandatory**: True

.. attribute:: admin_status

The desired state of the interface. This leaf has the same read semantics as ifAdminStatus

**type**: :py:class:`AdminStatus <ydk.models.ietf.ietf_interfaces.InterfacesState.Interface.AdminStatus>`

**mandatory**: True

.. attribute:: oper_status

The current operational state of the interface. This leaf has the same semantics as ifOperStatus

**type**: :py:class:`OperStatus <ydk.models.ietf.ietf_interfaces.InterfacesState.Interface.OperStatus>`
The time the interface entered its current operational state. If the current state was entered prior to the last re-initialization of the local network management subsystem, then this node is not present

**mandatory**: True

.. attribute:: last_change

**type**: str

**pattern**: \d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}(\.\d+)?(Z|[+\-]\d{2}:\d{2})

.. attribute:: if_index

The ifIndex value for the ifEntry represented by this interface

**mandatory**: True

.. attribute:: phys_address

The interface's address at its protocol sub-layer. For example, for an 802.x interface, this object normally contains a Media Access Control (MAC) address. The interface's media-specific modules must define the bit and byte ordering and the format of the value of this object. For interfaces that do not have such an address (e.g., a serial line), this node is not present

**type**: str

**pattern**: ([0-9a-fA-F]{2}\{2\})\{0,2\}\{0-9a-fA-F\}{2}\}\}\)?

.. attribute:: higher_layer_if

A list of references to interfaces layered on top of this interface

**type**: list of str

**refers to**: :py:class:`name <ydk.models.ietf.ietf_interfaces.InterfacesState.Interface>`

.. attribute:: lower_layer_if

A list of references to interfaces layered underneath this interface

**type**: list of str

**refers to**: :py:class:`name <ydk.models.ietf.ietf_interfaces.InterfacesState.Interface>`

.. attribute:: speed

An estimate of the interface's current bandwidth in bits per second. For interfaces that do not vary in bandwidth or for those where no accurate estimation can be made, this node should contain the nominal bandwidth. For interfaces that have no concept of bandwidth, this node is not present
.. attribute:: statistics

A collection of interface-related statistics objects

.. attribute:: routing_instance

The name of the routing instance to which the interface is assigned

.. attribute:: ipv4

Interface-specific parameters for the IPv4 address family

.. attribute:: ipv6

Parameters for the IPv6 address family

.. attribute:: diffserv_target_entry

policy target for inbound or outbound direction

```python
__prefix = 'if'
_revision = '2014-05-08'

def __init__(self):
    super(InterfacesState.Interface, self).__init__()

    self.yang_name = "interface"
    self.yang_parent_name = "interfaces-state"
```
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = ['name']
self._leafs = OrderedDict([('name', (YLeaf(YType.str, 'name'), ['str'])), ('type', (YLeaf(YType.identityref, 'type'), [('ydk.models.ietf.ietf_interfaces', 'InterfaceType')]))])
self.statistics = InterfacesState.Interface.Statistics()
self.statistics.parent = self
self._children_name_map['statistics'] = "statistics"
self.ipv4 = None
self._children_name_map['ipv4'] = "ietf-ip:ipv4"
self.ipv6 = None
self._children_name_map['ipv6'] = "ietf-ip:ipv6"
self.diffserv_target_entry = YList(self)
self._segment_path = lambda: "interface" + "{name='{}'}".format(self.name)
self._absolute_path = lambda: "ietf-interfaces:interfaces-state/{}".format(self._segment_path())
self._is_frozen = True

self.name = None
self.type = None
self.admin_status = None
self.oper_status = None
self.last_change = None
self.if_index = None
self.phys_address = None
self.higher_layer_if = []
self.lower_layer_if = []
speed = None
self.routing_instance = None
self.statistics = InterfacesState.Interface.Statistics()
self.statistics.parent = self
self._children_name_map['statistics'] = "statistics"

self.ipv4 = None
self._children_name_map['ipv4'] = "ietf-ip:ipv4"

self.ipv6 = None
self._children_name_map['ipv6'] = "ietf-ip:ipv6"

self.diffserv_target_entry = YList(self)
self._segment_path = lambda: "interface" + "{name='{}'}".format(self.name)
self._absolute_path = lambda: "ietf-interfaces:interfaces-state/{}".format(self._segment_path())
self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(InterfacesState.Interface, [u'name', u'type', u'admin_status', u'oper_status',
    u'last_change', u'if_index', u'phys_address', u'higher_layer_if', u'lower_layer_if', u'speed', u'routing_instance'], name,
    value)

class AdminStatus(Enum):
    """
    AdminStatus (Enum Class)
    The desired state of the interface.
    This leaf has the same read semantics as ifAdminStatus.
    """
    up = Enum.YLeaf(1, "up")
    down = Enum.YLeaf(2, "down")
    testing = Enum.YLeaf(3, "testing")

class OperStatus(Enum):
    """
    OperStatus (Enum Class)
    The current operational state of the interface.
    This leaf has the same semantics as ifOperStatus.
    """
    up = Enum.YLeaf(1, "up")
    down = Enum.YLeaf(2, "down")
The interface does not pass any packets.

.. data:: testing = 3

In some test mode. No operational packets can be passed.

.. data:: unknown = 4

Status cannot be determined for some reason.

.. data:: dormant = 5

Waiting for some external event.

.. data:: not_present = 6

Some component (typically hardware) is missing.

.. data:: lower_layer_down = 7

Down due to state of lower-layer interface(s).

```
up = Enum.YLeaf(1, "up")
down = Enum.YLeaf(2, "down")
testing = Enum.YLeaf(3, "testing")
unknown = Enum.YLeaf(4, "unknown")
dormant = Enum.YLeaf(5, "dormant")
not_present = Enum.YLeaf(6, "not-present")
lower_layer_down = Enum.YLeaf(7, "lower-layer-down")
```

class Statistics(Entity):
    """
    A collection of interface-related statistics objects.
    """

    .. attribute:: discontinuity_time
The time on the most recent occasion at which any one or more of this interface's counters suffered a discontinuity. If no such discontinuities have occurred since the last re-initialization of the local management subsystem, then this node contains the time the local management subsystem re-initialized itself

**type**: str

**pattern**: \d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}(\.\d+)?(Z|([\+\-]\d{2}:\d{2}))

**mandatory**: True

.. attribute:: in_octets

The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range**: 0..18446744073709551615

.. attribute:: in_unicast_pkts

The number of packets, delivered by this sub-layer to a higher (sub-)layer, that were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range**: 0..18446744073709551615

.. attribute:: in_broadcast_pkts

The number of packets, delivered by this sub-layer to a higher (sub-)layer, that were addressed to a broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range**: 0..18446744073709551615

.. attribute:: in_multicast_pkts

The number of packets, delivered by this sub-layer to a higher (sub-)layer, that were addressed to a multicast address at this sub-layer. For a MAC-layer protocol, this includes both Group and Functional addresses. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range**: 0..18446744073709551615

.. attribute:: in_discards
The number of inbound packets that were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range**: 0..4294967295

.. attribute:: in_errors

For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character-oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range**: 0..4294967295

.. attribute:: in_unknown_protos

For packet-oriented interfaces, the number of packets received via the interface that were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing, the number of transmission units received via the interface that were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter is not present. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range**: 0..4294967295

.. attribute:: out_octets

The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range**: 0..18446744073709551615

.. attribute:: out_unicast_pkts

The total number of packets that higher-level protocols requested be transmitted, and that were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int
**range:** 0..18446744073709551615

.. attribute:: out_broadcast_pkts

The total number of packets that higher-level protocols requested be transmitted, and that were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range:** 0..18446744073709551615

.. attribute:: out_multicast_pkts

The total number of packets that higher-level protocols requested be transmitted, and that were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC-layer protocol, this includes both Group and Functional addresses. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range:** 0..18446744073709551615

.. attribute:: out_discards

The number of outbound packets that were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range:** 0..4294967295

.. attribute:: out_errors

For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'

**type**: int

**range:** 0..4294967295

.. attribute:: in_pkts

total packets input

**type**: int

**range:** 0..18446744073709551615
.. attribute:: out_pkts

total packets output

**type**: int

**range**: 0..18446744073709551615

""

_prefix = 'if'
_revision = '2014-05-08'

def __init__(self):
    super(InterfacesState.Interface.Statistics, self).__init__()

    self.yang_name = "statistics"
    self.yang_parent_name = "interface"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yslist_key_names = []
    self._child_classes = OrderedDict([
        ('discontinuity_time', (YLeaf(YType.str, 'discontinuity-time'), [str])),
        ('in_octets', (YLeaf(YType.uint64, 'in-octets'), [int])),
        ('in_unicast_pkts', (YLeaf(YType.uint64, 'in-unicast-pkts'), [int])),
        ('in_broadcast_pkts', (YLeaf(YType.uint64, 'in-broadcast-pkts'), [int])),
        ('in_multicast_pkts', (YLeaf(YType.uint64, 'in-multicast-pkts'), [int])),
        ('out_octets', (YLeaf(YType.uint64, 'out-octets'), [int])),
        ('out_unicast_pkts', (YLeaf(YType.uint64, 'out-unicast-pkts'), [int])),
        ('out_broadcast_pkts', (YLeaf(YType.uint64, 'out-broadcast-pkts'), [int])),
        ('out_multicast_pkts', (YLeaf(YType.uint64, 'out-multicast-pkts'), [int])),
        ('in_discards', (YLeaf(YType.uint32, 'in-discards'), [int])),
        ('in_errors', (YLeaf(YType.uint32, 'in-errors'), [int])),
        ('in_unknown_protos', (YLeaf(YType.uint32, 'in-unknown-protos'), [int])),
        ('out_discards', (YLeaf(YType.uint32, 'out-discards'), [int])),
        ('out_errors', (YLeaf(YType.uint32, 'out-errors'), [int])),
        ('in_pkts', (YLeaf(YType.uint64, 'ietf-interfaces-ext:in-pkts'), [int])),
        ('out_pkts', (YLeaf(YType.uint64, 'ietf-interfaces-ext:out-pkts'), [int])),
    ])
    self.discontinuity_time = None
    self.in_octets = None
    self.in_unicast_pkts = None
    self.in_broadcast_pkts = None
    self.in_multicast_pkts = None
    self.in_discards = None
self.in_errors = None
self.in_unknown_protos = None
self.out_octets = None
self.out_unicast_pkts = None
self.out_broadcast_pkts = None
self.out_multicast_pkts = None
self.out_discards = None
self.out_errors = None
self.in_pkts = None
self.out_pkts = None
self._segment_path = lambda: "statistics"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(InterfacesState.Interface.Statistics, [u'discontinuity_time', u'in_octets', u'in_unicast_pkts', u'in_broadcast_pkts', u'in_multicast_pkts', u'in_discards', u'in_errors', u'in_unknown_protos', u'out_octets', u'out_unicast_pkts', u'out_broadcast_pkts', u'out_multicast_pkts', u'out_discards', u'out_errors', 'in_pkts', 'out_pkts'], name, value)

class Ipv4(Entity):
    ""
    Interface-specific parameters for the IPv4 address family.
    ""

    .. attribute:: forwarding

    Indicates whether IPv4 packet forwarding is enabled or disabled on this interface
    
    **type**: bool

    .. attribute:: mtu

    The size, in octets, of the largest IPv4 packet that the interface will send and receive
    
    **type**: int

    **range**: 68..65535

    **units**: octets

    .. attribute:: address

    The list of IPv4 addresses on the interface
    
    **type**: list of :py:class:`Address

    .. attribute:: neighbor

    A list of mappings from IPv4 addresses to link-layer addresses. This list represents the ARP Cache
    
    **type**: list of :py:class:`Neighbor


This class is a :ref:`presence class<presence-class>`

```
_prefix = 'ip'
_revision = '2014-06-16'

def __init__(self):
    super(InterfacesState.Interface.Ipv4, self).__init__()

    self.yang_name = "ipv4"
    self.yang_parent_name = "interface"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        ("address", ('address', InterfacesState.Interface.Ipv4.Address)),
    self.is_presence_container = True
    self._leafs = OrderedDict(
        ("forwarding", (YLeaf(YType.boolean, 'forwarding'), ['bool'])),
        ("mtu", (YLeaf(YType.uint16, 'mtu'), ['int'])),
    )
    self.forwarding = None
    self.mtu = None

    self.address = YList(self)
    self.neighbor = YList(self)
    self._segment_path = lambda: "ietf-ip:ipv4"
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(InterfacesState.Interface.Ipv4, [u'forwarding', u'mtu'], name, value)

```

class Address(Entity):
    """
    The list of IPv4 addresses on the interface.
    """

    .. attribute:: ip  (key)

    The IPv4 address on the interface

    **type**::  str

    **pattern:**  (([0-9][1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])
The length of the subnet prefix
**type**:
int

**range**:
0..32

The subnet specified as a netmask
**type**:
str

**pattern**:
((\[0-9\]|\[1-9\]|1[0-9]|0\-9|2[0-4]|25[0-5])\.){3}((\[0-9\]|\[1-9\]|1[0-9]|0\-9|2[0-4]|25[0-5]))

The origin of this address
**type**:
:py:class:`IpAddressOrigin <ydk.models.ietf.ietf_ip.IpAddressOrigin>`

```python
__prefix = 'ip'
__revision = '2014-06-16'
def __init__(self):
    super(InterfacesState.Interface.Ipv4.Address, self).__init__()

    self.yang_name = "address"
    self.yang_parent_name = "ipv4"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ys_list_key_names = ['ip']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('ip', (YLeaf(YType.str, 'ip'), ['str'])),
        ('prefix_length', (YLeaf(YType.uint8, 'prefix-length'), ['int'])),
        ('netmask', (YLeaf(YType.str, 'netmask'), ['str'])),
        ('origin', (YLeaf(YType.enumeration, 'origin'), ['str']))
    )
    self.ip = None
    self.prefix_length = None
    self.netmask = None
    self.origin = None
```
class Neighbor(Entity):
    """
    A list of mappings from IPv4 addresses to
    link-layer addresses.
    This list represents the ARP Cache.
    """
    .. attribute:: ip  (key)
        The IPv4 address of the neighbor node
        **type**\: str
        **pattern:** (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]-
        9]|2[0-4]|0-9]|25[0-5])%(\p{N}\p{L}+)?
    .. attribute:: link_layer_address
        The link-layer address of the neighbor node
        **type**\: str
        **pattern:** (([0-9a-fA-F][2] |\[0-9a-fA-F][2])*)?
    .. attribute:: origin
        The origin of this neighbor entry

    """

_prefix = 'ip'
_revision = '2014-06-16'

def __init__(self):
    super(InterfacesState.Interface.Ipv4.Neighbor, self).__init__()

    self.yang_name = "neighbor"
    self.yang_parent_name = "ipv4"
    self.is_top_level_class = False
    self.has_list_ancestor = True
class Ipv6(Entity):
    """
    Parameters for the IPv6 address family.
    """
    .. attribute:: forwarding

    Indicates whether IPv6 packet forwarding is enabled or disabled on this interface
    **type**: bool

    **default value**: false

    .. attribute:: mtu

    The size, in octets, of the largest IPv6 packet that the interface will send and receive
    **type**: int

    **range**: 1280..4294967295

    **units**: octets

    .. attribute:: address

    The list of IPv6 addresses on the interface
    **type**: list of :py:class:`Address`

    .. attribute:: neighbor

    A list of mappings from IPv6 addresses to link-layer addresses. This list represents the Neighbor Cache
    **type**: list of :py:class:`Neighbor`
This class is a :ref:`presence class <presence-class>`

```python
_prefix = 'ip'
_revision = '2014-06-16'

def __init__(self):
    super(InterfacesState.Interface.Ipv6, self).__init__()

    self.yang_name = "ipv6"
    self.yang_parent_name = "interface"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(["address", "neighbor")
    self.is_presence_container = True
    self._leafs = OrderedDict(["forwarding", "mtu")
    self.forwarding = None
    self.mtu = None

    self.address = YList(self)
    self.neighbor = YList(self)

    self._segment_path = lambda: "ietf-ip:ipv6"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(InterfacesState.Interface.Ipv6, ["forwarding", "mtu"]) 
        setattr(self, name, value)

class Address(Entity):
    
    The list of IPv6 addresses on the interface.
    .. attribute:: ip  (key)
        The IPv6 address on the interface

    The IPv6 address on the interface
    **type**: str

    **pattern**: ((\:\[[0-9a-fA-F]{0,4}\])|([0-9a-fA-F]{0,4}\:]|0\.\d+\d+?\d)\[[0-9a-fA-F]{0,4}\])?\:\[[0-9a-fA-F]{0,4}\]

    .. attribute:: ip
```

---

Open Source Used In BGP TE Controller Version 4.3.0  1504
.. attribute:: prefix_length

The length of the subnet prefix
**type**: int

**range**: 0..128

**mandatory**: True

.. attribute:: origin

The origin of this address
**type**: :py:class:`IpAddressOrigin <ydk.models.ietf.ietf_ip.IpAddressOrigin>`

.. attribute:: status

The status of an address. Most of the states correspond to states from the IPv6 Stateless Address Autoconfiguration protocol

```python
__init__(self):
    super(InterfacesState.Interface.Ipv6.Address, self).__init__()
    self.yang_name = "address"
    self.yang_parent_name = "ipv6"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['ip']
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict(
        ("ip", (YLeaf(YType.str, 'ip'), ["str"])),
        ("prefix_length", (YLeaf(YType.uint8, 'prefix-length'), ["int"])),
        ("origin", (YLeaf(YType.enumeration, 'origin'), ["ydk.models.ietf.ietf_ip.IpAddressOrigin"])),
    )
    self.ip = None
```
self.prefix_length = None
self.origin = None
self.status = None
self._segment_path = lambda: "address" + "[ip='" + str(self.ip) + "']"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(InterfacesState.Interface.Ipv6.Address, [u'ip', u'prefix_length', u'origin', u'status'], name, value)

class Status(Enum):
    ""
    Status (Enum Class)
    ""

    The status of an address. Most of the states correspond
to states from the IPv6 Stateless Address
    Autoconfiguration protocol.

    .. data:: preferred = 0

    This is a valid address that can appear as the
destination or source address of a packet.

    .. data:: deprecated = 1

    This is a valid but deprecated address that should
no longer be used as a source address in new
communications, but packets addressed to such an
address are processed as expected.

    .. data:: invalid = 2

    This isn't a valid address, and it shouldn't appear
as the destination or source address of a packet.

    .. data:: inaccessible = 3

    The address is not accessible because the interface
to which this address is assigned is not
The status cannot be determined for some reason.

The uniqueness of the address on the link is being verified. Addresses in this state should not be used for general communication and should only be used to determine the uniqueness of the address.

The address has been determined to be non-unique on the link and so must not be used.

The address is available for use, subject to restrictions, while its uniqueness on a link is being verified.

preferred = Enum.YLeaf(0, "preferred")
deprecated = Enum.YLeaf(1, "deprecated")
invalid = Enum.YLeaf(2, "invalid")
inaccessible = Enum.YLeaf(3, "inaccessible")
unknown = Enum.YLeaf(4, "unknown")
tentative = Enum.YLeaf(5, "tentative")
duplicate = Enum.YLeaf(6, "duplicate")
optimistic = Enum.YLeaf(7, "optimistic")
class Neighbor(Entity):
    """
    A list of mappings from IPv6 addresses to link-layer addresses.
    This list represents the Neighbor Cache.
    """
    .. attribute:: ip (key)

    The IPv6 address of the neighbor node
    **type**: str

    **pattern**: (\.[0-9a-zA-F]{0,4}(:\.[0-9a-zA-F]{0,4}){0,5}(\.[0-9a-zA-F]{0,4})?(:\.[0-9a-zA-F]{0,4})?)(%[\p{N}\p{L}]+)?

    .. attribute:: link_layer_address

    The link-layer address of the neighbor node
    **type**: str

    **pattern**: ([0-9a-zA-F]{2}(:[0-9a-zA-F]{2})*)?

    .. attribute:: origin

    The origin of this neighbor entry

    .. attribute:: is_router

    Indicates that the neighbor node acts as a router
    **type**: :py:class:`Empty <ydk.types.Empty>`

    .. attribute:: state

    The Neighbor Unreachability Detection state of this entry

    """

    _prefix = 'ip'
    _revision = '2014-06-16'

    def __init__(self):

    _prefix = 'ip'
    _revision = '2014-06-16'

    def __init__(self):

    _prefix = 'ip'
    _revision = '2014-06-16'

    def __init__(self):
super(InterfacesState.Interface.Ipv6.Neighbor, self).__init__()

self.yang_name = "neighbor"
self.yang_parent_name = "ipv6"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['ip']
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([('ip', (YLeaf(YType.str, 'ip'), ['str'])), ('link_layer_address', (YLeaf(YType.str, 'link-layer-address'), ['str'])), ('origin', (YLeaf(YType.enumeration, 'origin'), [('ydk.models.ietf.ietf_ip', 'NeighborOrigin', '')])), ('is_router', (YLeaf(YType.empty, 'is-router'), [Empty])), ('state', (YLeaf(YType.enumeration, 'state'), [('ydk.models.ietf.ietf_interfaces', 'InterfacesState', 'Interface.Ipv6.Neighbor.State')])))

self.ip = None
self.link_layer_address = None
self.origin = None
self.is_router = None
self.state = None

self._segment_path = lambda: "neighbor" + "[ip='" + str(self.ip) + "']"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(InterfacesState.Interface.Ipv6.Neighbor, ['ip', 'link_layer_address', 'origin', 'is_router', 'state'], name, value)

class State(Enum):
    ""
    State (Enum Class)
    
The Neighbor Unreachability Detection state of this

    entry.

    .. data:: incomplete = 0

    Address resolution is in progress, and the link-layer

    address of the neighbor has not yet been

    determined.

    .. data:: reachable = 1

    Roughly speaking, the neighbor is known to have been
reachable recently (within tens of seconds ago).

.. data:: stale = 2

The neighbor is no longer known to be reachable, but until traffic is sent to the neighbor no attempt should be made to verify its reachability.

.. data:: delay = 3

The neighbor is no longer known to be reachable, and traffic has recently been sent to the neighbor. Rather than probe the neighbor immediately, however, delay sending probes for a short while in order to give upper-layer protocols a chance to provide reachability confirmation.

.. data:: probe = 4

The neighbor is no longer known to be reachable, and unicast Neighbor Solicitation probes are being sent to verify reachability.

incomplete = Enum.YLeaf(0, "incomplete")

reachable = Enum.YLeaf(1, "reachable")

stale = Enum.YLeaf(2, "stale")

delay = Enum.YLeaf(3, "delay")

probe = Enum.YLeaf(4, "probe")
.. attribute:: direction  (key)

Direction for the traffic flow either inbound or outbound

.. attribute:: policy_name  (key)

Policy entry name

.. attribute:: diffserv_target_classifier_statistics

Statistics for each Classifier Entry in a Policy

```
.. _prefix = 'target'
.. _revision = '2015-04-07'

def __init__(self):
    super(InterfacesState.Interface.DiffservTargetEntry, self).__init__()

    self.yang_name = "diffserv-target-entry"
    self.yang_parent_name = "interface"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yslist_key_names = ['direction', 'policy_name']
    self._child_classes = OrderedDict([("diffserv-target-classifier-statistics",
                                         InterfacesState.Interface.DiffservTargetEntry.DiffservTargetClassifierStatistics))])
    self._leafs = OrderedDict([("direction", (YLeaf(YType.identityref, 'direction'), [('ydk.models.ietf.ietf_diffserv_target', 'Direction')])),
                               ("policy_name", (YLeaf(YType.str, 'policy-name'), ['str']))])
    self.direction = None
    self.policy_name = None

    self.diffserv_target_classifier_statistics = YList(self)
    self._segment_path = lambda: "ietf-diffserv-target:diffserv-target-entry" + 
                             ["direction="+ str(self.direction) + """] + 
                             ["policy-name="+ str(self.policy_name) + ""]
    self._is_frozen = True
```
def __setattr__(self, name, value):
    self._perform_setattr(InterfacesState.Interface.DiffservTargetEntry, ['direction', 'policy_name'], name, value)

class DiffservTargetClassifierStatistics(Entity):
    """
    Statistics for each Classifier Entry in a Policy
    .. attribute:: classifier_entry_name (key)
    Classifier Entry Name
    **type**: str
    .. attribute:: parent_path (key)
    Path of the Classifier Entry in a hierarchial policy
    **type**: str
    .. attribute:: classifier_entry_statistics
    This group defines the classifier filter statistics of each classifier entry
    **type**: :py:class:`ClassifierEntryStatistics`
<
    .. attribute:: meter_statistics
    Meter statistics
    **type**: list of :py:class:`MeterStatistics`
<
    .. attribute:: queuing_statistics
    queue related statistics
    **type**: :py:class:`QueuingStatistics`
<
    """

_prefix = 'target'
_revision = '2015-04-07'

def __init__(self):
super(InterfacesState.Interface.DiffservTargetEntry.DiffservTargetClassifierStatistics, self).__init__()

self.yang_name = "diffserv-target-classifier-statistics"
self.yang_parent_name = "diffserv-target-entry"
self.is_top_level_class = False
self.has_list_ancestor = True
self.yang_key_names = ['classifier_entry_name', 'parent_path']
self._child_classes = OrderedDict(

self._leafs = OrderedDict(
    [('classifier_entry_name', (YLeaf(YType.str, 'classifier-entry-name'), ['str'])), ('parent_path', (YLeaf(YType.str, 'parent-path'), ['str']))],
)

self.classifier_entry_name = None
self.parent_path = None

self.classifier_entry_statistics.parent = self
self._children_name_map['classifier_entry_statistics'] = "classifier-entry-statistics"

self.queuing_statistics.parent = self
self._children_name_map['queuing_statistics'] = "queuing-statistics"

self.meter_statistics = YList(self)
self._segment_path = lambda: "diffserv-target-classifier-statistics" + "[classifier-entry-name='" + str(self.classifier_entry_name) + "']" + "[parent-path='" + str(self.parent_path) + "]"

self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(InterfacesState.Interface.DiffservTargetEntry.DiffservTargetClassifierStatistics, ['classifier_entry_name', 'parent_path'], name, value)


class ClassifierEntryStatistics(Entity):
    
    """
    This group defines the classifier filter statistics of each classifier entry
    """
.. attribute:: classified_pkts

Number of total packets which filtered to the classifier-entry
**type**: int

**range**: 0..18446744073709551615

.. attribute:: classified_bytes

Number of total bytes which filtered to the classifier-entry
**type**: int

**range**: 0..18446744073709551615

.. attribute:: classified_rate

Rate of average data flow through the classifier-entry
**type**: int

**range**: 0..18446744073709551615

**units**: bits-per-second

....

_prefix = 'target'
_revision = '2015-04-07'

def __init__(self):
    self.yang_name = 'classifier-entry-statistics'
    self.yang_parent_name = 'diffserv-target-classifier-statistics'
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(["classified_pkts", (YLeaf(YType.uint64, 'classified-pkts'), ['int']),
                               "classified_bytes", (YLeaf(YType.uint64, 'classified-bytes'), ['int']),
                               "classified_rate", (YLeaf(YType.uint64, 'classified-rate'), ['int'])])
    self.classified_pkts = None
    self.classified_bytes = None
    self.classified_rate = None
self._segment_path = lambda: "classifier-entry-statistics"
self._is_frozen = True

def __setattr__(self, name, value):

class MeterStatistics(Entity):
    """
    Meter statistics
    """

    .. attribute:: meter_id  (key)

        Meter Identifier
        
        **type**: int
        
        **range**: 0..65535

    .. attribute:: meter_succeed_pkts

        Number of packets which succeed the meter
        
        **type**: int
        
        **range**: 0..18446744073709551615

    .. attribute:: meter_succeed_bytes

        Bytes of packets which succeed the meter
        
        **type**: int
        
        **range**: 0..18446744073709551615

    .. attribute:: meter_failed_pkts

        Number of packets which failed the meter
        
        **type**: int
        
        **range**: 0..18446744073709551615

    .. attribute:: meter_failed_bytes

        Bytes of packets which failed the meter
        
        **type**: int
        
        **range**: 0..18446744073709551615
_prefix = 'target'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "meter-statistics"
    self.yang_parent_name = "diffserv-target-classifier-statistics"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['meter_id']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('meter_id', (YLeaf(YType.uint16, 'meter-id'), ['int'])),
        ('meter_succeed_pkts', (YLeaf(YType.uint64, 'meter-succeed-pkts'), ['int'])),
        ('meter_succeed_bytes', (YLeaf(YType.uint64, 'meter-succeed-bytes'), ['int'])),
        ('meter_failed_pkts', (YLeaf(YType.uint64, 'meter-failed-pkts'), ['int'])),
        ('meter_failed_bytes', (YLeaf(YType.uint64, 'meter-failed-bytes'), ['int'])),
    )

    self.meter_id = None
    self.meter_succeed_pkts = None
    self.meter_succeed_bytes = None
    self.meter_failed_pkts = None
    self.meter_failed_bytes = None

    self._segment_path = lambda: "meter-statistics" + "[meter-id='" + str(self.meter_id) + "]"
    self._is_frozen = True

    def __setattr__(self, name, value):

class QueuingStatistics(Entity):
    ""
    queue related statistics
    .. attribute:: output_pkts

    Number of packets transmitted from queue
    **type**=: int

    **range:** 0..18446744073709551615

    .. attribute:: output_bytes

Number of bytes transmitted from queue
**type**: int

**range**: 0..18446744073709551615

.. attribute:: queue_size_pkts

Number of packets currently buffered
**type**: int

**range**: 0..18446744073709551615

.. attribute:: queue_size_bytes

Number of bytes currently buffered
**type**: int

**range**: 0..18446744073709551615

.. attribute:: drop_pkts

Total number of packets dropped
**type**: int

**range**: 0..18446744073709551615

.. attribute:: drop_bytes

Total number of bytes dropped
**type**: int

**range**: 0..18446744073709551615

.. attribute:: wred_stats

Container for WRED statistics
**type**: :py:class:`WredStats`


_.....

_prefix = 'target'
_revision = '2015-04-07'
def __init__(self):

    self.yang_name = "queuing-statistics"
    self.yang_parent_name = "diffserv-target-classifier-statistics"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict(
        [('output_pkts', (YLeaf(YType.uint64, 'output-pkts'), ['int']))],
        [('output_bytes', (YLeaf(YType.uint64, 'output-bytes'), ['int']))],
        [('queue_size_pkts', (YLeaf(YType.uint64, 'queue-size-pkts'), ['int']))],
        [('queue_size_bytes', (YLeaf(YType.uint64, 'queue-size-bytes'), ['int']))],
        [('drop_pkts', (YLeaf(YType.uint64, 'drop-pkts'), ['int']))],
        [('drop_bytes', (YLeaf(YType.uint64, 'drop-bytes'), ['int']))])

    self.output_pkts = None
    self.output_bytes = None
    self.queue_size_pkts = None
    self.queue_size_bytes = None
    self.drop_pkts = None
    self.drop_bytes = None

    self.wred_stats.parent = self
    self._children_name_map['wred_stats'] = "wred-stats"
    self._segment_path = lambda: "queuing-statistics"
    self._is_frozen = True

    def __setattr__(self, name, value):

class WredStats(Entity):
    ""
    Container for WRED statistics
    ""

    .. attribute:: early_drop_pkts

        Early drop packets

        **type**: int

        **range**: 0..18446744073709551615
.. attribute:: early_drop_bytes

   Early drop bytes
   **type**: int

   **range**: 0..18446744073709551615

***

_prefix = 'target'
_revision = '2015-04-07'

def __init__(self):
    super(InterfacesState.Interface.DiffservTargetEntry.DiffservTargetClassifierStatistics.QueuingStatistics.WredStats,
    self).__init__()

    self.yang_name = "wred-stats"
    self.yang_parent_name = "queuing-statistics"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict(
        ('early_drop_pkts', (YLeaf(YType.uint64, 'early-drop-pkts'), ['int']))),
        ('early_drop_bytes', (YLeaf(YType.uint64, 'early-drop-bytes'), ['int']))),
    )
    self.early_drop_pkts = None
    self.early_drop_bytes = None
    self._segment_path = lambda: "wred-stats"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(InterfacesState.Interface.DiffservTargetEntry.DiffservTargetClassifierStatistics.QueuingStatistics.WredStats,
        self, name, value)

    def clone_ptr(self):
        self._top_entity = InterfacesState()
        return self._top_entity

def clone_ptr(self):
    self._top_entity = InterfacesState()
    return self._top_entity

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-
  0.1.5.post2/ydk/models/ietf/ietf_interfaces.py

No license file was found, but licenses were detected in source scan.

*** ietf_diffserv_classifier
This module contains a collection of YANG definitions for configuring diffserv specification implementations.

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This version of this YANG module is part of RFC XXXX; see the RFC itself for full legal notices.

```python
from collections import OrderedDict
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class FilterType(Identity):
    """This is identity of base filter-type"

    _prefix = 'classifier'
    _revision = '2015-04-07'

        super(FilterType, self).__init__(ns, pref, tag)

    

class ClassifierEntryFilterOperationType(Identity):
    """Classifier entry filter logical operation"

    _prefix = 'classifier'
    _revision = '2015-04-07'

        super(ClassifierEntryFilterOperationType, self).__init__(ns, pref, tag)

```
```python

_classifiers = Classifiers()

_classifiers.yang_name = "classifiers"
_classifiers.yang_parent_name = "ietf-diffserv-classifier"
_classifiers.is_top_level_class = True
_classifiers.has_list_ancestor = False
_classifiers.ylist_key_names = []
_classifiers._child_classes = OrderedDict(
    ("classifier-entry", ("classifier-entry", Classifiers.ClassifierEntry))
)
_classifiers._leafs = OrderedDict()
_classifiers.classifier_entry = YList(_classifiers)
_classifiers._segment_path = lambda: "ietf-diffserv-classifier:classifiers"
_classifiers._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Classifiers, [], name, value)
```
class ClassifierEntry(Entity):
    """
    classifier entry template

    .. attribute:: classifier_entry_name  (key)

    Diffserv classifier name
    **type**: str

    .. attribute:: classifier_entry_descr

    Description of the class template
    **type**: str

    .. attribute:: classifier_entry_filter_operation

    Filters are applicable as any or all filters
    **type**: :py:class:`ClassifierEntryFilterOperationType`
    <ydk.models.ietf.ietf_diffserv_classifier.ClassifierEntryFilterOperationType>
    
    **default value**: match-any-filter

    .. attribute:: filter_entry

    Filter configuration
    **type**: list of :py:class:`FilterEntry`

    """

    _prefix = 'classifier'
    _revision = '2015-04-07'

def __init__(self):
    super(Classifiers.ClassifierEntry, self).__init__()

    self.yang_name = "classifier-entry"
    self.yang_parent_name = "classifiers"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = ['classifier_entry_name']
    self._child_classes = OrderedDict([('filter-entry', ('filter_entry', Classifiers.ClassifierEntry.FilterEntry))])
    self._leafs = OrderedDict([('classifier_entry_name', (YLeaf(YType.str, 'classifier-entry-name'), ['str'])),
                               ('classifier_entry_descr', (YLeaf(YType.str, 'classifier-entry-descr'), ['str']))],
                               ('classifier_entry_filter_operation', (YLeaf(YType.str, 'classifier-entry-filter-operation'), [str])))
('classifier_entry_filter_operation', (YLeaf(YType.identityref, 'classifier-entry-filter-operation'),
[('ydk.models.ietf.ietf_diffserv_classifier', 'ClassifierEntryFilterOperationType')]),
})

self.classifier_entry_name = None
self.classifier_entry_descr = None
self.classifier_entry_filter_operation = None

self.filter_entry = YList(self)
self._segment_path = lambda: "classifier-entry" + "[classifier-entry-name='" + str(self.classifier_entry_name) + "]"
self._absolute_path = lambda: "ietf-diffserv-classifier:classifiers/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Classifiers.ClassifierEntry, [u'classifier_entry_name', u'classifier_entry_descr', u'classifier_entry_filter_operation'], name, value)

class FilterEntry(Entity):
    """
    Filter configuration
    """

    .. attribute:: filter_type  (key)

    This leaf defines type of the filter
    **type**: :py:class:`FilterType <ydk.models.ietf.ietf_diffserv_classifier.FilterType>`

    .. attribute:: filter_logical_not  (key)

    This is logicall-not operator for a filter. When true, it indicates filter looks for absence of a pattern defined by the filter
    **type**: bool

    .. attribute:: dscp_cfg

    list of dscp ranges

    .. attribute:: source_ip_address_cfg

    list of source ip address

    .. attribute:: destination_ip_address_cfg

    list of destination ip address
self.filter_type = None
self.filter_logical_not = None

self.dscp_cfg = YList(self)
self.source_ip_address_cfg = YList(self)
self.destination_ip_address_cfg = YList(self)
self.source_port_cfg = YList(self)
self.destination_port_cfg = YList(self)
self.protocol_cfg = YList(self)
self._segment_path = lambda: "filter-entry" + "[filter-type='" + str(self.filter_type) + "]" + "[filter-logical-not='" + str(self.filter_logical_not) + "]"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Classifiers.ClassifierEntry.FilterEntry, [u'filter_type', u'filter_logical_not'], name, value)

class DscpCfg(Entity):
    """
    list of dscp ranges
    .. attribute:: dscp_min  (key)
    Minimum value of dscp range
    **type**: int
    **range**: 0..63
    .. attribute:: dscp_max  (key)
    maximum value of dscp range
    **type**: int
    **range**: 0..63
    """

    _prefix = 'classifier'
    _revision = '2015-04-07'

def __init__(self):
    super(Classifiers.ClassifierEntry.FilterEntry.DscpCfg, self).__init__()
    self.yang_name = "dscp-cfg"
    self.yang_parent_name = "filter-entry"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['dscp_min','dscp_max']
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([
('dscp_min', (YLeaf(YType.uint8, 'dscp-min'), ['int'])),
('dscp_max', (YLeaf(YType.uint8, 'dscp-max'), ['int'])),
])
self.dscp_min = None
self.dscp_max = None
self._segment_path = lambda: "dscp-cfg" + "[dscp-min='" + str(self.dscp_min) + "']" + "[dscp-max='" +
str(self.dscp_max) + "']"
self._is_frozen = True
def __setattr__(self, name, value):
self._perform_setattr(Classifiers.ClassifierEntry.FilterEntry.DscpCfg, [u'dscp_min', u'dscp_max'], name,
value)

class SourceIpAddressCfg(Entity):
"""
list of source ip address
.. attribute:: source_ip_addr (key)
source ip prefix
**type**\: union of the below types:
**type**\: str
**pattern:** (([0\-9]\|[1\-9][0\-9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])\\.){3}([0\-9]\|[1\-9][0\-9]\|1[0\9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])/(([0\-9])\|([1\-2][0\-9])\|(3[0\-2]))
**type**\: str
**pattern:** ((\:\|[0\-9a\-fA\-F]{0,4})\:)([0\-9a\-fA\-F]{0,4}\:){0,5}((([0\-9a\-fA\-F]{0,4}\:)?(\:\|[0\-9a\fA\-F]{0,4}))\|(((25[0\-5]\|2[0\-4][0\-9]\|[01]?[0\-9]?[0\-9])\\.){3}(25[0\-5]\|2[0\-4][0\-9]\|[01]?[0\-9]?[0\-9])))(/(([0\9])\|([0\-9]{2})\|(1[0\-1][0\-9])\|(12[0\-8])))

"""
_prefix = 'classifier'
_revision = '2015-04-07'
def __init__(self):
super(Classifiers.ClassifierEntry.FilterEntry.SourceIpAddressCfg, self).__init__()

Open Source Used In BGP TE Controller Version 4.3.0 1526


class DestinationIpAddressCfg(Entity):
    
    list of destination ip address

    .. attribute:: destination_ip_addr (key)

    destination ip prefix

    **type**:: union of the below types:

    **type**:: str

    **pattern**: union of the below types:

    **pattern**: str

    .. _prefix = 'classifier'
    .. _revision = '2015-04-07'

def __init__(self):
    pass
super(Classifiers.ClassifierEntry.FilterEntry.DestinationIpAddressCfg, self).__init__()

self.yang_name = "destination-ip-address-cfg"
self.yang_parent_name = "filter-entry"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['destination_ip_addr']
self._child_classes = OrderedDict({})
self._leafs = OrderedDict({
    ('destination_ip_addr', (YLeaf(YType.str, 'destination-ip-addr'), ['str','str'])),
})
self.destination_ip_addr = None
self._segment_path = lambda: "destination-ip-address-cfg" + "[destination-ip-addr='" + str(self.destination_ip_addr) + "']"
self._is_frozen = True

class SourcePortCfg(Entity):
    
    list of ranges of source port

    .. attribute:: source_port_min  (key)

    minimum value of source port range
    **type**: int

    **range**: 0..65535

    .. attribute:: source_port_max  (key)

    maximum value of source port range
    **type**: int

    **range**: 0..65535


    _prefix = 'classifier'
    _revision = '2015-04-07'

    def __init__(self):
        super(Classifiers.ClassifierEntry.FilterEntry.SourcePortCfg, self).__init__()}
self.yang_name = "source-port-cfg"
self.yang_parent_name = "filter-entry"
self.is_top_level_class = False
self.has_list_ancestor = True
self._list_key_names = ['source_port_min','source_port_max']
self._child_classes = OrderedDict([
    ('source_port_min', (YLeaf(YType.uint16, 'source-port-min'), ['int'])),
    ('source_port_max', (YLeaf(YType.uint16, 'source-port-max'), ['int'])),
])
self.source_port_min = None
self.source_port_max = None
self._segment_path = lambda: "source-port-cfg" + "[source-port-min='" + str(self.source_port_min) + "]" + "[source-port-max='" + str(self.source_port_max) + "]"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Classifiers.ClassifierEntry.FilterEntry.SourcePortCfg, [u'source_port_min', u'source_port_max'], name, value)

class DestinationPortCfg(Entity):
    """
    list of ranges of destination port
    .. attribute:: destination_port_min (key)

    minimum value of destination port range
    **type**: int

    **range**: 0..65535

    .. attribute:: destination_port_max (key)

    maximum value of destination port range
    **type**: int

    **range**: 0..65535

    """

    _prefix = 'classifier'
    _revision = '2015-04-07'

def __init__(self):
super(Classifiers.ClassifierEntry.FilterEntry.DestinationPortCfg, self).__init__()

self.yang_name = "destination-port-cfg"
self.yang_parent_name = "filter-entry"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['destination_port_min', 'destination_port_max']
self._child_classes = OrderedDict([])
self._leafs = OrderedDict(
    ('destination_port_min', (YLeaf(YType.uint16, 'destination-port-min'), ['int'])),
    ('destination_port_max', (YLeaf(YType.uint16, 'destination-port-max'), ['int'])),
)
self.destination_port_min = None
self.destination_port_max = None
self._segment_path = lambda: "destination-port-cfg" + "[destination-port-min='" + str(self.destination_port_min) + "']" + "[destination-port-max='" + str(self.destination_port_max) + "']"
self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(Classifiers.ClassifierEntry.FilterEntry.DestinationPortCfg, [u'destination_port_min', u'destination_port_max'], name, value)

class ProtocolCfg(Entity):
    """
    list of ranges of protocol values
    .. attribute:: protocol_min  (key)

    minimum value of protocol range
    **type**::*
    int
    **range:** 0..255

    .. attribute:: protocol_max  (key)

    maximum value of protocol range
    **type**::*
    int
    **range:** 0..255
    """

_prefix = 'classifier'
_revision = '2015-04-07'
def __init__(self):
    super(Classifiers.ClassifierEntry.FilterEntry.ProtocolCfg, self).__init__()

    self.yang_name = "protocol-cfg"
    self.yang_parent_name = "filter-entry"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['protocol_min', 'protocol_max']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        [('protocol_min', (YLeaf(YType.uint8, 'protocol-min'), ['int'])),
         ('protocol_max', (YLeaf(YType.uint8, 'protocol-max'), ['int']))],
    )
    self.protocol_min = None
    self.protocol_max = None
    self._segment_path = lambda: "protocol-cfg" + "[protocol-min='" + str(self.protocol_min) + "]" + 
    "[protocol-max='" + str(self.protocol_max) + "]"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(Classifiers.ClassifierEntry.FilterEntry.ProtocolCfg, [u'protocol_min', u'protocol_max'], name, value)

    def clone_ptr(self):
        self._top_entity = Classifiers()
        return self._top_entity

class DestinationPort(FilterType):
    """
    destination-port filter-type
    """

    _prefix = 'classifier'
    _revision = '2015-04-07'

                 tag="ietf-diffserv-classifier:destination-port"):
        super(DestinationPort, self).__init__(ns, pref, tag)

    class Protocol(FilterType):
        """
        protocol filter-type
        """
_prefix = 'classifier'
_revision = '2015-04-07'

        super(Protocol, self).__init__(ns, pref, tag)

class DestinationIpAddress(FilterType):
    """
    destination-ip-address filter-type
    """

    _prefix = 'classifier'
    _revision = '2015-04-07'

        super(DestinationIpAddress, self).__init__(ns, pref, tag)

class Dscp(FilterType):
    """
    DSCP filter-type
    """

    _prefix = 'classifier'
    _revision = '2015-04-07'

        super(Dscp, self).__init__(ns, pref, tag)

class MatchAllFilter(ClassifierEntryFilterOperationType):
    """
    Classifier entry filter logical AND operation
    """
```python

class _Prefix:
    _prefix = 'classifier'
    _revision = '2015-04-07'


class SourceIpAddress(FilterType):
    """
    source-ip-address filter-type
    """


class MatchAnyFilter(ClassifierEntryFilterOperationType):
    """
    Classifier entry filter logical OR operation
    """


class SourcePort(FilterType):
    """
    source-port filter-type
    """
```
```python
_prefix = 'classifier'
_revision = '2015-04-07'

tag="ietf-diffserv-classifier:source-port"):
    super(SourcePort, self).__init__(ns, pref, tag)

```

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_diffserv_classifier.py
No license file was found, but licenses were detected in source scan.

```python
"""
ietf_inet_types

This module contains a collection of generally useful derived
YANG data types for Internet addresses and related things.

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authors of the code. All rights reserved.

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(http://trustee.ietf.org/license-info).

This version of this YANG module is part of RFC 6991; see
the RFC itself for full legal notices.

"""

from collections import OrderedDict
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits,
Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class IpVersion(Enum):
    """
    IpVersion (Enum Class)
```
This value represents the version of the IP protocol.

In the value set and its semantics, this type is equivalent to the InetVersion textual convention of the SMIv2.

.. data:: unknown = 0

An unknown or unspecified version of the Internet protocol.

.. data:: ipv4 = 1

The IPv4 protocol as defined in RFC 791.

.. data:: ipv6 = 2

The IPv6 protocol as defined in RFC 2460.

unknown = Enum.YLeaf(0, "unknown")

ipv4 = Enum.YLeaf(1, "ipv4")

ipv6 = Enum.YLeaf(2, "ipv6")

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_inet_types.py

No license file was found, but licenses were detected in source scan.

ietf_ipv6_unicast_routing

This YANG module augments the 'ietf-routing' module with basic configuration and state data for IPv6 unicast routing.

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The key words 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in the module text are to be interpreted as described in RFC 2119 (http://tools.ietf.org/html/rfc2119).

This version of this YANG module is part of RFC XXXX (http://tools.ietf.org/html/rfcXXXX); see the RFC itself for full legal notices.

```python
from collections import OrderedDict
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error
from ydk.models.ietf.ietf_routing import Ipv6

class Ipv6Unicast(Ipv6):
    
    This identity represents the IPv6 unicast address family.

             tag="ietf-ipv6-unicast-routing:ipv6-unicast"): super(Ipv6Unicast, self).__init__(ns, pref, tag)

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_ipv6_unicast_routing.py

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iientf_restconf_monitoring

This module contains monitoring information for the RESTCONF protocol.

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This version of this YANG module is part of RFC XXXX; see the RFC itself for full legal notices.

```python
from collections import OrderedDict
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class RestconfState(Entity):
    
    Contains RESTCONF protocol monitoring information.
    
    .. attribute:: capabilities

    Contains a list of protocol capability URIs
    
    **type**: :py:class:`Capabilities <ydk.models.ietf.ietf_restconf_monitoring.RestconfState.Capabilities>`

    .. attribute:: streams

    Container representing the notification event streams supported by the server
    
    **type**: :py:class:`Streams <ydk.models.ietf.ietf_restconf_monitoring.RestconfState.Streams>`

    _prefix = 'rcmon'
    _revision = '2016-08-15'

    def __init__(self):
        super(RestconfState, self).__init__()
        self._top_entity = None
```
self.yang_name = "restconf-state"
self.yang_parent_name = "ietf-restconf-monitoring"
self.is_top_level_class = True
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict(["capabilities", ("capabilities", RestconfState.Capabilities)), ("streams", ("streams", RestconfState.Streams))])
self._leafs = OrderedDict()

self.capabilities = RestconfState.Capabilities()
self.capabilities.parent = self
self._children_name_map["capabilities"] = "capabilities"

self.streams = RestconfState.Streams()
self.streams.parent = self
self._children_name_map["streams"] = "streams"
self._segment_path = lambda: "ietf-restconf-monitoring:restconf-state"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(RestconfState, [], name, value)

class Capabilities(Entity):
    ""
    Contains a list of protocol capability URIs
    ""
    .. attribute:: capability

    A RESTCONF protocol capability URI

    **type**: list of str

    """

    _prefix = 'rcmon'
    _revision = '2016-08-15'

def __init__(self):
    super(RestconfState.Capabilities, self).__init__()

    self.yang_name = "capabilities"
    self.yang_parent_name = "restconf-state"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
self._child_classes = OrderedDict([
    ('capability', (YLeafList(YType.str, 'capability'), ['str']))
])
self.capability = []
self._segment_path = lambda: "capabilities"
self._absolute_path = lambda: "ietf-restconf-monitoring:restconf-state/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(RestconfState.Capabilities, ['capability'], name, value)

class Streams(Entity):
    """
    Container representing the notification event streams
    supported by the server.
    .. attribute:: stream

    Each entry describes an event stream supported by the server
    **type**: list of :py:class:`Stream`
    
    `<ydk.models.ietf.ietf_restconf_monitoring.RestconfState.Streams.Stream>`
    """

    _prefix = 'rcmon'
    _revision = '2016-08-15'

def __init__(self):
    super(RestconfState.Streams, self).__init__()

    self.yang_name = "streams"
    self.yang_parent_name = "restconf-state"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([("stream", RestconfState.Streams.Stream)])
    self._leafs = OrderedDict()

    self.stream = YList(self)
    self._segment_path = lambda: "streams"
    self._absolute_path = lambda: "ietf-restconf-monitoring:restconf-state/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(RestconfState.Streams, ['stream'], name, value)
class Stream(Entity):
    """
    Each entry describes an event stream supported by
    the server.
    """
    .. attribute:: name (key)

    The stream name
    **type**: str

    .. attribute:: description

    Description of stream content
    **type**: str

    .. attribute:: replay_support

    Indicates if replay buffer supported for this stream. If 'true', then the server MUST support the 'start-time' and
    'stop-time' query parameters for this stream
    **type**: bool

    **default value**: false

    .. attribute:: replay_log_creation_time

    Indicates the time the replay log for this stream was created
    **type**: str

    **pattern**: \d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}(\.\d+)?(Z|([\+\-]\d{2}:\d{2}))

    .. attribute:: access

    The server will create an entry in this list for each encoding format that is supported for this stream. The
    media type 'text/event-stream' is expected for all event streams. This list identifies the sub-types supported for this
    stream
    **type**: list of :py:cls:`Access`
    """

    _prefix = 'rcmon'
    _revision = '2016-08-15'
def __init__(self):
    super(RestconfState.Streams.Stream, self).__init__()

    self.yang_name = "stream"
    self.yang_parent_name = "streams"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yang_key_names = ['name']
    self._child_classes = OrderedDict(
        [('access', ('access', RestconfState.Streams.Stream.Access))])
    self._leafs = OrderedDict(
        [('name', (YLeaf(YType.str, 'name'), None)),
         ('description', (YLeaf(YType.str, 'description'), None)),
         ('replay_support', (YLeaf(YType.boolean, 'replay-support'), None)),
         ('replay_log_creation_time', (YLeaf(YType.str, 'replay-log-creation-time'), None))])
    self.name = None
    self.description = None
    self.replay_support = None
    self.replay_log_creation_time = None

    self.access = YList(self)
    self._segment_path = lambda: "stream" + "[name='" + str(self.name) + "']"
    self._absolute_path = lambda: "ietf-restconf-monitoring:restconf-state/streams/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(RestconfState.Streams.Stream, ['name', 'description', 'replay_support', 'replay_log_creation_time'], name, value)

    class Access(Entity):
        
        The server will create an entry in this list for each
        encoding format that is supported for this stream.
        The media type 'text/event-stream' is expected
        for all event streams. This list identifies the
        sub-types supported for this stream.

        .. attribute:: encoding  (key)

        This is the secondary encoding format within the 'text/event-stream' encoding used by all streams. The
        type 'xml' is supported for XML encoding. The type 'json' is supported for JSON encoding

        .. attribute:: location

        Contains a URL that represents the entry point for establishing notification delivery via server sent events
**mandatory**: True

```python
_prefix = 'rcmon'
_revision = '2016-08-15'

def __init__(self):
    super(RestconfState.Streams.Stream.Access, self).__init__()

    self.yang_name = "access"
    self.yang_parent_name = "stream"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.traist_key_names = ['encoding']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        [('encoding', (YLeaf(YType.str, 'encoding'), ['str']))],
        [('location', (YLeaf(YType.str, 'location'), ['str']))],
    )
    self.encoding = None
    self.location = None
    self._segment_path = lambda: "access" + "[encoding='{}']".format(str(self.encoding))
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(RestconfState.Streams.Stream.Access, ['encoding', 'location'], name, value)

    def clone_ptr(self):
        self._top_entity = RestconfState()
        return self._top_entity

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-
  0.1.5.post2/ydk/models/ietf/ietf_restconf_monitoring.py
No license file was found, but licenses were detected in source scan.

*** ietf_ipv4_unicast_routing

This YANG module augments the 'ietf-routing' module with basic configuration and state data for IPv4 unicast routing.

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The key words 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in the module text are to be interpreted as described in RFC 2119 (http://tools.ietf.org/html/rfc2119).

This version of this YANG module is part of RFC XXXX (http://tools.ietf.org/html/rfcXXXX); see the RFC itself for full legal notices.

```python
from collections import OrderedDict
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error
from ydk.models.ietf.ietf_routing import Ipv4

class Ipv4Unicast(Ipv4):
    
    This identity represents the IPv4 unicast address family.

    

    _prefix = 'v4ur'
    _revision = '2015-05-25'

        tag="ietf-ipv4-unicast-routing:ipv4-unicast"):
        super(Ipv4Unicast, self).__init__(ns, pref, tag)

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_ipv4_unicast_routing.py
module ietf-yang-types {
namespace "urn:ietf:params:xml:ns:yang:ietf-yang-types";
prefix yang;

organization "IETF NETMOD (NETCONF Data Modeling Language) Working Group";
contact "WG Web: <http://tools.ietf.org/wg/netmod> 
WG List: <mailto:netmod@ietf.org>
WG Chair: David Kessens <mailto:david.kessens@nsn.com>
WG Chair: Juergen Schoenwaelder <mailto:j.schoenwaelder@jacobs-university.de>
Editor: Juergen Schoenwaelder <mailto:j.schoenwaelder@jacobs-university.de>";

description "This module contains a collection of generally useful derived YANG data types.

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This version of this YANG module is part of RFC 6991; see the RFC itself for full legal notices.";

revision 2013-07-15 {
description "This revision adds the following new data types:
 - yang-identifier
 - hex-string
 - uuid
 - dotted-quad";
reference "RFC 6991: Common YANG Data Types";
}
revision 2010-09-24 {
description
typedef counter32 {
  type uint32;
  description "The counter32 type represents a non-negative integer that monotonically increases until it reaches a maximum value of $2^{32} - 1$ (4294967295 decimal), when it wraps around and starts increasing again from zero.

  Counters have no defined 'initial' value, and thus, a single value of a counter has (in general) no information content. Discontinuities in the monotonically increasing value normally occur at re-initialization of the management system, and at other times as specified in the description of a schema node using this type. If such other times can occur, for example, the creation of a schema node of type counter32 at times other than re-initialization, then a corresponding schema node should be defined, with an appropriate type, to indicate the last discontinuity.

  The counter32 type should not be used for configuration schema nodes. A default statement SHOULD NOT be used in combination with the type counter32.

  In the value set and its semantics, this type is equivalent to the Counter32 type of the SMIV2.";
} reference "RFC 2578: Structure of Management Information Version 2 (SMIV2)";
}

typedef zero-based-counter32 {
  type yang:counter32;
  default "0";
  description "The zero-based-counter32 type represents a counter32 that has the defined 'initial' value zero.

  A schema node of this type will be set to zero (0) on creation and will thereafter increase monotonically until it reaches a maximum value of $2^{32} - 1$ (4294967295 decimal), when it wraps around and starts increasing again from zero.

  Provided that an application discovers a new schema node
of this type within the minimum time to wrap, it can use the
'initial' value as a delta. It is important for a management
station to be aware of this minimum time and the actual time
between polls, and to discard data if the actual time is too
long or there is no defined minimum time.

In the value set and its semantics, this type is equivalent
to the ZeroBasedCounter32 textual convention of the SMIv2.
reference
"RFC 4502: Remote Network Monitoring Management Information
Base Version 2";

typedef counter64 {
type uint64;
description
"The counter64 type represents a non-negative integer
that monotonically increases until it reaches a
maximum value of 2^64-1 (18446744073709551615 decimal),
when it wraps around and starts increasing again from zero.

Counters have no defined 'initial' value, and thus, a
single value of a counter has (in general) no information
content. Discontinuities in the monotonically increasing
value normally occur at re-initialization of the
management system, and at other times as specified in the
description of a schema node using this type. If such
other times can occur, for example, the creation of
a schema node of type counter64 at times other than
re-initialization, then a corresponding schema node
should be defined, with an appropriate type, to indicate
the last discontinuity.

The counter64 type should not be used for configuration
schema nodes. A default statement SHOULD NOT be used in
combination with the type counter64.

In the value set and its semantics, this type is equivalent
to the Counter64 type of the SMIv2.
reference
"RFC 2578: Structure of Management Information Version 2
(SMIv2)"
}

typedef zero-based-counter64 {
type yang:counter64;
default "0";
description
"The zero-based-counter64 type represents a counter64 that has the defined 'initial' value zero.

A schema node of this type will be set to zero (0) on creation and will thereafter increase monotonically until it reaches a maximum value of $2^{64}-1$ (18446744073709551615 decimal), when it wraps around and starts increasing again from zero.

Provided that an application discovers a new schema node of this type within the minimum time to wrap, it can use the 'initial' value as a delta. It is important for a management station to be aware of this minimum time and the actual time between polls, and to discard data if the actual time is too long or there is no defined minimum time.

In the value set and its semantics, this type is equivalent to the ZeroBasedCounter64 textual convention of the SMIv2."; reference "RFC 2856: Textual Conventions for Additional High Capacity Data Types";
}

typedef gauge32 {
  type uint32;
  description
  "The gauge32 type represents a non-negative integer, which may increase or decrease, but shall never exceed a maximum value, nor fall below a minimum value. The maximum value cannot be greater than $2^{32}-1$ (4294967295 decimal), and the minimum value cannot be smaller than 0. The value of a gauge32 has its maximum value whenever the information being modeled is greater than or equal to its maximum value, and has its minimum value whenever the information being modeled is smaller than or equal to its minimum value. If the information being modeled subsequently decreases below (increases above) the maximum (minimum) value, the gauge32 also decreases (increases).

In the value set and its semantics, this type is equivalent to the Gauge32 type of the SMIv2."; reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

typedef gauge64 {
  type uint64;
  description
"The gauge64 type represents a non-negative integer, which may increase or decrease, but shall never exceed a maximum value, nor fall below a minimum value. The maximum value cannot be greater than 2^64-1 (18446744073709551615), and the minimum value cannot be smaller than 0. The value of a gauge64 has its maximum value whenever the information being modeled is greater than or equal to its maximum value, and has its minimum value whenever the information being modeled is smaller than or equal to its minimum value. If the information being modeled subsequently decreases below (increases above) the maximum (minimum) value, the gauge64 also decreases (increases).

In the value set and its semantics, this type is equivalent to the CounterBasedGauge64 SMIv2 textual convention defined in RFC 2856";

reference
"RFC 2856: Textual Conventions for Additional High Capacity Data Types";

typedef object-identifier {
  type string {
    pattern "(([0-1]\.[1-3]?[0-9])|(2\.[0-9]?))((0|([1-9]\d*)))*";
  }
}
description
"The object-identifier type represents administratively assigned names in a registration-hierarchical-name tree.

Values of this type are denoted as a sequence of numerical non-negative sub-identifier values. Each sub-identifier value MUST NOT exceed 2^32-1 (4294967295). Sub-identifiers are separated by single dots and without any intermediate whitespace.

The ASN.1 standard restricts the value space of the first sub-identifier to 0, 1, or 2. Furthermore, the value space of the second sub-identifier is restricted to the range 0 to 39 if the first sub-identifier is 0 or 1. Finally, the ASN.1 standard requires that an object identifier has always at least two sub-identifiers. The pattern captures these restrictions.

Although the number of sub-identifiers is not limited, module designers should realize that there may be implementations that stick with the SMIv2 limit of 128 sub-identifiers.
This type is a superset of the SMIv2 OBJECT IDENTIFIER type since it is not restricted to 128 sub-identifiers. Hence, this type SHOULD NOT be used to represent the SMIv2 OBJECT IDENTIFIER type; the object-identifier-128 type SHOULD be used instead.

reference
"ISO9834-1: Information technology -- Open Systems Interconnection -- Procedures for the operation of OSI Registration Authorities: General procedures and top arcs of the ASN.1 Object Identifier tree";

typedef object-identifier-128 {
type object-identifier {
pattern "\d*(\.\d*){1,127}";
}
description
"This type represents object-identifiers restricted to 128 sub-identifiers.

In the value set and its semantics, this type is equivalent to the OBJECT IDENTIFIER type of the SMIv2.";
reference
"RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

typedef yang-identifier {
type string {
length "1..max";
pattern "[a-zA-Z_][a-zA-Z0-9_]*";
pattern ".|.[^xX].*|.[^mM].*|.[^lL].*";
}
description
"A YANG identifier string as defined by the 'identifier' rule in Section 12 of RFC 6020. An identifier must start with an alphabetic character or an underscore followed by an arbitrary sequence of alphabetic or numeric characters, underscores, hyphens, or dots.

A YANG identifier MUST NOT start with any possible combination of the lowercase or uppercase character sequence 'xml'.";
reference
"RFC 6020: YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)";
typedef date-and-time {
  type string {
    pattern "\d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}(\.\d+)?(Z|\[\+\-]\d{2}:\d{2})";
  }
  description
  "The date-and-time type is a profile of the ISO 8601
  standard for representation of dates and times using the
  Gregorian calendar. The profile is defined by the
date-time production in Section 5.6 of RFC 3339.

  The date-and-time type is compatible with the dateTime XML
  schema type with the following notable exceptions:

  (a) The date-and-time type does not allow negative years.

  (b) The date-and-time time-offset -00:00 indicates an unknown
time zone (see RFC 3339) while -00:00 and +00:00 and Z
  all represent the same time zone in dateTime.

  (c) The canonical format (see below) of data-and-time values
differs from the canonical format used by the dateTime XML
  schema type, which requires all times to be in UTC using
  the time-offset 'Z'.

  This type is not equivalent to the DateAndTime textual
  convention of the SMIv2 since RFC 3339 uses a different
  separator between full-date and full-time and provides
  higher resolution of time-secfrac.

  The canonical format for date-and-time values with a known time
  zone uses a numeric time zone offset that is calculated using
  the device's configured known offset to UTC time. A change of
  the device's offset to UTC time will cause date-and-time values
to change accordingly. Such changes might happen periodically
in case a server follows automatically daylight saving time
(DST) time zone offset changes. The canonical format for
date-and-time values with an unknown time zone (usually
referring to the notion of local time) uses the time-offset
-00:00."
  reference
  "RFC 3339: Date and Time on the Internet: Timestamps
RFC 2579: Textual Conventions for SMIv2
}

typedef timeticks {
  type uint32;
  description
"The timeticks type represents a non-negative integer that represents the time, modulo $2^{32}$ (4294967296 decimal), in hundredths of a second between two epochs. When a schema node is defined that uses this type, the description of the schema node identifies both of the reference epochs.

In the value set and its semantics, this type is equivalent to the TimeTicks type of the SMIv2.

"RFC 2578: Structure of Management Information Version 2 (SMIv2)"

typedef timestamp {
    type yang:timeticks;
    description
    "The timestamp type represents the value of an associated timeticks schema node at which a specific occurrence happened. The specific occurrence must be defined in the description of any schema node defined using this type. When the specific occurrence occurred prior to the last time the associated timeticks attribute was zero, then the timestamp value is zero. Note that this requires all timestamp values to be reset to zero when the value of the associated timeticks attribute reaches 497+ days and wraps around to zero.

The associated timeticks schema node must be specified in the description of any schema node using this type.

In the value set and its semantics, this type is equivalent to the TimeStamp textual convention of the SMIv2."

"RFC 2579: Textual Conventions for SMIv2"

}

typedef phys-address {
    type string {
        pattern "((0-9a-fA-F)[2]:[0-9a-fA-F][2])?";
    }
    description
    "Represents media- or physical-level addresses represented as a sequence octets, each octet represented by two hexadecimal numbers. Octets are separated by colons. The canonical representation uses lowercase characters.

In the value set and its semantics, this type is equivalent to the PhysAddress textual convention of the SMIv2."

"RFC 2579: Textual Conventions for SMIv2"

}
typedef mac-address {
    type string {
        pattern "[0-9a-fA-F]{2}:([0-9a-fA-F]{2}){5}";
    }
    description
    "The mac-address type represents an IEEE 802 MAC address. The canonical representation uses lowercase characters."

    In the value set and its semantics, this type is equivalent to the MacAddress textual convention of the SMIv2.";
    reference
    "IEEE 802: IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture
    RFC 2579: Textual Conventions for SMIv2";
}

typedef xpath1.0 {
    type string;
    description
    "This type represents an XPATH 1.0 expression."

    When a schema node is defined that uses this type, the description of the schema node MUST specify the XPath context in which the XPath expression is evaluated.";
    reference "XPATH: XML Path Language (XPath) Version 1.0";
}

typedef hex-string {
    type string {
        pattern "([0-9a-fA-F]{2}([0-9a-fA-F]{2}))*";
    }
    description
    "A hexadecimal string with octets represented as hex digits separated by colons. The canonical representation uses lowercase characters.";
}

typedef uuid {
    type string {
        pattern "([0-9a-fA-F]{8}([0-9a-fA-F]{4}){5}){12}";
    }
    description
    "A Universally Unique IDentifier in the string representation defined in RFC 4122. The canonical representation uses lowercase characters."

    The following is an example of a UUID in string representation:
typedef dotted-quad {
  type string {
    pattern "(([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])";
  }
  description
  "An unsigned 32-bit number expressed in the dotted-quad notation, i.e., four octets written as decimal numbers and separated with the '.' (full stop) character."
}

module ietf-ipv4-unicast-routing {
  namespace "urn:ietf:params:xml:ns:yang:ietf-ipv4-unicast-routing";
  prefix "v4ur";

  import ietf-routing {
    prefix "rt";
  }

  import ietf-inet-types {
    prefix "inet";
  }

  organization
  "IETF NETMOD (NETCONF Data Modeling Language) Working Group";

  contact
  "WG Web: <http://tools.ietf.org/wg/netmod/>
  WG List: <mailto:netmod@ietf.org>

  WG Chair: Thomas Nadeau
  <mailto:tnadeau@lucidvision.com>

  WG Chair: Juergen Schoenwaelder"
This YANG module augments the 'ietf-routing' module with basic configuration and state data for IPv4 unicast routing.

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The key words 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in the module text are to be interpreted as described in RFC 2119 (http://tools.ietf.org/html/rfc2119).

This version of this YANG module is part of RFC XXXX (http://tools.ietf.org/html/rfcXXXX); see the RFC itself for full legal notices.

revision 2015-05-25 {
  description
    "Initial revision.";
  reference
    "RFC XXXX: A YANG Data Model for Routing Management";
}

/* Identities */
identity ipv4-unicast {
  base rt:ipv4;
  description
    "This identity represents the IPv4 unicast address family.";
}

/* State data */

  when "/..//rt:address-family = 'v4ur:ipv4-unicast" {
    description

"This augment is valid only for IPv4 unicast."
}
description
"This leaf augments an IPv4 unicast route."
leaf destination-prefix {
  type inet:ipv4-prefix;
  description
  "IPv4 destination prefix."
}
}*/

  + "rt:routes/rt:route/rt:next-hop/rt:next-hop-options/"
  + "rt:simple-next-hop" {
when "./././rt:address-family = 'v4ur:ipv4-unicast' {
  description
  "This augment is valid only for IPv4 unicast."
}
description
  "This leaf augments the 'simple-next-hop' case of IPv4 unicast routes."
leaf next-hop-address {
  type inet:ipv4-address;
  description
  "IPv4 address of the next-hop."
}
}*/

/* Configuration data */

augment "/rt:routing/rt:routing-instance/rt:routing-protocols/"
  + "rt:routing-protocol/rt:static-routes" {
  description
  "This augment defines the configuration of the 'static'
  pseudo-protocol with data specific to IPv4 unicast."
  container ipv4 {
    description
    "Configuration of a 'static' pseudo-protocol instance
    consists of a list of routes."
    list route {
      key "destination-prefix";
      ordered-by "user";
      description
      "A user-ordered list of static routes."
      leaf destination-prefix {
        type inet:ipv4-prefix;
        mandatory "true";
        description
        "This leaf augments an IPv4 unicast route."
      }
    }
  }
}*/
"IPv4 destination prefix."
)
leaf description {
  type string;
  description
  "Textual description of the route."
}
container next-hop {
  description
  "Configuration of next-hop."
  uses rt:next-hop-content {
    augment "next-hop-options" {
      description
      "Add next-hop address case."
      leaf next-hop-address {
        type inet:ipv4-address;
        description
        "IPv4 address of the next-hop."
      }
    }
  }
}
/* RPC operations */

augment "/rt:fib-route/rt:input/rt:destination-address" {
  when "rt:address-family='v4ur:ipv4-unicast'" {
    description
    "This augment is valid only for IPv4 unicast."
  }
}

augment "/rt:fib-route/rt:output/rt:route" {
  when "rt:address-family='v4ur:ipv4-unicast'" {
    description
    "This augment is valid only for IPv4 unicast."
  }
}
description
  "This leaf augments the reply to the 'rt:fib-route'
  operation.";
leaf destination-prefix {
  type inet:ipv4-prefix;
  description
    "IPv4 destination prefix.";
}

augment "/rt:fib-route/rt:output/rt:route/rt:next-hop/
  + "rt:next-hop-options/rt:simple-next-hop" {
when "/..rt:address-family='v4ur:ipv4-unicast'" {
  description
    "This augment is valid only for IPv4 unicast.";
}
  description
    "This leaf augments the 'simple-next-hop' case in the reply to
    the 'rt:fib-route' operation.";
leaf next-hop-address {
  type inet:ipv4-address;
  description
    "IPv4 address of the next-hop.";
}
}

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-
  0.1.5.post2/ydk/models/ietf/_yang/ietf-ipv4-unicast-routing.yang
No license file was found, but licenses were detected in source scan.

```python
from collections import OrderedDict
```

This module contains a collection of YANG definitions for configuring
diffserv specification implementations. Copyright (c) 2014 IETF
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This version of this YANG module is part of RFC XXXX; see the
RFC itself for full legal notices.

```python
from collections import OrderedDict
```
class Marking(ActionType):
    
    marking action type

    

    _prefix = 'action'
    _revision = '2015-04-07'

        super(Marking, self).__init__(ns, pref, tag)

class DropType(Identity):
    
    drop algorithm

    

    _prefix = 'action'
    _revision = '2015-04-07'

        super(DropType, self).__init__(ns, pref, tag)

class MinRate(ActionType):
    
    min\-rate action type
```python

_prefix = 'action'
_revision = '2015-04-07'

    super(MinRate, self).__init__(ns, pref, tag)

class Meter(ActionType):
    """
    meter action type
    """

class Priority(ActionType):
    """
    priority action type
    """

class MaxRate(ActionType):
    """
    max-rate action type
    """
```
_prefix = 'action'
_revision = '2015-04-07'

    super(MaxRate, self).__init__(ns, pref, tag)

class MeterActionType(Identity):
    
    action type in a meter

class AlgorithmicDrop(ActionType):
    
algorithmic-drop action type

class AlwaysDrop(DropType):
    
always drop algorithm
```python

# prefix = 'action'
# revision = '2015-04-07'

    super(AlwaysDrop, self).__init__(ns, pref, tag)

class TailDrop(DropType):
    # tail drop algorithm

    # prefix = 'action'
    # revision = '2015-04-07'

    super(TailDrop, self).__init__(ns, pref, tag)

class MeterActionDrop(MeterActionType):
    # drop action type in a meter

    # prefix = 'action'
    # revision = '2015-04-07'

    super(MeterActionDrop, self).__init__(ns, pref, tag)

class MeterActionSet(MeterActionType):
    # mark action type in a meter
```
```python

class RandomDetect(DropType):

```

This YANG module defines YANG identities for IANA-registered interface types.

This YANG module is maintained by IANA and reflects the 'iType definitions' registry.

The latest revision of this YANG module can be obtained from the IANA web site.

Requests for new values should be made to IANA via email (iana@iana.org).

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The initial version of this YANG module is part of RFC 7224;
see the RFC itself for full legal notices.

===

from collections import OrderedDict

from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits,
Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

from ydk.models.ietf.ietf_interfaces import InterfaceType

class IanaInterfaceType(InterfaceType):
    """
    This identity is used as a base for all interface types
defined in the 'ifType definitions' registry.
    """

    __prefix = 'ianaift'
    __revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:iana-
interface-type"):
        super(IanaInterfaceType, self).__init__(ns, pref, tag)

class VoiceFXO(IanaInterfaceType):
    """
    Voice Foreign Exchange Office.
    """

    __prefix = 'ianaift'
class AtmVciEndPt(IanaInterfaceType):
    ""
    ATM VCI End Point.
    ""

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:atmVciEndPt"):
        super(AtmVciEndPt, self).__init__(ns, pref, tag)

class PropBWAp2Mp(IanaInterfaceType):
    ""
    PropBroadbandWirelessAccesspt2Multipt (use of this value for IEEE 802.16 WMAN interfaces as per IEEE Std 802.16f is deprecated, and ieee80216WMAN(237) should be used instead).
    ""

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:propBWAp2Mp"):
        super(PropBWAp2Mp, self).__init__(ns, pref, tag)

class PropDocsWirelessDownstream(IanaInterfaceType):
    ""
    Cisco proprietary Downstream.
    ""
_prefix = 'ianaift'
_revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:propDocsWirelessDownstream"):
        super(PropDocsWirelessDownstream, self).__init__(ns, pref, tag)

class V11(IanaInterfaceType):

    CCITT V.11/X.21.

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:v11"):
    super(V11, self).__init__(ns, pref, tag)

class SoftwareLoopback(IanaInterfaceType):

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:softwareLoopback"):
        super(SoftwareLoopback, self).__init__(ns, pref, tag)

class Hdlc(IanaInterfaceType):

    HDLC.
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:hdlc"):  
    super(Hdlc, self).__init__(ns, pref, tag)

class VoiceFGDOS(IanaInterfaceType):
    
    Voice FGD Operator Services.

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceFGDOS"):  
    super(VoiceFGDOS, self).__init__(ns, pref, tag)

class FastEtherFX(IanaInterfaceType):

    Obsoleted via RFC 3635.  
    ethernetCsmacd(6) should be used instead.

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:fastEtherFX"):  
    super(FastEtherFX, self).__init__(ns, pref, tag)

class DvbTdm(IanaInterfaceType):

    DVB Satellite TDM.

    _prefix = 'ianaift'
    _revision = '2014-05-08'
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dvbTdm"): 
super(DvbTdm, self).__init__(ns, pref, tag)

class Nfas(IanaInterfaceType):
    
    Non-Facility Associated Signaling.

    

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:nfas"): 
super(Nfas, self).__init__(ns, pref, tag)

class IfPwType(IanaInterfaceType):
    
    Pseudowire interface type.

    

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ifPwType"): 
super(IfPwType, self).__init__(ns, pref, tag)

class L2vlan(IanaInterfaceType):
    
    Layer 2 Virtual LAN using 802.1Q.

    

_prefix = 'ianaift'
class Adsl2plus(IanaInterfaceType):
    '''
    Asymmetric Digital Subscriber Loop Version 2 -
    Version 2 Plus and all variants.
    '''
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:adsl2plus"):
        super(Adsl2plus, self).__init__(ns, pref, tag)

class Ieee802154(IanaInterfaceType):
    '''
    IEEE 802.15.4 WPAN interface.
    '''
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ieee802154"):
        super(Ieee802154, self).__init__(ns, pref, tag)

class VoiceFXS(IanaInterfaceType):
    '''
    Voice Foreign Exchange Station.
    '''
    _prefix = 'ianaift'
class DvbRcsMacLayer(IanaInterfaceType):
    
    DVB-RCS MAC Layer.

    

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dvbRcsMacLayer"):  
        super(DvbRcsMacLayer, self).__init__(ns, pref, tag)

class Idsl(IanaInterfaceType):
    
    Digital Subscriber Loop over ISDN.

    

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:idsl"):  
        super(Idsl, self).__init__(ns, pref, tag)

class Infiniband(IanaInterfaceType):
    
    Infiniband.

    

    _prefix = 'ianaitf'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:infiniband"):
    super(Infiniband, self).__init__(ns, pref, tag)

class DdnX25(IanaInterfaceType):
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ddnX25"):
    super(DdnX25, self).__init__(ns, pref, tag)

class WwanPP2(IanaInterfaceType):
    
    3GPP2 WWAN.

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:wwanPP2"):
    super(WwanPP2, self).__init__(ns, pref, tag)

class DocsCableUpstream(IanaInterfaceType):
    
    CATV Upstream interface.

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:docsCableUpstream"):
    super(DocsCableUpstream, self).__init__(ns, pref, tag)
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:docsCableUpstream"):  super(DocsCableUpstream, self).__init__(ns, pref, tag)

class Ethernet3Mbit(IanaInterfaceType):  
    
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ethernet3Mbit"):  super(Ethernet3Mbit, self).__init__(ns, pref, tag)

class DigitalPowerline(IanaInterfaceType):  
    
    IP over Power Lines.

    
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:digitalPowerline"):  super(DigitalPowerline, self).__init__(ns, pref, tag)

class H323Proxy(IanaInterfaceType):  
    
    H323 Voice and Video Proxy.

    
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:h323Proxy"):
    super(H323Proxy, self).__init__(ns, pref, tag)

class Gtp(IanaInterfaceType):
    """    GTP (GPRS Tunneling Protocol).
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:gtp"):
        super(Gtp, self).__init__(ns, pref, tag)

class IpOverAtm(IanaInterfaceType):
    """    IBM ipOverAtm.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ipOverAtm"):
        super(IpOverAtm, self).__init__(ns, pref, tag)

class AluEpon(IanaInterfaceType):
    """
    Ethernet Passive Optical Networks (E-PON).
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aluEpon"):
super(AluEpon, self).__init__(ns, pref, tag)

class Imt(IanaInterfaceType):
    """
    Inter'-Machine Trunks.
    """

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:imt"):  
        super(Imt, self).__init__(ns, pref, tag)

class IpSwitch(IanaInterfaceType):
    """
    IP Switching Objects.
    """

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ipSwitch"):  
        super(IpSwitch, self).__init__(ns, pref, tag)

class Msdsl(IanaInterfaceType):
    """
    Multi-rate Symmetric DSL.
    """

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:msdsl"):  
        super(Msdsl, self).__init__(ns, pref, tag)
class DvbRecMacLayer(IanaInterfaceType):
    
    DVB-RCC MAC Layer.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dvbRecMacLayer"):
        super(DvbRecMacLayer, self).__init__(ns, pref, tag)

class SmdsDxi(IanaInterfaceType):
    
    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:smdsDxi"):
        super(SmdsDxi, self).__init__(ns, pref, tag)

class VoiceOverAtm(IanaInterfaceType):
    
    Voice over ATM.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceOverAtm"):
        super(VoiceOverAtm, self).__init__(ns, pref, tag)

class Arap(IanaInterfaceType):

__init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:arap"): super(Arap, self).__init__(ns, pref, tag)

class FastEther(IanaInterfaceType):

    Obsoleted via RFC 3635.
    ethernetCsmacd(6) should be used instead.

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:fastEther"): super(FastEther, self).__init__(ns, pref, tag)

class Mpc(IanaInterfaceType):

    IBM multi-protocol channel support.

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:mpc"): super(Mpc, self).__init__(ns, pref, tag)

class Linegroup(IanaInterfaceType):
Interface common to multiple lines.

```python
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:linegroup"):
    super(Linegroup, self).__init__(ns, pref, tag)

class Hippi(IanaInterfaceType):
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:hippi"):
    super(Hippi, self).__init__(ns, pref, tag)

class Rpr(IanaInterfaceType):

    Resilient Packet Ring Interface Type.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:rpr"):
    super(Rpr, self).__init__(ns, pref, tag)

class Ds1FDL(IanaInterfaceType):

    Facility Data Link (4Kbps) on a DS1.
```
class SonetVT(IanaInterfaceType):
    """
    SS7 Signaling Link.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sonetVT"):  
        super(SonetVT, self).__init__(ns, pref, tag)

class VoiceEncap(IanaInterfaceType):
    """
    Voice encapsulation.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceEncap"):  
        super(VoiceEncap, self).__init__(ns, pref, tag)

class Ss7SigLink(IanaInterfaceType):
    """
    SS7 Signaling Link.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceEncap"):  
        super(VoiceEncap, self).__init__(ns, pref, tag)
```python
_def__init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ss7SigLink"):
    super(Ss7SigLink, self).__init__(ns, pref, tag)

class Arcnet(IanaInterfaceType):
    ARCnet.

class ActelisMetaLOOP(IanaInterfaceType):
    Actelis proprietary MetaLOOP High Speed Link.

class Qllc(IanaInterfaceType):
    SNA QLLC.
```
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:qllc"):  
super(Qllc, self).__init__(ns, pref, tag)

class Rfc877x25(IanaInterfaceType):
    
    
    
    
    _prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:rfc877x25"):  
super(Rfc877x25, self).__init__(ns, pref, tag)

class MpegTransport(IanaInterfaceType):
    
    MPEG transport interface.
    
    
    
    _prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:mpegTransport"):  
super(MpegTransport, self).__init__(ns, pref, tag)

class X25mlp(IanaInterfaceType):
    
    Multi-Link Protocol.
class VirtualTg(IanaInterfaceType):
    """
    Virtual Trunk Group.
    """
    __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:virtualTg"):
        super(VirtualTg, self).__init__(ns, pref, tag)

class HostPad(IanaInterfaceType):
    """
    CCITT\ITU X.29 PAD Protocol.
    """
    __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:hostPad"):
        super(HostPad, self).__init__(ns, pref, tag)

class StarLan(IanaInterfaceType):
    """
    Deprecated via RFC 3635.
    Use ethernetCsmacd(6) instead.
    """
    __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:starLan"):
        super(StarLan, self).__init__(ns, pref, tag)
class Iso88025Dtr(IanaInterfaceType):
    """
    ISO 802.5r DTR.
    """

    _prefix = 'ianailf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:iso88025Dtr"):
        super(Iso88025Dtr, self).__init__(ns, pref, tag)

class Ibm370parChan(IanaInterfaceType):
    """
    IBM System 360/370 OEMI Channel.
    """

    _prefix = 'ianailf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ibm370parChan"):
        super(Ibm370parChan, self).__init__(ns, pref, tag)

class Adsl2(IanaInterfaceType):
    """
    Asymmetric Digital Subscriber Loop Version 2
    (DEPRECATED/OBSOLETED \ please use adsl2plus(238) instead).
    """

    _prefix = 'ianailf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:adsl2"):
        super(Adsl2, self).__init__(ns, pref, tag)
class OtnOtu(IanaInterfaceType):
    """
    OTN Optical channel Transport Unit.
    """

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:otnOtu"):
        super(OtnOtu, self).__init__(ns, pref, tag)

class PropWirelessP2P(IanaInterfaceType):
    """
    Prop. P2P wireless interface.
    """

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:propWirelessP2P"):
        super(PropWirelessP2P, self).__init__(ns, pref, tag)

class Interleave(IanaInterfaceType):
    """
    Interleave channel.
    """

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:interleave"):
        super(Interleave, self).__init__(ns, pref, tag)
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:interleave"):  
    super(Interleave, self).__init__(ns, pref, tag)

class Isup(IanaInterfaceType):
    
    ISUP.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:isup"):  
    super(Isup, self).__init__(ns, pref, tag)

class Regular1822(IanaInterfaceType):
    
    

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:regular1822"):  
    super(Regular1822, self).__init__(ns, pref, tag)

class Gr303RDT(IanaInterfaceType):
    
    Remote Digital Terminal.

    

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:gr303RDT"):
    super(Gr303RDT, self).__init__(ns, pref, tag)

class PropDocsWirelessMaclayer(IanaInterfaceType):
    """
    Cisco proprietary Maclayer.
    """

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:propDocsWirelessMaclayer"):
        super(PropDocsWirelessMaclayer, self).__init__(ns, pref, tag)

class Async(IanaInterfaceType):
    """
    Asynchronous Protocol.
    """

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:async"):
        super(Async, self).__init__(ns, pref, tag)

class RadioMAC(IanaInterfaceType):
    """
    MAC layer over radio links.
    """

    _prefix = 'ianaitf'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:radioMAC"):
class OpticalChannelGroup(IanaInterfaceType):
    """
    Optical Channel Group.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:opticalChannelGroup"):
        super(OpticalChannelGroup, self).__init__(ns, pref, tag)

class SixToFour(IanaInterfaceType):
    """
    6to4 interface (DEPRECATED).
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sixToFour"):
        super(SixToFour, self).__init__(ns, pref, tag)

class PropDocsWirelessUpstream(IanaInterfaceType):
    """
    Cisco proprietary Upstream.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sixToFour"):
class Q2931(IanaInterfaceType):
    """
    Q.2931.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:q2931"):  
        super(Q2931, self).__init__(ns, pref, tag)

class Fddi(IanaInterfaceType):
    """
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:fddi"):  
        super(Fddi, self).__init__(ns, pref, tag)

class PropCnls(IanaInterfaceType):
    """
    Proprietary Connectionless Protocol.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:propCnls"):  
        super(PropCnls, self).__init__(ns, pref, tag)
class Aal2(IanaInterfaceType):
    
    ATM adaptation layer 2.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aal2"):  
        super(Aal2, self).__init__(ns, pref, tag)

class DvbAsiOut(IanaInterfaceType):
    
    DVB-ASI Output.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dvbAsiOut"):  
        super(DvbAsiOut, self).__init__(ns, pref, tag)

class AluELP(IanaInterfaceType):
    
    Alcatel-Lucent Ethernet Link Protection.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aluELP"):  
        super(AluELP, self).__init__(ns, pref, tag)
class CiscoISLvlan(IanaInterfaceType):
    
    Layer 2 Virtual LAN using Cisco ISL.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ciscoISLvlan"):
        super(CiscoISLvlan, self).__init__(ns, pref, tag)

class DocsCableUpstreamRfPort(IanaInterfaceType):
    
    DOCSIS CATV Upstream RF Port.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:docsCableUpstreamRfPort"):
        super(DocsCableUpstreamRfPort, self).__init__(ns, pref, tag)

class Aal5(IanaInterfaceType):
    
    AAL5 over ATM.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aal5"):
        super(Aal5, self).__init__(ns, pref, tag)

class FrDlcEndPt(IanaInterfaceType):
Frame Relay DLCI End Point.

```
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:frDlciEndPt"):  
    super(FrDlciEndPt, self).__init__(ns, pref, tag)
```

class HippiInterface(IanaInterfaceType):
    
    HIPPI interfaces.

```
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:hippiInterface"):  
    super(HippiInterface, self).__init__(ns, pref, tag)
```

class L3ipvlan(IanaInterfaceType):
    
    Layer 3 Virtual LAN using IP.

```
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:l3ipvlan"):  
    super(L3ipvlan, self).__init__(ns, pref, tag)
```

class Miox25(IanaInterfaceType):
    

class AluGponOnu(IanaInterfaceType):
    
    GPON Optical Network Unit.
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aluGponOnu"):
        super(AluGponOnu, self).__init__(ns, pref, tag)

class Hssi(IanaInterfaceType):
    
    ATM Virtual Interface.
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:hssi"):
        super(Hssi, self).__init__(ns, pref, tag)

class AtmVirtual(IanaInterfaceType):
    
    ATM Virtual Interface.
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:atmVirtual"):
        super(AtmVirtual, self).__init__(ns, pref, tag)
```python
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type"): tag="iana-if-type:aluGponOnu"):
        super(AluGponOnu, self).__init__(ns, pref, tag)

class Rfc1483(IanaInterfaceType):
    """
    Multiprotocol over ATM AAL5.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:rfc1483"):
        super(Rfc1483, self).__init__(ns, pref, tag)

class Cnr(IanaInterfaceType):
    """
    Combat Net Radio.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:cnr"):
        super(Cnr, self).__init__(ns, pref, tag)

class SipSig(IanaInterfaceType):
    """
    SIP Signaling.
    """
```
```python
# class Myrinet(IanaInterfaceType):
#     
#     Myricom Myrinet.

# class Dlsw(IanaInterfaceType):
#     
#     Data Link Switching.

# class GigabitEthernet(IanaInterfaceType):
#     
#     Obsoleted via RFC 3635.
#     ethernetCsmacd(6) should be used instead.
```
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:gigabitEthernet"):  
    super(GigabitEthernet, self).__init__(ns, pref, tag)

class X25ple(IanaInterfaceType):

    ""

    _prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:x25ple"):  
    super(X25ple, self).__init__(ns, pref, tag)

class Lmp(IanaInterfaceType):

    ""
    Link Management Protocol.

    _prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:lmp"):  
    super(Lmp, self).__init__(ns, pref, tag)

class OpticalTransport(IanaInterfaceType):

    ""
    Optical Transport.

    _prefix = 'ianaift'
_revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:opticalTransport"):  
    super(OpticalTransport, self).__init__(ns, pref, tag)

class Sdlc(IanaInterfaceType):
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sdlc"):  
    super(Sdlc, self).__init__(ns, pref, tag)

class VoiceEM(IanaInterfaceType):
    
    Voice recEive and transMit.

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceEM"):  
    super(VoiceEM, self).__init__(ns, pref, tag)

class X86Laps(IanaInterfaceType):
    
    LAPS based on ITU\-T X.86/Y.1323.

    _prefix = 'ianaift'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:x86Laps"):  
    super(X86Laps, self).__init__(ns, pref, tag)

class G9982(IanaInterfaceType):  
    
    G.998.2 bonded interface.

    
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:g9982"):  
    super(G9982, self).__init__(ns, pref, tag)

class Iso88022llc(IanaInterfaceType):  
    
    
    
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:iso88022llc"):  
    super(Iso88022llc, self).__init__(ns, pref, tag)

class DvbAsiIn(IanaInterfaceType):  
    
    DVB\-ASI Input.

    
    
    
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dvbAsiIn"):  
    super(DvbAsiIn, self).__init__(ns, pref, tag)
class Bgppolicyaccounting(IanaInterfaceType):
    """
    BGP Policy Accounting.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:bgppolicyaccounting"):  
        super(Bgppolicyaccounting, self).__init__(ns, pref, tag)


class AluEponOnu(IanaInterfaceType):
    """
    EPON Optical Network Unit.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aluEponOnu"):  
        super(AluEponOnu, self).__init__(ns, pref, tag)


class MfSigLink(IanaInterfaceType):
    """
    Multi-frequency signaling link.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:mfSigLink"):  
        super(MfSigLink, self).__init__(ns, pref, tag)
super(MfSigLink, self).__init__(ns, pref, tag)

class Dcn(IanaInterfaceType):
    
    Data Communications Network.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dcn"):  
    super(Dcn, self).__init__(ns, pref, tag)

class AtmDxi(IanaInterfaceType):
    
    ATM DXI.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:atmDxi"):  
    super(AtmDxi, self).__init__(ns, pref, tag)

class VoiceOverFrameRelay(IanaInterfaceType):
    
    Voice Over Frame Relay.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceOverFrameRelay"):  
    super(VoiceOverFrameRelay, self).__init__(ns, pref, tag)
class Gfp(IanaInterfaceType):
    
    Generic Framing Procedure (GFP).

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:gfp"):  
        super(Gfp, self).__init__(ns, pref, tag)

class SonetOverheadChannel(IanaInterfaceType):
    
    SONET Overhead Channel.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sonetOverheadChannel"):  
        super(SonetOverheadChannel, self).__init__(ns, pref, tag)

class VmwareVirtualNic(IanaInterfaceType):
    
    VMware Virtual Network Interface.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:vmwareVirtualNic"):  
        super(VmwareVirtualNic, self).__init__(ns, pref, tag)
class FcipLink(IanaInterfaceType):
    
    FCIP Link.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:fcipLink"):
        super(FcipLink, self).__init__(ns, pref, tag)

class IpOverClaw(IanaInterfaceType):
    
    IBM Common Link Access to Workstn.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ipOverClaw"):
        super(IpOverClaw, self).__init__(ns, pref, tag)

class Coffee(IanaInterfaceType):
    
    Coffee pot.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:coffee"):
        super(Coffee, self).__init__(ns, pref, tag)

class Radsl(IanaInterfaceType):
    

Rate-Adapt. Digital Subscriber Loop.

```python

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:radsl"): super(Radsl, self).__init__(ns, pref, tag)

class Vdsl2(IanaInterfaceType):
    ""
    Very high speed digital subscriber line Version 2 (as per ITU-T Recommendation G.993.2).
    ""

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:vdsl2"): super(Vdsl2, self).__init__(ns, pref, tag)

class Rs232(IanaInterfaceType):
    ""

class E1(IanaInterfaceType):
    ""
    Obsolete; see DS1-MIB.
```
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:e1"):  
    super(E1, self).__init__(ns, pref, tag)

class ReachDSL(IanaInterfaceType):
    
    Long Reach DSL.

    
    _prefix = 'ianaift'
_revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:reachDSL"):  
        super(ReachDSL, self).__init__(ns, pref, tag)

class VoiceOverCable(IanaInterfaceType):
    
    Voice Over Cable Interface.

    
    _prefix = 'ianaift'
_revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceOverCable"):  
        super(VoiceOverCable, self).__init__(ns, pref, tag)

class Tr008(IanaInterfaceType):
    
    TR008.
```python

_class_.prefix = 'ianaift'
_class_.revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:tr008"):  
    super(Tr008, self).__init__(ns, pref, tag)

class VoiceOverIp(IanaInterfaceType):
    """
    Voice over IP encapsulation.
    """

_class_.prefix = 'ianaift'
_class_.revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceOverIp"):  
    super(VoiceOverIp, self).__init__(ns, pref, tag)

class Atm(IanaInterfaceType):
    """
    ATM cells.
    """

_class_.prefix = 'ianaift'
_class_.revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:atm"):  
    super(Atm, self).__init__(ns, pref, tag)

class Ds3(IanaInterfaceType):
    """
    DS3-MIB.
    """
```

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ds3"):  
    super(Ds3, self).__init__(ns, pref, tag)

class Ds0(IanaInterfaceType):
    
    Digital Signal Level 0.

    

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ds0"):  
    super(Ds0, self).__init__(ns, pref, tag)

class Ds1(IanaInterfaceType):
    
    DS1\-MIB.

    

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ds1"):  
    super(Ds1, self).__init__(ns, pref, tag)

class Srp(IanaInterfaceType):
    
    Spatial Reuse Protocol.
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:srp"):    super(Srp, self).__init__(ns, pref, tag)

class DocsCableDownstream(IanaInterfaceType):
    """
    CATV Downstream interface.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:docsCableDownstream"):    super(DocsCableDownstream, self).__init__(ns, pref, tag)

class DvbRcsTdma(IanaInterfaceType):
    """
    DVB-RCS TDMA.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dvbRcsTdma"):    super(DvbRcsTdma, self).__init__(ns, pref, tag)

class G9983(IanaInterfaceType):
    """
    G.998.3 bonded interface.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:g9983"): 
    super(G9983, self).__init__(ns, pref, tag)

class Plc(IanaInterfaceType): 
    
    Power Line Communications.

    
    _prefix = 'ianaifl'
    _revision = '2014-05-08'
    
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:plc"): 
        super(Plc, self).__init__(ns, pref, tag)

class FrameRelayMPI(IanaInterfaceType): 
    
    Multiprotocol Interconnect over FR.

    
    _prefix = 'ianaifl'
    _revision = '2014-05-08'
    
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:frameRelayMPI"): 
        super(FrameRelayMPI, self).__init__(ns, pref, tag)

class Mvl(IanaInterfaceType): 
    
    Multiple Virtual Lines DSL.

    
    _prefix = 'ianaifl'
    _revision = '2014-05-08'
    
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:mvl"): 
        super(Mvl, self).__init__(ns, pref, tag)
class PropMultiplexor(IanaInterfaceType):
    
    Proprietary multiplexing.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:propMultiplexor"):
        super(PropMultiplexor, self).__init__(ns, pref, tag)

class VoiceDID(IanaInterfaceType):
    
    Voice Direct Inward Dialing.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceDID"):
        super(VoiceDID, self).__init__(ns, pref, tag)

class CompositeLink(IanaInterfaceType):
    
    Avici Composite Link Interface.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:compositeLink"):
        super(CompositeLink, self).__init__(ns, pref, tag)
class Proteon10Mbit(IanaInterfaceType):
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:proteon10Mbit"):
        super(Proteon10Mbit, self).__init__(ns, pref, tag)

class Atmbond(IanaInterfaceType):
    
    atmbond.

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:atmbond"):
        super(Atmbond, self).__init__(ns, pref, tag)

class Frf16MfrBundle(IanaInterfaceType):
    
    FRF.16 Multilink Frame Relay.

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:frf16MfrBundle"):
        super(Frf16MfrBundle, self).__init__(ns, pref, tag)
class CctEmul(IanaInterfaceType):
    """
    ATM Emulated circuit.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:cctEmul"):  
    super(CctEmul, self).__init__(ns, pref, tag)

class MplsTunnel(IanaInterfaceType):
    """
    MPLS Tunnel Virtual Interface.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:mplsTunnel"):  
    super(MplsTunnel, self).__init__(ns, pref, tag)

class Gpon(IanaInterfaceType):
    """
    Gigabit-capable passive optical networks (G-PON) as per
    ITU-T G.948.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:gpon"):  
    super(Gpon, self).__init__(ns, pref, tag)
class Vdsl(IanaInterfaceType):
    """
    Very H\-Speed Digital Subscrib. Loop.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:vdsl"):
        super(Vdsl, self).__init__(ns, pref, tag)

class Pos(IanaInterfaceType):
    """
    Packet over SONET/SDH Interface.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:pos"):
        super(Pos, self).__init__(ns, pref, tag)

class Ieee8023adLag(IanaInterfaceType):
    """
    IEEE 802.3ad Link Aggregate.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ieee8023adLag"):
        super(Ieee8023adLag, self).__init__(ns, pref, tag)

class DocsCableMaclayer(IanaInterfaceType):
    """
CATV Mac Layer.

```python
_prefix = 'ianaif'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:docsCableMaclayer"):
    super(DocsCableMaclayer, self).__init__(ns, pref, tag)

class DocsCableMCmtsDownstream(IanaInterfaceType):
    ""
    CATV Modular CMTS Downstream Interface.
    ""

_prefix = 'ianaif'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:docsCableMCmtsDownstream"):
    super(DocsCableMCmtsDownstream, self).__init__(ns, pref, tag)

class Ppp(IanaInterfaceType):
    ""

_prefix = 'ianaif'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ppp"):
    super(Ppp, self).__init__(ns, pref, tag)

class FrameRelay(IanaInterfaceType):
    ""
    DTE only.
```
```python

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:frameRelay"):
    super(FrameRelay, self).__init__(ns, pref, tag)

class Eplrs(IanaInterfaceType):
    """
    Ext Pos Loc Report Sys.
    """

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:eplrs"):
    super(Eplrs, self).__init__(ns, pref, tag)

class VmwareNicTeam(IanaInterfaceType):
    """
    VMware NIC Team.
    """

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:vmwareNicTeam"):
    super(VmwareNicTeam, self).__init__(ns, pref, tag)

class CableDownstreamRfPort(IanaInterfaceType):
    """
    CATV downstream RF Port.
    """
```
class CableDownstreamRfPort(IanaInterfaceType):
    ""
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:cableDownstreamRfPort"):
        super(CableDownstreamRfPort, self).__init__(ns, pref, tag)

class MacSecUncontrolledIF(IanaInterfaceType):
    ""
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:macSecUncontrolledIF"):
        super(MacSecUncontrolledIF, self).__init__(ns, pref, tag)

class Iso88023Csmacd(IanaInterfaceType):
    ""
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:iso88023Csmacd"):
        super(Iso88023Csmacd, self).__init__(ns, pref, tag)

class Usb(IanaInterfaceType):
    ""
    USB Interface.
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:usb"):
    super(Usb, self).__init__(ns, pref, tag)

class AtmFuni(IanaInterfaceType):
    """
    ATM FUNI.
    """

class TeLink(IanaInterfaceType):
    """
    TE Link.
    """

class Pon622(IanaInterfaceType):
    """
    FSAN 622Mb Symetrical PON interface.
    """
class Econet(IanaInterfaceType):
    
    Acorn Econet.

class Tdlc(IanaInterfaceType):
    
    IBM twinaxial data link control.

class Ds0Bundle(IanaInterfaceType):
    
    Group of ds0s on the same ds1.
def __init__(self, ns='urn:ietf:params:xml:ns:yang:iana-if-type', pref='iana-if-type', tag='iana-if-type:ds0Bundle'):
    super(Ds0Bundle, self).__init__(ns, pref, tag)

class Fast(IanaInterfaceType):
    """
    Fast channel.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns='urn:ietf:params:xml:ns:yang:iana-if-type', pref='iana-if-type', tag='iana-if-type:fast'):
    super(Fast, self).__init__(ns, pref, tag)

class Ieee1394(IanaInterfaceType):
    """
    IEEE1394 High Performance Serial Bus.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns='urn:ietf:params:xml:ns:yang:iana-if-type', pref='iana-if-type', tag='iana-if-type:ieee1394'):
    super(Ieee1394, self).__init__(ns, pref, tag)

class CblVectaStar(IanaInterfaceType):
    """
    Cambridge Broadband Networks Limited VectaStar.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'
class Rsrb(IanaInterfaceType):

    """
    Remote Source Route Bridging.
    """

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:rsrb"):
        super(Rsrb, self).__init__(ns, pref, tag)

class FrameRelayInterconnect(IanaInterfaceType):

    """
    Obsolete; use either
    frameRelay(32) or frameRelayService(44).
    """

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:frameRelayInterconnect"):
        super(FrameRelayInterconnect, self).__init__(ns, pref, tag)

class Isdns(IanaInterfaceType):

    """
    ISDN S/T interface.
    """

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:isdns"):
        super(Isdns, self).__init__(ns, pref, tag)
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:isdns"):
    super(Isdns, self).__init__(ns, pref, tag)

class PppMultilinkBundle(IanaInterfaceType):
    
    PPP Multilink Bundle.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-
    type:pppMultilinkBundle"):
        super(PppMultilinkBundle, self).__init__(ns, pref, tag)

class Aflane8025(IanaInterfaceType):
    
    ATM Emulated LAN for 802.5.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-
    type:aflane8025"):
        super(Aflane8025, self).__init__(ns, pref, tag)

class Lapb(IanaInterfaceType):
    
    
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:lapb"):
    super(Lapb, self).__init__(ns, pref, tag)

class Aflane8023(IanaInterfaceType):
    
    ATM Emulated LAN for 802.3.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aflane8023"):
    super(Aflane8023, self).__init__(ns, pref, tag)

class Lapd(IanaInterfaceType):
    
    Link Access Protocol D.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:lapd"):
    super(Lapd, self).__init__(ns, pref, tag)

class IsdnU(IanaInterfaceType):
    
    ISDN U interface.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:isdnU"):
    super(IsdnU, self).__init__(ns, pref, tag)
class Lapf(IanaInterfaceType):
    """
    LAP F.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:lapf"):  
        super(Lapf, self).__init__(ns, pref, tag)

class CapwapWtpVirtualRadio(IanaInterfaceType):
    """
    WTP Virtual Radio Interface.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:capwapWtpVirtualRadio"):  
        super(CapwapWtpVirtualRadio, self).__init__(ns, pref, tag)

class IfVfiType(IanaInterfaceType):
    """
    VPLS Forwarding Instance Interface Type.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ifVfiType"):  
        super(IfVfiType, self).__init__(ns, pref, tag)
class X25huntGroup(IanaInterfaceType):
    

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:x25huntGroup"): 
        super(X25huntGroup, self).__init__(ns, pref, tag)

class Para(IanaInterfaceType):
    
    Parallel-Port.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:para"): 
        super(Para, self).__init__(ns, pref, tag)

class MacSecControlledIF(IanaInterfaceType):
    
    MACSecControlled.

    

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:macSecControlledIF"): 
        super(MacSecControlledIF, self).__init__(ns, pref, tag)
class Iso88024TokenBus(IanaInterfaceType):
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'
    
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:iso88024TokenBus"):
        super(Iso88024TokenBus, self).__init__(ns, pref, tag)

class LocalTalk(IanaInterfaceType):
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'
    
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:localTalk"):
        super(LocalTalk, self).__init__(ns, pref, tag)

class Hyperchannel(IanaInterfaceType):
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'
    
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:hyperchannel"):
        super(Hyperchannel, self).__init__(ns, pref, tag)
class MediaMailOverIp(IanaInterfaceType):
    """
    Multimedia Mail over IP.
    """
    _prefix = 'ianailf'
    _revision = '2014-05-08'
    
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:mediaMailOverIp"):
        super(MediaMailOverIp, self).__init__(ns, pref, tag)

class IfGsn(IanaInterfaceType):
    """
    HIPPI-6400.
    """
    _prefix = 'ianailf'
    _revision = '2014-05-08'
    
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:if-gsn"):
        super(IfGsn, self).__init__(ns, pref, tag)

class CapwapDot11Profile(IanaInterfaceType):
    """
    WLAN Profile Interface.
    """
    _prefix = 'ianailf'
    _revision = '2014-05-08'
    
    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:capwapDot11Profile"):
        super(CapwapDot11Profile, self).__init__(ns, pref, tag)

class L3ipxvlan(IanaInterfaceType):
Layer 3 Virtual LAN using IPX.

class L3ipxvlan(IanaInterfaceType):
    
    __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:l3ipxvlan"):  
        super(L3ipxvlan, self).__init__(ns, pref, tag)

class AtmSubInterface(IanaInterfaceType):
    
    ATM Sub Interface.

class PrimaryISDN(IanaInterfaceType):
    
    No longer used. See also RFC 2127.

class Proteon80Mbit(IanaInterfaceType):

```python
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:proteon80Mbit"): super(Proteon80Mbit, self).__init__(ns, pref, tag)

class Iso88026Man(IanaInterfaceType):
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:iso88026Man"): super(Iso88026Man, self).__init__(ns, pref, tag)

class DigitalWrapperOverheadChannel(IanaInterfaceType):
    
    Digital Wrapper.

class DocsCableUpstreamChannel(IanaInterfaceType):
    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:digitalWrapperOverheadChannel"): super(DigitalWrapperOverheadChannel, self).__init__(ns, pref, tag)
```

CATV Upstream Channel.

__init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:docsCableUpstreamChannel"):
    super(DocsCableUpstreamChannel, self).__init__(ns, pref, tag)

class OpticalChannel(IanaInterfaceType):
    Optical Channel.

__init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:opticalChannel"):
    super(OpticalChannel, self).__init__(ns, pref, tag)

class EthernetCsmacd(IanaInterfaceType):
    For all Ethernet-like interfaces, regardless of speed, as per RFC 3635.

__init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ethernetCsmacd"):
    super(EthernetCsmacd, self).__init__(ns, pref, tag)
class Bits(IanaInterfaceType):
    """
    bitsport.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:bits"):  
        super(Bits, self).__init__(ns, pref, tag)

class Tunnel(IanaInterfaceType):
    """
    Encapsulation interface.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:tunnel"):  
        super(Tunnel, self).__init__(ns, pref, tag)

class Hdsl2(IanaInterfaceType):
    """
    High Bit-Rate DSL \- 2nd generation.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:hdsl2"):  
        super(Hdsl2, self).__init__(ns, pref, tag)

class FrameRelayService(IanaInterfaceType):
    """
    FRNETSERV\-MIB.
    """
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:frameRelayService"):  
    super(FrameRelayService, self).__init__(ns, pref, tag)

class Mpls(IanaInterfaceType):
    """
    MPLS.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:mpls"):  
        super(Mpls, self).__init__(ns, pref, tag)

class Ieee80211(IanaInterfaceType):
    """
    Radio spread spectrum.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ieee80211"):  
        super(Ieee80211, self).__init__(ns, pref, tag)

class Ieee80212(IanaInterfaceType):
    """
    100BaseVG.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ieee80212"):  
        super(Ieee80212, self).__init__(ns, pref, tag)
```python

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ieee80212"):  
    super(ieee80212, self).__init__(ns, pref, tag)

class MocaVersion1(IanaInterfaceType):
    """
    MultiMedia over Coax Alliance (MoCA) Interface
    as documented in information provided privately to IANA.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:mocaVersion1"):  
    super(MocaVersion1, self).__init__(ns, pref, tag)

class Sonet(IanaInterfaceType):
    """
    SONET or SDH.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sonet"):  
    super(Sonet, self).__init__(ns, pref, tag)

class Escon(IanaInterfaceType):
    """
    IBM Enterprise Systems Connection.
    """
```
class AluEponLogicalLink(IanaInterfaceType):
    
    The emulation of a point-to-point link over the EPON layer.

class G703at2mb(IanaInterfaceType):
    
    Obsolete; see DS1-MIB.

class Ultra(IanaInterfaceType):
    
    Ultra Technologies.
class DvbRccDownstream(IanaInterfaceType):
    """
    DVB-RCC Downstream Channel.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dvbRccDownstream"):  
        super(DvbRccDownstream, self).__init__(ns, pref, tag)

class SipTg(IanaInterfaceType):
    """
    SIP Trunk Group.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sipTg"):  
        super(SipTg, self).__init__(ns, pref, tag)

class SmdsIcip(IanaInterfaceType):
    """
    SMDS InterCarrier Interface.
    """
```python

```
class V35(IanaInterfaceType):
    
class V36(IanaInterfaceType):
    
    CCITT V.36.

class V37(IanaInterfaceType):
    
    V.37.
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:v37"): super(V37, self).__init__(ns, pref, tag)

class Ip(IanaInterfaceType):
    """
    IP (for APPN HPR in IP networks).
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ip"): super(Ip, self).__init__(ns, pref, tag)

class Gr303IDT(IanaInterfaceType):
    """
    Integrated Digital Terminal.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:gr303IDT"): super(Gr303IDT, self).__init__(ns, pref, tag)

class BasicISDN(IanaInterfaceType):
    """
    No longer used. See also RFC 2127.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:basicISDN"):
    super(BasicISDN, self).__init__(ns, pref, tag)

class G703at64k(IanaInterfaceType):
    """
    CCITT G703 at 64Kbps.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:g703at64k"):
        super(G703at64k, self).__init__(ns, pref, tag)

class ArcnetPlus(IanaInterfaceType):
    """
    ARCnet Plus.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:arcnetPlus"):
        super(ArcnetPlus, self).__init__(ns, pref, tag)

class Pip(IanaInterfaceType):
    """
    Provider Instance Port on a bridge per IEEE 802.1ah PBB.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:pip"): super(Pip, self).__init__(ns, pref, tag)

class Dtm(IanaInterfaceType):
    
    Dynamic synchronous Transfer Mode.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dtm"): super(Dtm, self).__init__(ns, pref, tag)

class Slip(IanaInterfaceType):
    
    Generic SLIP.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:slip"): super(Slip, self).__init__(ns, pref, tag)

class Hiperlan2(IanaInterfaceType):
    
    HIPERLAN Type 2 Radio Interface.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:hiperlan2"): super(Hiperlan2, self).__init__(ns, pref, tag)
class Adsl(IanaInterfaceType):
    
    Asymmetric Digital Subscriber Loop.

    

    __prefix = 'ianaift'
    __revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:adsl"):  
    super(Adsl, self).__init__(ns, pref, tag)

class Ieee80216WMAN(IanaInterfaceType):
    
    IEEE 802.16 WMAN interface.

    

    __prefix = 'ianaift'
    __revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ieee80216WMAN"):  
    super(Ieee80216WMAN, self).__init__(ns, pref, tag)

class AtmIma(IanaInterfaceType):
    
    ATM IMA.

    

    __prefix = 'ianaift'
    __revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:atmIma"):  
    super(AtmIma, self).__init__(ns, pref, tag)
class Isdn(IanaInterfaceType):
    """
    ISDN and X.25.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:isdn"):  
        super(Isdn, self).__init__(ns, pref, tag)

class CapwapDot11Bss(IanaInterfaceType):
    """
    WLAN BSS Interface.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:capwapDot11Bss"):  
        super(CapwapDot11Bss, self).__init__(ns, pref, tag)

class Sip(IanaInterfaceType):
    """
    SMDS, coffee.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sip"):  
        super(Sip, self).__init__(ns, pref, tag)

class PdnEtherLoop2(IanaInterfaceType):
    """


Paradyne EtherLoop 2.

```python

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:pdnEtherLoop2"):  
    super(PdnEtherLoop2, self).__init__(ns, pref, tag)

class VoiceEBS(IanaInterfaceType):
    
    Voice P-phonEBS physical interface.

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceEBS"):  
    super(VoiceEBS, self).__init__(ns, pref, tag)

class IpForward(IanaInterfaceType):
    
    IP Forwarding Interface.

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ipForward"):  
    super(IpForward, self).__init__(ns, pref, tag)

class Iso88025CRFPInt(IanaInterfaceType):

```
ISO 802.5 CRFP.

```python
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:iso88025CRFPInt"):  
    super(Iso88025CRFPInt, self).__init__(ns, pref, tag)

class PropVirtual(IanaInterfaceType):
    
    Proprietary virtual/internal.

    
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:propVirtual"):  
    super(PropVirtual, self).__init__(ns, pref, tag)

class WwanPP(IanaInterfaceType):
    
    3GPP WWAN.

    
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:wwanPP"):  
    super(WwanPP, self).__init__(ns, pref, tag)

class Other(IanaInterfaceType):
    
```
```python
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:other"):  
    super(Other, self).__init__(ns, pref, tag)

class Pon155(IanaInterfaceType):
    
    FSAN 155Mb Symmetrical PON interface.

class Qam(IanaInterfaceType):
    
    RF Qam Interface.

class OtnOdu(IanaInterfaceType):
    
    OTN Optical Data Unit.
```
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:otnOdu"):  
    super(OtnOdu, self).__init__(ns, pref, tag)

class Iso88025Fiber(IanaInterfaceType):
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:iso88025Fiber"):  
    super(Iso88025Fiber, self).__init__(ns, pref, tag)

class Channel(IanaInterfaceType):
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:channel"):  
    super(Channel, self).__init__(ns, pref, tag)

class VoiceEMFGD(IanaInterfaceType):
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:channel"):  
    super(Channel, self).__init__(ns, pref, tag)
class AluGponPhysicalUni(IanaInterfaceType):
    """
    GPON physical User to Network interface.
    """

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceEMFGD"): super(VoiceEMFGD, self).__init__(ns, pref, tag)

class AluGponPhysicalUni(IanaInterfaceType):
    """
    GPON physical User to Network interface.
    """

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aluGponPhysicalUni"): super(AluGponPhysicalUni, self).__init__(ns, pref, tag)

class A12MppSwitch(IanaInterfaceType):
    """
    Avalon Parallel Processor.
    """

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:a12MppSwitch"): super(A12MppSwitch, self).__init__(ns, pref, tag)

class Ilan(IanaInterfaceType):
    """
    Internal LAN on a bridge per IEEE 802.1ap.
    """
class PdnEtherLoop1(IanaInterfaceType):
    """
    Paradyne EtherLoop 1.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:ilan"):  
        super(Ilan, self).__init__(ns, pref, tag)

class X213(IanaInterfaceType):
    """
    CCITT\-ITU X213.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:x213"):  
        super(X213, self).__init__(ns, pref, tag)

class SonetPath(IanaInterfaceType):
    """
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sonetPath"):  
    super(SonetPath, self).__init__(ns, pref, tag)

class VoiceFGDEANA(IanaInterfaceType):
    """
    """

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:voiceFGDEANA"):  
        super(VoiceFGDEANA, self).__init__(ns, pref, tag)

class Iso88025TokenRing(IanaInterfaceType):
    """
    """

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:iso88025TokenRing"):  
        super(Iso88025TokenRing, self).__init__(ns, pref, tag)

class PropAtm(IanaInterfaceType):
    """
    Proprietary ATM.
    """

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sonetPath"):  
        super(SonetPath, self).__init__(ns, pref, tag)
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:propAtm"):  
    super(PropAtm, self).__init__(ns, pref, tag)

class AluEponPhysicalUni(IanaInterfaceType):  
    """
    EPON physical User to Network interface.
    """

    ....

    _prefix = 'ianait'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aluEponPhysicalUni"):  
        super(AluEponPhysicalUni, self).__init__(ns, pref, tag)

class StackToStack(IanaInterfaceType):  
    """
    IBM stackToStack.
    """

    ....

    _prefix = 'ianait'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:stackToStack"):  
        super(StackToStack, self).__init__(ns, pref, tag)

class FrForward(IanaInterfaceType):  
    """
    Frame Forward Interface.
    """

    ....

    _prefix = 'ianait'
    _revision = '2014-05-08'
def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:frForward"):
    super(FrForward, self).__init__(ns, pref, tag)

class Homepna(IanaInterfaceType):
    
    HomePNA ITU-T G.989.

    
    _prefix = 'iainait'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:homepna"):
    super(Homepna, self).__init__(ns, pref, tag)

class Sdsl(IanaInterfaceType):
    
    Symmetric Digital Subscriber Loop.

    
    _prefix = 'iainait'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:sdsl"):
    super(Sdsl, self).__init__(ns, pref, tag)

class VirtualIpAddress(IanaInterfaceType):
    
    IBM VIPA.

    
    _prefix = 'iainait'
    _revision = '2014-05-08'
class Bsc(IanaInterfaceType):
    """
    Bisynchronous Protocol.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:bsc"):
        super(Bsc, self).__init__(ns, pref, tag)

class AtmRadio(IanaInterfaceType):
    """
    ATM over radio links.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:atmRadio"):
        super(AtmRadio, self).__init__(ns, pref, tag)

class AviciOpticalEther(IanaInterfaceType):
    """
    Avici Optical Ethernet Aggregate.
    """
    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:aviciOpticalEther"):
type: aviciOpticalEther):
    super(AviciOpticalEther, self).__init__(ns, pref, tag)

class G9981(IanaInterfaceType):
    
    G.998.1 bonded interface.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:g9981"): 
    super(G9981, self).__init__(ns, pref, tag)

class FibreChannel(IanaInterfaceType):
    
    Fibre Channel.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:fibreChannel"): 
    super(FibreChannel, self).__init__(ns, pref, tag)

class Shdsl(IanaInterfaceType):
    
    Multirate HDSL2.

    
    _prefix = 'ianaift'
    _revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:shdsl"): 
    super(Shdsl, self).__init__(ns, pref, tag)
class Eon(IanaInterfaceType):
    """
    CLNP over IP.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:eon"):  
        super(Eon, self).__init__(ns, pref, tag)

class H323Gatekeeper(IanaInterfaceType):
    """
    H323 Gatekeeper.
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:h323Gatekeeper"):  
        super(H323Gatekeeper, self).__init__(ns, pref, tag)

class Hdh1822(IanaInterfaceType):
    """
    """

    _prefix = 'ianaift'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:hdh1822"):  
        super(Hdh1822, self).__init__(ns, pref, tag)
class DvbRccUpstream(IanaInterfaceType):
    
    DVB-RCC Upstream Channel.

    

    _prefix = 'ianaif'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:dvbRccUpstream"):  
        super(DvbRccUpstream, self).__init__(ns, pref, tag)

class Nsip(IanaInterfaceType):

    XNS over IP.

    

    _prefix = 'ianaif'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:nsip"):  
        super(Nsip, self).__init__(ns, pref, tag)

class TranspHdlc(IanaInterfaceType):

    Transp HDLC.

    

    _prefix = 'ianaif'
    _revision = '2014-05-08'

    def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:transpHdlc"):  
        super(TranspHdlc, self).__init__(ns, pref, tag)

class TermPad(IanaInterfaceType):
CCITT-ITU X.3 PAD Facility.

_

_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:termPad"):  
    super(TermPad, self).__init__(ns, pref, tag)

class IpOverCdlc(IanaInterfaceType):
    
    IBM ipOverCdlc.

class Ces(IanaInterfaceType):
    
    Circuit Emulation Service.

class Modem(IanaInterfaceType):
    
    Generic modem.
```python
_prefix = 'ianaift'
_revision = '2014-05-08'

def __init__(self, ns="urn:ietf:params:xml:ns:yang:iana-if-type", pref="iana-if-type", tag="iana-if-type:modem"):  
    super(Modem, self).__init__(ns, pref, tag)

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-
  0.1.5.post2/ydk/models/ietf/iana_if_type.py
No license file was found, but licenses were detected in source scan.

module ietf-restconf-monitoring {
    prefix rcmon;

    import ietf-yang-types {
        prefix yang;
    }
    import ietf-inet-types {
        prefix inet;
    }

    organization
        "IETF NETCONF (Network Configuration) Working Group";
    contact
        "WG Web: <http://tools.ietf.org/wg/netconf/>"
        "WG List: <mailto:netconf@ietf.org>"
    Author: Andy Bierman
        <mailto:andy@yumaworks.com>
    Author: Martin Bjorklund
        <mailto:mbj@tail-f.com>
    Author: Kent Watsen
        <mailto:kwatsen@juniper.net>"
    description
        "This module contains monitoring information for the
        RESTCONF protocol."

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    authors of the code. All rights reserved.
```
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This version of this YANG module is part of RFC XXXX; see the RFC itself for full legal notices.;

revision 2016-08-15 {
  description
    "Initial revision.";
  reference "RFC XXXX: RESTCONF Protocol."
}

container restconf-state {
  config false;
  description
    "Contains RESTCONF protocol monitoring information.";
  container capabilities {
    description
      "Contains a list of protocol capability URIs";
    leaf-list capability {
      type inet:uri;
      description
        "A RESTCONF protocol capability URI.";
    }
  }
}

container streams {
  description
    "Container representing the notification event streams supported by the server.";
  reference "RFC 5277, Section 3.4, <streams> element.";
  list stream {
    key "name";
    description
      "Each entry describes an event stream supported by the server.";
    leaf name {
      type string;
      description
        "The stream name";
      reference "RFC 5277, Section 3.4, <name> element.";
    }
    leaf description {
      type string;
      description
        "The description of the stream";
    }
  }
}

leaf-list capability {
  type inet:uri;
  description
    "A RESTCONF protocol capability URI.";
}
"Description of stream content";
reference "RFC 5277, Section 3.4, <description> element. ";
}
leaf replay-support {
    type boolean;
    default "false";
    description
    "Indicates if replay buffer supported for this stream.
    If 'true', then the server MUST support the 'start-time'
    and 'stop-time' query parameters for this stream.";
    reference "RFC 5277, Section 3.4, <replaySupport> element. ";
}
leaf replay-log-creation-time {
    when "../replay-support" {
        description
        "Only present if notification replay is supported";
    }
    type yang:date-and-time;
    description
    "Indicates the time the replay log for this stream
    was created.";
    reference
    "RFC 5277, Section 3.4, <replayLogCreationTime>
    element. ";
}
list access {
    key "encoding";
    min-elements 1;
    description
    "The server will create an entry in this list for each
    encoding format that is supported for this stream.
    The media type 'text/event-stream' is expected
    for all event streams. This list identifies the
    sub-types supported for this stream.";
    leaf encoding {
        type string;
        description
        "This is the secondary encoding format within the
        'text/event-stream' encoding used by all streams.
        The type 'xml' is supported for XML encoding.
        The type 'json' is supported for JSON encoding.";
    }
    leaf location {
        type inet:uri;
        mandatory true;
        description
        "Contains a URL that represents the entry point
        for establishing notification delivery via server
sent events.

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar.gz/ydk-models-ietf-
0.1.5.post2/ydk/models/ietf/_yang/ietf-restconf-monitoring.yang

No license file was found, but licenses were detected in source scan.

Metadata-Version: 1.1
Name: ydk-models-ietf
Version: 0.1.5.post2
Summary: YDK bundle for IETF models
Home-page: https://github.com/CiscoDevNet/ydk-py
Author: Cisco Systems
Author-email: yang-dk@cisco.com
License: Apache 2.0
Description: This YANG Development Kit (YDK) bundle provides APIs for IETF YANG models. YDK facilitates
the use of YANG data models by expressing the model semantics in an API and abstracting protocol/encoding
details. YDK is composed of a core package that defines services and providers, plus one or more module bundles.
This YDK bundle for IETF models uses the YDK core package. You can find the SDK documentation at
http://ydk.cisco.com/py/docs You can find more details on YDK at http://ydk.io
Keywords: yang,C++11,python bindings
Platform: UNKNOWN
Classifier: Development Status :: 3 - Alpha
Classifier: Intended Audience :: Developers
Classifier: Intended Audience :: Education
Classifier: Intended Audience :: Information Technology
Classifier: Intended Audience :: Science/Research
Classifier: Intended Audience :: System Administrators
Classifier: Topic :: Software Development :: Build Tools
Classifier: Topic :: Software Development :: Libraries
Classifier: License :: OSI Approved :: Apache Software License
Classifier: Programming Language :: Python :: 2.7
Classifier: Programming Language :: Python :: 3
Classifier: Programming Language :: Python :: 3.2
Classifier: Programming Language :: Python :: 3.3
Classifier: Programming Language :: Python :: 3.4
Classifier: Programming Language :: Python :: 3.5
Classifier: Programming Language :: C++

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar.gz/ydk-models-ietf-
0.1.5.post2/PKG-INFO
module ietf-netconf {
  namespace "urn:ietf:params:xml:ns:netconf:base:1.0";
  prefix nc;

  import ietf-inet-types {
    prefix inet;
  }

  organization
    "IETF NETCONF (Network Configuration) Working Group";
  contact
    "WG Web:  <http://tools.ietf.org/wg/netconf/>"
    "WG List: <netconf@ietf.org>"
    "WG Chair: Bert Wijnen"
    "<bertietf@bwijnen.net>"
    "WG Chair: Mehmet Ersue"
    "<mehmet.ersue@nsn.com>"
    "Editor: Martin Bjorklund"
    "<mbj@tail-f.com>"
    "Editor: Juergen Schoenwaelder"
    "<j.schoenwaelder@jacobs-university.de>"
    "Editor: Andy Bierman"
    "<andy.bierman@brocade.com>"

  description
    "NETCONF Protocol Data Types and Protocol Operations."

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  (http://trustee.ietf.org/license-info).

  This version of this YANG module is part of RFC 6241; see
  the RFC itself for full legal notices.";
revision 2011-06-01 {
  description
  "Initial revision";
  reference "RFC 6241: Network Configuration Protocol";
}

extension get-filter-element-attributes {
  description
  "If this extension is present within an 'anymxml'
  statement named 'filter', which must be conceptually
  defined within the RPC input section for the <get>
  and <get-config> protocol operations, then the
  following unqualified XML attribute is supported
  within the <filter> element, within a <get> or
  <get-config> protocol operation:

  type : optional attribute with allowed
       value strings 'subtree' and 'xpath'.
       If missing, the default value is 'subtree'.

  If the 'xpath' feature is supported, then the
  following unqualified XML attribute is
  also supported:

  select: optional attribute containing a
         string representing an XPath expression.
         The 'type' attribute must be equal to 'xpath'
         if this attribute is present."
}

feature writable-running {
  description
  "NETCONF :writable-running capability;
  If the server advertises the :writable-running
  capability for a session, then this feature must
  also be enabled for that session. Otherwise,
  this feature must not be enabled.";
  reference "RFC 6241, Section 8.2";
}

feature candidate {
  description
  "NETCONF :candidate capability;
  If the server advertises the :candidate
  capability for a session, then this feature must
  also be enabled for that session. Otherwise,
  this feature must not be enabled.";
  reference "RFC 6241, Section 8.3";
feature confirmed-commit {
    if-feature "candidate";
    description
        "NETCONF :confirmed-commit:1.1 capability;
        If the server advertises the :confirmed-commit:1.1 capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled."
    reference "RFC 6241, Section 8.4";
}

feature rollback-on-error {
    description
        "NETCONF :rollback-on-error capability;
        If the server advertises the :rollback-on-error capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled."
    reference "RFC 6241, Section 8.5";
}

feature validate {
    description
        "NETCONF :validate:1.1 capability;
        If the server advertises the :validate:1.1 capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled."
    reference "RFC 6241, Section 8.6";
}

feature startup {
    description
        "NETCONF :startup capability;
        If the server advertises the :startup capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled."
    reference "RFC 6241, Section 8.7";
}

feature url {
    description
        "NETCONF :url capability;
        If the server advertises the :url capability for a session, then this feature must
also be enabled for that session. Otherwise, this feature must not be enabled.”;
reference "RFC 6241, Section 8.8";
}

feature xpath {
  description
  "NETCONF :xpath capability;
  If the server advertises the :xpath capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled.”;
  reference "RFC 6241, Section 8.9";
}

typedef session-id-type {
  type uint32 {
    range "1..max";
  }
  description
  "NETCONF Session Id";
}

typedef session-id-or-zero-type {
  type uint32;
  description
  "NETCONF Session Id or Zero to indicate none";
}

typedef error-tag-type {
  type enumeration {
    enum "in-use" {
      description
      "The request requires a resource that already is in use.”;
    }
    enum "invalid-value" {
      description
      "The request specifies an unacceptable value for one or more parameters.”;
    }
    enum "too-big" {
      description
      "The request or response (that would be generated) is too large for the implementation to handle.”;
    }
    enum "missing-attribute" {
      description
      "The request requires a resource that already is in use.”;
    }
  }
}

"An expected attribute is missing."
}
enum "bad-attribute" {
  description
  "An attribute value is not correct; e.g., wrong type,
  out of range, pattern mismatch.";
}
enum "unknown-attribute" {
  description
  "An unexpected attribute is present.";
}
enum "missing-element" {
  description
  "An expected element is missing.";
}
enum "bad-element" {
  description
  "An element value is not correct; e.g., wrong type,
  out of range, pattern mismatch.";
}
enum "unknown-element" {
  description
  "An unexpected element is present."
}
enum "unknown-namespace" {
  description
  "An unexpected namespace is present."
}
enum "access-denied" {
  description
  "Access to the requested protocol operation or
  data model is denied because authorization failed.";
}
enum "lock-denied" {
  description
  "Access to the requested lock is denied because the
  lock is currently held by another entity.";
}
enum "resource-denied" {
  description
  "Request could not be completed because of
  insufficient resources.";
}
enum "rollback-failed" {
  description
  "Request to roll back some configuration change (via
  rollback-on-error or <discard-changes> operations)
  was not completed for some reason.";
enum "data-exists" {
    description
    "Request could not be completed because the relevant
data model content already exists. For example,
a 'create' operation was attempted on data that
already exists.";
}
enum "data-missing" {
    description
    "Request could not be completed because the relevant
data model content does not exist. For example,
a 'delete' operation was attempted on
data that does not exist.";
}
enum "operation-not-supported" {
    description
    "Request could not be completed because the requested
operation is not supported by this implementation.";
}
enum "operation-failed" {
    description
    "Request could not be completed because the requested
operation failed for some reason not covered by
any other error condition.";
}
enum "partial-operation" {
    description
    "This error-tag is obsolete, and SHOULD NOT be sent
by servers conforming to this document.";
}
enum "malformed-message" {
    description
    "A message could not be handled because it failed to
be parsed correctly. For example, the message is not
well-formed XML or it uses an invalid character set.";
}

description
"NETCONF Error Tag";
reference "RFC 6241, Appendix A";

typedef error-severity-type {
    type enumeration {
        enum "error" {
            description
            "Error severity";
        }
    }
}
enum "warning" {
    description
    "Warning severity";
}

description
"NETCONF Error Severity";
reference "RFC 6241, Section 4.3";
}
typedef edit-operation-type {
    type enumeration {
        enum "merge" {
            description
            "The configuration data identified by the
            element containing this attribute is merged
            with the configuration at the corresponding
            level in the configuration datastore identified
            by the target parameter.";
        }
        enum "replace" {
            description
            "The configuration data identified by the element
            containing this attribute replaces any related
            configuration in the configuration datastore
            identified by the target parameter. If no such
            configuration data exists in the configuration
datastore, it is created. Unlike a
<copy-config> operation, which replaces the
entire target configuration, only the configuration
actually present in the config parameter is affected.";
        }
        enum "create" {
            description
            "The configuration data identified by the element
containing this attribute is added to the
configuration if and only if the configuration
data does not already exist in the configuration
datastore. If the configuration data exists, an
<rpc-error> element is returned with an
<error-tag> value of 'data-exists'.";
        }
        enum "delete" {
            description
            "The configuration data identified by the element
containing this attribute is deleted from the
configuration if and only if the configuration
data currently exists in the configuration datastore. If the configuration data does not exist, an <rpc-error> element is returned with an <error-tag> value of 'data-missing'.

}
}
enum "remove" {
  description
  "The configuration data identified by the element containing this attribute is deleted from the configuration if the configuration data currently exists in the configuration datastore. If the configuration data does not exist, the 'remove' operation is silently ignored by the server."
}
}
default "merge";

description
"NETCONF 'operation' attribute values"
reference "RFC 6241, Section 7.2"
}

rpc get-config {
  description
  "Retrieve all or part of a specified configuration."
  reference "RFC 6241, Section 7.1"
  input {
    container source {
      description
      "Particular configuration to retrieve."
      choice config-source {
        mandatory true;
        description
        "The configuration to retrieve."
        leaf candidate {
          if-feature "candidate"
          type empty;
          description
          "The candidate configuration is the config source."
        }
        leaf running {
          type empty;
          description
          "The running configuration is the config source."
        }
        leaf startup {
          if-feature "startup"
          type empty;
          description
          "The startup configuration is the config source."
        }
      }
    }
  }
}
description
"The startup configuration is the config source.
This is optional-to-implement on the server because
not all servers will support filtering for this
datastore.";
}
}
}
}
anyxml filter {
description
"Subtree or XPath filter to use."
nc:get-filter-element-attributes;
}
}
output {
anyxml data {
description
"Copy of the source datastore subset that matched
the filter criteria (if any). An empty data container
indicates that the request did not produce any results.";
}
}
}
rpc edit-config {
description
"The <edit-config> operation loads all or part of a specified
configuration to the specified target configuration.";
reference "RFC 6241, Section 7.2";
input {
container target {
description
"Particular configuration to edit."
choice config-target {
mandatory true;
description
"The configuration target."
leaf candidate {
if-feature "candidate";
type empty;
description
"The candidate configuration is the config target."
}
leaf running {
if-feature "writable-running";
type empty;
description
"The running configuration is the config source."
}
leaf default-operation {
  type enumeration {
    enum "merge" {
      description
      "The default operation is merge.";
    }
    enum "replace" {
      description
      "The default operation is replace.";
    }
    enum "none" {
      description
      "There is no default operation.";
    }
  }
  default "merge";
  description
  "The default operation to use.";
}
leaf test-option {
  if-feature "validate";
  type enumeration {
    enum "test-then-set" {
      description
      "The server will test and then set if no errors.";
    }
    enum "set" {
      description
      "The server will set without a test first.";
    }
    enum "test-only" {
      description
      "The server will only test and not set, even if there are no errors.";
    }
  }
  default "test-then-set";
  description
  "The test option to use.";
}
leaf error-option {
  type enumeration {
    enum "stop-on-error" {
      description
      "The server will stop on errors.";
    }
  }
}
enum "continue-on-error" {
    description
    "The server may continue on errors."
}

enum "rollback-on-error" {
    description
    "The server will roll back on errors.
    This value can only be used if the 'rollback-on-error'
    feature is supported."
}

default "stop-on-error";
    description
    "The error option to use."

choice edit-content {
    mandatory true;
    description
    "The content for the edit operation."

    anyxml config {
        description
        "Inline Config content."
    }

    leaf url {
        if-feature "url";
        type inet:uri;
        description
        "URL-based config content."
    }
}

rpc copy-config {
    description
    "Create or replace an entire configuration datastore with the
    contents of another complete configuration datastore."
    reference "RFC 6241, Section 7.3"

    input {
        container target {
            description
            "Particular configuration to copy to."

            choice config-target {
                mandatory-target;
                description
                "The configuration target of the copy operation."

                leaf candidate {
                    if-feature "candidate";
                    type empty;
                }
            }
        }
    }
}
description
  "The candidate configuration is the config target."
};
}
leaf running {
  if-feature "writable-running";
  type empty;
  description
    "The running configuration is the config target.
     This is optional-to-implement on the server."
};
}
leaf startup {
  if-feature "startup";
  type empty;
  description
    "The startup configuration is the config target."
};
}
leaf url {
  if-feature "url";
  type inet:uri;
  description
    "The URL-based configuration is the config target."
};
}
}
container source {
  description
    "Particular configuration to copy from."
  choice config-source {
    mandatory true;
    description
      "The configuration source for the copy operation."
    leaf candidate {
      if-feature "candidate";
      type empty;
      description
        "The candidate configuration is the config source."
    }
    leaf running {
      type empty;
      description
        "The running configuration is the config source."
    }
    leaf startup {
      if-feature "startup";
      type empty;
      description
        "The startup configuration is the config source."
    }
  }
}
leaf url {
  if-feature "url";
  type inet:uri;
  description "The URL-based configuration is the config source.";
}
anyxml config {
  description "Inline Config content: <config> element. Represents an entire configuration datastore, not a subset of the running datastore.";
}
}
}
}
}
rpc delete-config {
  description "Delete a configuration datastore.";
  reference "RFC 6241, Section 7.4";
  input {
    container target {
      description "Particular configuration to delete.";
      choice config-target {
        mandatory true;
        description "The configuration target to delete.";
        leaf startup {
          if-feature "startup";
          type empty;
          description "The startup configuration is the config target.";
        }
        leaf url {
          if-feature "url";
          type inet:uri;
          description "The URL-based configuration is the config target.";
        }
      }
    }
  }
}
rpc lock {
  description "The lock operation allows the client to lock the configuration system of a device.";
reference "RFC 6241, Section 7.5";
input {
    container target {
        description "Particular configuration to lock.";
        choice config-target {
            mandatory true;
            description "The configuration target to lock.";
            leaf candidate {
                if-feature "candidate";
                type empty;
                description "The candidate configuration is the config target.";
            }
            leaf running {
                type empty;
                description "The running configuration is the config target.";
            }
            leaf startup {
                if-feature "startup";
                type empty;
                description "The startup configuration is the config target.";
            }
        }
    }
}
}
}
}
}
}
}

rpc unlock {
    description "The unlock operation is used to release a configuration lock,
    previously obtained with the 'lock' operation.";
    reference "RFC 6241, Section 7.6";
    input {
        container target {
            description "Particular configuration to unlock.";
            choice config-target {
                mandatory true;
                description "The configuration target to unlock.";
                leaf candidate {
                    if-feature "candidate";
                    type empty;
                    description "The candidate configuration is the config target.";
                }
            }
        }
    }
}
leaf running {
    type empty;
    description
        "The running configuration is the config target.";
}
leaf startup {
    if-feature "startup";
    type empty;
    description
        "The startup configuration is the config target.";
}
}
}
}
}
rpc get {
    description
        "Retrieve running configuration and device state information.";
    reference "RFC 6241, Section 7.7";
    input {
        anyxml filter {
            description
                "This parameter specifies the portion of the system
                configuration and state data to retrieve."
            nc:get-filter-element-attributes;
        }
    }
    output {
        anyxml data {
            description
                "Copy of the running datastore subset and/or state
                data that matched the filter criteria (if any).
                An empty data container indicates that the request did not
                produce any results.";
        }
    }
}
}
rpc close-session {
    description
        "Request graceful termination of a NETCONF session.";
    reference "RFC 6241, Section 7.8";
}
}
rpc kill-session {
    description
        "Force the termination of a NETCONF session.";
    reference "RFC 6241, Section 7.9";
    input {

leaf session-id {
  type session-id-type;
  mandatory true;
  description
   "Particular session to kill."
}
}
}
rpc commit {
  if-feature "candidate";
  description
   "Commit the candidate configuration as the device's new
current configuration.";
  reference "RFC 6241, Section 8.3.4.1";
  input {
    leaf confirmed {
      if-feature "confirmed-commit";
      type empty;
      description
       "Requests a confirmed commit."
      reference "RFC 6241, Section 8.3.4.1";
    }
    leaf confirm-timeout {
      if-feature "confirmed-commit";
      type uint32 {
        range "1..max";
      }
      units "seconds";
      default "600";
      description
       "The timeout interval for a confirmed commit.";
      reference "RFC 6241, Section 8.3.4.1";
    }
    leaf persist {
      if-feature "confirmed-commit";
      type string;
      description
       "This parameter is used to make a confirmed commit
persistent. A persistent confirmed commit is not aborted
if the NETCONF session terminates. The only way to abort
a persistent confirmed commit is to let the timer expire,
or to use the <cancel-commit> operation.

The value of this parameter is a token that must be given
in the 'persist-id' parameter of <commit> or
<cancel-commit> operations in order to confirm or cancel
the persistent confirmed commit.";  
}
The token should be a random string.

leaf persist-id {
  if-feature "confirmed-commit";
  type string;
  description "This parameter is given in order to commit a persistent confirmed commit. The value must be equal to the value given in the 'persist' parameter to the <commit> operation. If it does not match, the operation fails with an 'invalid-value' error."
  reference "RFC 6241, Section 8.3.4.1";
}

cancel-commit {
  if-feature "confirmed-commit";
  description "This operation is used to cancel an ongoing confirmed commit. If the confirmed commit is persistent, the parameter 'persist-id' must be given, and it must match the value of the 'persist' parameter."
  reference "RFC 6241, Section 8.4.4.1";
  input {
    leaf persist-id {
      type string;
      description "This parameter is given in order to cancel a persistent confirmed commit. The value must be equal to the value given in the 'persist' parameter to the <commit> operation. If it does not match, the operation fails with an 'invalid-value' error."
    }
  }
}

discard-changes {
  if-feature "candidate";
  description "Revert the candidate configuration to the current running configuration."
  reference "RFC 6241, Section 8.3.4.2";
}

validate {
  if-feature "validate";
  description "Validates the contents of the specified configuration."
  reference "RFC 6241, Section 8.6.4.1";
}
input {
  container source {
    description
    "Particular configuration to validate.";
    choice config-source {
      mandatory true;
      description
      "The configuration source to validate.";
      leaf candidate {
        if-feature "candidate";
        type empty;
        description
        "The candidate configuration is the config source.";
      }
      leaf running {
        type empty;
        description
        "The running configuration is the config source.";
      }
      leaf startup {
        if-feature "startup";
        type empty;
        description
        "The startup configuration is the config source.";
      }
      leaf url {
        if-feature "url";
        type inet:uri;
        description
        "The URL-based configuration is the config source.";
      }
      anyxml config {
        description
        "Inline Config content: <config> element. Represents
        an entire configuration datastore, not
        a subset of the running datastore.";
      }
    }
  }
}

Found in path(s):
  * /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-
    0.1.5.post2/ydk/models/ietf/_yang/ietf-netconf.yang

No license file was found, but licenses were detected in source scan.
module ietf-diffserv-target {

  yang-version 1;
  prefix target;

  import ietf-interfaces {
    prefix if;
  }

  organization "IETF NETMOD (Netmod Working Group) Working Group";
  contact
    "WG Web: <http://tools.ietf.org/wg/netmod/>
    WG List: <mailto:netmod@ietf.org>
    WG Chair: Juergen Schoenwaelder
      <mailto:j.schoenwaelder@jacobs-university.de>
    WG Chair: Tom Nadeau
      <mailto:tnadeau@lucidvision.com>
    Editor: Aseem Choudhary
      <mailto:asechoud@cisco.com>
    Editor: Shitanshu Shah
      <mailto:svshah@cisco.com>";
  description
    "This module contains a collection of YANG definitions for
     configuring diffserv specification implementations.

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  the RFC itself for full legal notices."

  revision 2015-04-07 {
    description
      "Latest revision diffserv based policy applied to a target";
    reference "RFC XXXX";
  }
}
identity direction {
  description
  "This is identity of traffic direction";
}

identity inbound {
  base direction;
  description
  "Direction of traffic coming into the network entry";
}

identity outbound {
  base direction;
  description
  "Direction of traffic going out of the network entry";
}

feature target-inline-policy-config {
  description
  "This feature allows the policy configuration
   directly under a target.";
}

grouping wred-stats {
  description
  "WRED Counters";
  leaf early-drop-pkts {
    type uint64;
    description
    "Early drop packets ";
  }
  leaf early-drop-bytes {
    type uint64;
    description
    "Early drop bytes ";
  }
}

grouping classifier-entry-stats {
  description
  "Classifier Counters";
  container classifier-entry-statistics {
    config false;
    description
    "This group defines the classifier filter statistics of
     each classifier entry
   

leaf classified-pkts {
  type uint64;
  description
  " Number of total packets which filtered to the classifier-entry";
}

leaf classified-bytes {
  type uint64;
  description
  " Number of total bytes which filtered to the classifier-entry";
}

leaf classified-rate {
  type uint64;
  units "bits-per-second";
  description
  " Rate of average data flow through the classifier-entry";
}
}

grouping queuing-stats {
  description
  "Queuing Counters";
  container queuing-statistics {
    description
    "queue related statistics ";
    leaf output-pkts {
      type uint64;
      description
      "Number of packets transmitted from queue ";
    }
    leaf output-bytes {
      type uint64;
      description
      "Number of bytes transmitted from queue ";
    }
    leaf queue-size-pkts {
      type uint64;
      description
      "Number of packets currently buffered ";
    }
    leaf queue-size-bytes {
      type uint64;
      description
      "Number of bytes currently buffered ";
    }
  }
}

"Number of bytes currently buffered ";
}
leaf drop-pkts {
  type uint64;
  description
  "Total number of packets dropped ";
}
leaf drop-bytes {
  type uint64;
  description
  "Total number of bytes dropped ";
}
container wred-stats {
  uses wred-stats;
  description
  "Container for WRED statistics";
}
}

grouping meter-stats {
  description
  "Metering Counters";
list meter-statistics {
  key "meter-id";
  description
  "Meter statistics";
leaf meter-id {
  type uint16;
  description
  "Meter Identifier";
}
leaf meter-succeed-pkts {
  type uint64;
  description
  "Number of packets which succeed the meter";
}
leaf meter-succeed-bytes {
  type uint64;
  description
  "Bytes of packets which succeed the meter";
}
leaf meter-failed-pkts {
  type uint64;
  description
  "Number of packets which failed the meter";
}
leaf meter-failed-bytes {
type uint64;
    description
    "Bytes of packets which failed the meter";
}
}

augment "/if:interfaces/if:interface" {
    description
    "Augments Diffserv Target Entry to Interface module";
    list diffserv-target-entry {
        key "direction policy-name";
        description
        "policy target for inbound or outbound direction";
        leaf direction {
            type identityref {
                base direction;
            }
            description
            "Direction fo the traffic flow either inbound or outbound";
        }
        leaf policy-name {
            type string;
            description
            "Policy entry name";
        }
    }
}

augment "/if:interfaces-state/if:interface" {
    description
    "Augments Diffserv Target Entry to Interface module";
    list diffserv-target-entry {
        key "direction policy-name";
        description
        "policy target for inbound or outbound direction";
        leaf direction {
            type identityref {
                base direction;
            }
            description
            "Direction fo the traffic flow either inbound or outbound";
        }
        leaf policy-name {
            type string;
            description
            "Policy entry name";
        }
    }
}
list diffserv-target-classifier-statistics {
  key "classifier-entry-name parent-path";
  description
    "Statistics for each Classifier Entry in a Policy";
  leaf classifier-entry-name {
    type string;
    description
      "Classifier Entry Name";
  }
  leaf parent-path {
    type string;
    description
      "Path of the Classifier Entry in a hierarchial policy ";
  }
  uses classifier-entry-stats;
  uses meter-stats;
  uses queuing-stats;
}
}
}

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ietf/models/ietf/_yang/ietf-diffserv-target.yang
No license file was found, but licenses were detected in source scan.

*** ietf_diffserv_policy

This module contains a collection of YANG definitions for configuring diffserv specification implementations.

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***

from collections import OrderedDict
class ActionType(Identity):
    """
    This base identity type defines action-types
    """

    _prefix = 'policy'
    _revision = '2015-04-07'

                 tag="ietf-diffserv-policy:action-type"):
        super(ActionType, self).__init__(ns, pref, tag)

class Policies(Entity):
    """
    list of policy templates
    .. attribute:: policy_entry

    policy template

    """

    _prefix = 'policy'
    _revision = '2015-04-07'

    def __init__(self):
        super(Policies, self).__init__()
        self._top_entity = None
        self.yang_name = "policies"
        self.yang_parent_name = "ietf-diffserv-policy"
        self.is_top_level_class = True
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([('policy-entry', ('policy_entry', Policies.PolicyEntry))])
self._leafs = OrderedDict()

self.policy_entry = YList(self)
self._segment_path = lambda: "ietf-diffserv-policy:policies"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Policies, [], name, value)

class PolicyEntry(Entity):
    """
    policy template
    .. attribute:: policy_name  (key)
    Diffserv policy name
    **type**: str
    .. attribute:: policy_descr
    Diffserv policy description
    **type**: str
    .. attribute:: classifier_entry
    Classifier entry configuration in a policy
    **type**: list of :py:class:`ClassifierEntry`
    _prefix = 'policy'
    _revision = '2015-04-07'

def __init__(self):
    super(Policies.PolicyEntry, self).__init__()
    self.yang_name = "policy-entry"
    self.yang_parent_name = "policies"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = ['policy_name']
self._child_classes = OrderedDict(["classifier-entry", "classifier_entry", 
Policies.PolicyEntry.ClassifierEntry)])

self._leafs = OrderedDict[
  ("policy-name", (YLeaf(YType.str, 'policy-name'), ['str'])),
  ("policy-descr", (YLeaf(YType.str, 'policy-descr'), ['str'])),
]

self.policy_name = None
self.policy_descr = None

self.classifier_entry = YList(self)

self._segment_path = lambda: "policy-entry" + "[policy-name='" + str(self.policy_name) + "']"
self._absolute_path = lambda: "ietf-diffserv-policy:policies/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
  self._perform_setattr(Policies.PolicyEntry, ['policy_name', 'policy_descr'], name, value)

class ClassifierEntry(Entity):
  
  Classifier entry configuration in a policy

  .. attribute:: classifier_entry_name  (key)

  Diffserv classifier entry name
  **type**: str

  .. attribute:: classifier_entry_inline

  Indication of inline classifier entry
  **type**: bool

  **default value**: false

  .. attribute:: classifier_entry_filter_oper

  Filters are applicable as any or all filters
  **type**: :py:class:`ClassifierEntryFilterOperationType`

  <ydk.models.ietf.ietf_diffserv_classifier.ClassifierEntryFilterOperationType>

  **default value**: match-any-filter

  .. attribute:: filter_entry

  Filters configured inline in a policy
  **type**: list of :py:class:`FilterEntry`

Configuration of classifier & associated actions

**type**

A list of :py:class:`ClassifierActionEntryCfg`

```python
.. attribute:: classifier_action_entry_cfg

    Configuration of classifier & associated actions

    **type**

    A list of :py:class:`ClassifierActionEntryCfg`


Imports:

```python
.. _prefix = 'policy'

.. _revision = '2015-04-07'

def __init__(self):

    super(Policies.PolicyEntry.ClassifierEntry, self).__init__()``

```

Calculating the segment path for the classifier entry:

```python
self._segment_path = lambda: "classifier-entry" + 
    '[classifier-entry-name={}]'.format(str(self.classifier_entry_name))``

```

Filter configuration class:

```python
class FilterEntry(Entity):

    Filters configured inline in a policy

```
.. attribute:: filter_type  (key)

This leaf defines type of the filter

**type**:: :py:class:`FilterType <ydk.models.ietf.ietf_diffserv_classifier.FilterType>`

.. attribute:: filter_logical_not  (key)

This is logical-not operator for a filter. When true, it indicates filter looks for absence of a pattern defined by the filter

**type**:: bool

.. attribute:: dscp_cfg

list of dscp ranges


.. attribute:: source_ip_address_cfg

list of source ip address


.. attribute:: destination_ip_address_cfg

list of destination ip address


.. attribute:: source_port_cfg

list of ranges of source port


.. attribute:: destination_port_cfg

list of ranges of destination port


.. attribute:: protocol_cfg

list of ranges of protocol values

def __init__(self):
    super(Policies.PolicyEntry.ClassifierEntry.FilterEntry, self).__init__()

    self.yang_name = "filter-entry"
    self.yang_parent_name = "classifier-entry"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['filter_type', 'filter_logical_not']
    self._leafs = OrderedDict([('filter_type', (YLeaf(YType.identityref, 'filter-type'), [('ydk.models.ietf.ietf_diffserv_classifier', 'FilterType')]))])
    self._set attr = None
    self.filter_type = None
    self.filter_logical_not = None

    self.dscp_cfg = YList(self)
    self.source_ip_address_cfg = YList(self)
    self.destination_ip_address_cfg = YList(self)
    self.source_port_cfg = YList(self)
    self.destination_port_cfg = YList(self)
    self.protocol_cfg = YList(self)
    self._segment_path = lambda: "filter-entry" + "[filter-type='" + str(self.filter_type) + "']" + "[filter-logical-not='" + str(self.filter_logical_not) + "']"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._setattr__(name, value)

        if name in self._leafs:
            self._setattr__ (name, value)
        elif name in self._children:
            child = self._children[name]
            child._setattr__ (name, value)

    class DscpCfg(Entity):
        ...
list of dscp ranges

.. attribute:: dscp_min (key)

Minimum value of dscp range
**type**: int

**range**: 0..63

.. attribute:: dscp_max (key)

maximum value of dscp range
**type**: int

**range**: 0..63

def __init__(self):

    self.yang_name = "dscp-cfg"
    self.yang_parent_name = "filter-entry"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['dscp-min', 'dscp-max']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('dscp-min', (YLeaf(YType.uint8, 'dscp-min'), ['int'])),
        ('dscp-max', (YLeaf(YType.uint8, 'dscp-max'), ['int'])),
    )
    self.dscp_min = None
    self.dscp_max = None
    self._segment_path = lambda: "dscp-cfg" + "[dscp-min='" + str(self.dscp_min) + "']" + "[dscp-max='" + str(self.dscp_max) + "']"
    self._is_frozen = True

def __setattr__(self, name, value):

class SourceIpAddressCfg(Entity):
list of source ip address

.. attribute:: source_ip_addr (key)

source ip prefix

**type**: union of the below types:

**type**: str


_\_\_prefix = 'policy'
_\_\_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "source-ip-address-cfg"
    self.yang_parent_name = "filter-entry"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['source_ip_addr']
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'source_ip_addr': (YLeaf(YType.str, 'source-ip-addr'), ['str','str']),
    })

    self._segment_path = lambda: "source-ip-address-cfg" + "[source-ip-addr='" + str(self.source_ip_addr) + "]"
    self._is_frozen = True

    def __setattr__(self, name, value):
class DestinationIpAddressCfg(Entity):
    
    list of destination ip address

    .. attribute:: destination_ip_addr (key)

    destination ip prefix

    **type**: union of the below types:

    **type**: str

    **pattern**: (([0-9\-9][1\-9\-9][\-0\-9][\-0\-9][2[0\-4][0\-9][\-0\-9][25[0\-5]]\-3][0\-9][0\-9][\-0\-9][\-0\-9][\-0\-9][2[0\-4][0\-9][\-0\-9][25[0\-5]]/((0\-9)[1\-2][0\-9])\-3[0\-2]))

    **type**: str

    **pattern**: ((\[0\-9a\-fA\-F\][0\-4])\-4([0\-9a\-fA\-F\][0\-4])\-12(25[0\-5][2[0\-4][0\-9][0\-9][0\-9][0\-9][0\-9]/((0\-9)[1\-2][0\-9])\-3[0\-2]))

    

    _prefix = 'policy'
    _revision = '2015-04-07'

    def __init__(self):

        self.yang_name = "destination-ip-address-cfg"
        self.yang_parent_name = "filter-entry"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = ['destination_ip_addr']
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict([ ('destination_ip_addr', (YLeaf(YType.str, 'destination-ip-addr'), ['str','str']))])
        self.destination_ip_addr = None
        self._segment_path = lambda: "destination-ip-address-cfg" + "[destination-ip-addr='" + str(self.destination_ip_addr) + "']"
        self._is_frozen = True

    def __setattr__(self, name, value):
class SourcePortCfg(Entity):
    """
    list of ranges of source port

    .. attribute:: source_port_min  (key)

    minimum value of source port range
    **type**: int

    **range**: 0..65535

    .. attribute:: source_port_max  (key)

    maximum value of source port range
    **type**: int

    **range**: 0..65535

    """

    _prefix = 'policy'
    _revision = '2015-04-07'

def __init__(self):

    self.yang_name = "source-port-cfg"
    self.yang_parent_name = "filter-entry"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = ['source_port_min', 'source_port_max']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        [('source_port_min', (YLeaf(YType.uint16, 'source-port-min'), ['int'])),
         ('source_port_max', (YLeaf(YType.uint16, 'source-port-max'), ['int']))
         ]
    )
    self.source_port_min = None
    self.source_port_max = None
    self._segment_path = lambda: "source-port-cfg" + "[source-port-min='{}']" + "[source-port-max='{}']" + "[source-port-min='{}']" + "[source-port-max='{}']" + "[source-port-min='{}']" + "[source-port-max='{}']" + "[source-port-min='{}']" + "[source-port-max='{}']"
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Policies.PolicyEntry.ClassifierEntry.FilterEntry.SourcePortCfg, [u'source_port_min', u'source_port_max'], name, value)
class DestinationPortCfg(Entity):
  
  list of ranges of destination port

  .. attribute:: destination_port_min (key)

  minimum value of destination port range
  **type**:: int

  **range:** 0..65535

  .. attribute:: destination_port_max (key)

  maximum value of destination port range
  **type**:: int

  **range:** 0..65535

__prefix = 'policy'
__revision = '2015-04-07'

def __init__(self):

  self.yang_name = "destination-port-cfg"
  self.yang_parent_name = "filter-entry"
  self.is_top_level_class = False
  self.has_list_ancestor = True
  self.yang_key_names = ['destination-port-min', 'destination-port-max']
  self._child_classes = OrderedDict({})
  self._leafs = OrderedDict({
    ('destination-port-min', (YLeaf(YType.uint16, 'destination-port-min'), ['int'])),
    ('destination-port-max', (YLeaf(YType.uint16, 'destination-port-max'), ['int'])),
  })
  self.destination_port_min = None
  self.destination_port_max = None
  self._segment_path = lambda: "destination-port-cfg" + "[destination-port-min='" + str(self.destination_port_min) + "']" + "[destination-port-max='" + str(self.destination_port_max) + "]"
  self._is_frozen = True

def __setattr__(self, name, value):
  self._perform_setattr(Policies.PolicyEntry.ClassifierEntry.FilterEntry.DestinationPortCfg,
class ProtocolCfg(Entity):

    """
    list of ranges of protocol values

    .. attribute:: protocol_min  (key)

        minimum value of protocol range
        **type**: int
        **range**: 0..255

    .. attribute:: protocol_max  (key)

        maximum value of protocol range
        **type**: int
        **range**: 0..255

    """

    _prefix = 'policy'
    _revision = '2015-04-07'

    def __init__(self):

        self.yang_name = "protocol-cfg"
        self.yang_parent_name = "filter-entry"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = ['protocol_min','protocol_max']
        self._child_classes = OrderedDict(
            )
        self._leafs = OrderedDict(
            [('protocol_min', (YLeaf(YType.uint8, 'protocol-min'), ['int']))],
            [('protocol_max', (YLeaf(YType.uint8, 'protocol-max'), ['int']))],
            )

        self.protocol_min = None
        self.protocol_max = None

    _setattr__ = lambda self, name, value:

    def _segment_path(self):
        return self._get_relative_entity_path("protocol-cfg", None, "protocol-min={`${str(self.protocol_min)}, protocol-max=${str(self.protocol_max)}, protocol-min=${self.protocol_min}, protocol-max=${self.protocol_max}"", self.is_frozen = True

    def _map_meta_data(self):
        return None

class ClassifierActionEntryCfg(Entity):
    """
    Configuration of classifier & associated actions
    
    .. attribute:: action_type (key)
    
    This defines action type
    **type**: :py:class:`ActionType <ydk.models.ietf.ietf_diffserv_policy.ActionType>`
    
    .. attribute:: marking_cfg
    
    Marking configuration container
    
    .. attribute:: priority_cfg
    
    priority attributes container
    
    .. attribute:: meter_cfg
    
    Meter list configuration container
    
    .. attribute:: min_rate_cfg
    
    min guaranteed bandwidth
    
    .. attribute:: max_rate_cfg
    
    maximum rate attributes
    
    .. attribute:: drop_cfg
    
    Always Drop configuration container
.. attribute:: tail_drop_cfg

Tail Drop configuration container
**type**: :py:class:`TailDropCfg


.. attribute:: random_detect_cfg

Random Detect configuration container
**type**: :py:class:`RandomDetectCfg


""

_prefix = 'policy'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "classifier-action-entry-cfg"
    self.yang_parent_name = "classifier-entry"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['action_type']
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict(
        [('action_type', (YLeaf(YType.identityref, 'action-type'), [('ydk.models.ietf.ietf_diffserv_policy', 'ActionType')]))],
    )
    self.action_type = None

    self.marking_cfg.parent = self
self._children_name_map["marking_cfg"] = "ietf-diffserv-action:marking-cfg"

self.priority_cfg.parent = self
self._children_name_map["priority_cfg"] = "ietf-diffserv-action:priority-cfg"

self.meter_cfg.parent = self
self._children_name_map["meter_cfg"] = "ietf-diffserv-action: meter-cfg"

self.min_rate_cfg.parent = self
self._children_name_map["min_rate_cfg"] = "ietf-diffserv-action: min-rate-cfg"

self.max_rate_cfg.parent = self
self._children_name_map["max_rate_cfg"] = "ietf-diffserv-action: max-rate-cfg"

self.drop_cfg.parent = self
self._children_name_map["drop_cfg"] = "ietf-diffserv-action: drop-cfg"

self.tail_drop_cfg.parent = self
self._children_name_map["tail_drop_cfg"] = "ietf-diffserv-action: tail-drop-cfg"

self.random_detect_cfg.parent = self
self._children_name_map["random_detect_cfg"] = "ietf-diffserv-action: random-detect-cfg"

self._segment_path = lambda: "classifier-action-entry-cfg" + "[action-type='"] + str(self.action_type) + "]"
self._is_frozen = True

def __setattr__(self, name, value):

class MarkingCfg(Entity):
    """
    Marking configuration container
    """
    .. attribute:: dscp
        
        dscp marking

        **type***: int
**range:** 0..63

_**prefix** = 'action'
_**revision** = '2015-04-07'

def __init__(self):

    self.yang_name = "marking-cfg"
    self.yang_parent_name = "classifier-action-entry-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'dscp': (YLeaf(YType.uint8, 'dscp'), ['int'])
    })
    self.dscp = None
    self._segment_path = lambda: "ietf-diffserv-action:marking-cfg"
    self._is_frozen = True

def __setattr__(self, name, value):

class PriorityCfg(Entity):
    """
    priority attributes container
    """
    .. attribute:: priority_level

    priority level
    **type**: int

    **range:** 0..255

    .. attribute:: rate_burst

    absolute priority rate with/without burst rate and absolute percent
    **type**: :py:class:`RateBurst`
_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "priority-cfg"
    self.yang_parent_name = "classifier-action-entry-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._leafs = OrderedDict(["priority_level")

    self._leafs = OrderedDict(["priority_level", (YLeaf(YType.uint8, 'priority-level'), ['int'])),

    self.rate_burst =

    self.rate_burst.parent = self
    self._children_name_map["rate_burst"] = "rate-burst"
    self._segment_path = lambda: "ietf-diffserv-action:priority-cfg"
    self._is_frozen = True

    def __setattr__(self, name, value):
        ['priority_level'], name, value)

    class RateBurst(Entity):
        absolute priority rate with/without burst rate and absolute percent

        . attribute:: rate

        Rate value
        **type**:: int

        **range**: 0..18446744073709551615

        **units**: bits-per-second

        . attribute:: absolute_rate_metric
Metric
**type**: :py:class:`Metric <ydk.models.ietf.policy_types.Metric>`

**default value**: none

.. attribute:: absolute_rate_units

Rate basic units
**type**: :py:class:`RateUnit <ydk.models.ietf.policy_types.RateUnit>`

.. attribute:: rate_percent

percent
**type**: int

**range**: 1..100

.. attribute:: rate_ratio

**type**: int

**range**: 1..65532

.. attribute:: burst_size

burst size
**type**: int

**range**: 0..18446744073709551615

**units**: bytes

.. attribute:: burst_interval

burst interval
**type**: int

**range**: 0..18446744073709551615

**units**: microsecond


_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "rate-burst"
    self.yang_parent_name = "priority-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict([ ('rate', (YLeaf(YType.uint64, 'rate'), ['int'])),
                                ('absolute_rate_metric', (YLeaf(YType.enumeration, 'absolute-rate-metric'), ['ydk.models.ietf.policy_types', 'Metric', ''])),
                                ('absolute_rate_units', (YLeaf(YType.enumeration, 'absolute-rate-units'), ['ydk.models.ietf.policy_types', 'RateUnit', '']))],
                                 [('rate_percent', (YLeaf(YType.uint8, 'rate-percent'), ['int'])),
                                  ('rate_ratio', (YLeaf(YType.uint32, 'rate-ratio'), ['int'])),
                                  ('burst_size', (YLeaf(YType.uint64, 'burst-size'), ['int'])),
                                  ('burst_interval', (YLeaf(YType.uint64, 'burst-interval'), ['int']))]
                                )

    self.rate = None
    self.absolute_rate_metric = None
    self.absolute_rate_units = None
    self.rate_percent = None
    self.rate_ratio = None
    self.burst_size = None
    self.burst_interval = None
    self._segment_path = lambda: "rate-burst"
    self._is_frozen = True

    def _setattr__(self, name, value):

class MeterCfg(Entity):
    """
    Meter list configuration container
    """

    .. attribute:: meter_list

    Meter configuration

    **type**: list of :py:class:`MeterList`
_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "meter-cfg"
    self.yang_parent_name = "classifier-action-entry-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._leafs = OrderedDict()

    self.meter_list = YList(self)
    self._segment_path = lambda: "ietf-diffserv-action:meter-cfg"
    self._is_frozen = True

    def __setattr__(self, name, value):

class MeterList(Entity):
    
    Meter configuration

    .. attribute:: meter_id  (key)

        meter identifier

        **type**: int

        **range**: 0..65535

    .. attribute:: meter_rate

        meter rate

        **type**: int

        **range**: 0..18446744073709551615

        **units**: bits-per-second
.. attribute:: burst_size

burst size
**type**: int

**range**: 0..18446744073709551615

**units**: bytes

.. attribute:: burst_interval

burst interval
**type**: int

**range**: 0..18446744073709551615

**units**: microsecond

.. attribute:: color

color aware & color blind attributes container

.. attribute:: succeed_action

confirm action

.. attribute:: fail_action

exceed action

```python
__prefix = 'action'
__revision = '2015-04-07'
def __init__(self):
```

self.yang_name = "meter-list"
self.yang_parent_name = "meter-cfg"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['meter_id']
self._leafs = OrderedDict([('meter_id', (YLeaf(YType.uint16, 'meter-id'), ['int'])), ('meter_rate', (YLeaf(YType.uint64, 'meter-rate'), ['int'])), ('burst_size', (YLeaf(YType.uint64, 'burst-size'), ['int'])), ('burst_interval', (YLeaf(YType.uint64, 'burst-interval'), ['int']))])
self.meter_id = None
self.meter_rate = None
self.burst_size = None
self.burst_interval = None

self.color.parent = self
self._children_name_map['color'] = "color"

self.succeed_action.parent = self
self._children_name_map['succeed-action'] = "succeed-action"

self.fail_action.parent = self
self._children_name_map['fail-action'] = "fail-action"
self._segment_path = lambda: "meter-list" + "[meter-id='" + str(self.meter_id) + "']"
self._is_frozen = True

def __setattr__(self, name, value):

class Color(Entity):
......
.. attribute:: classifier_entry_name

DiffServ classifier name

**type**: str

.. attribute:: classifier_entry_descr

Description of the class template

**type**: str

.. attribute:: classifier_entry_filter_operation

Filters are applicable as any or all filters

**type**: :py:class:`ClassifierEntryFilterOperationType`<ydk.models.ietf.ietf_diffserv_classifier.ClassifierEntryFilterOperationType>

**default value**: match-any-filter

```python
_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "color"
    self.yang_parent_name = "meter-list"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(

    self._leafs = OrderedDict(
        ("classifier_entry_name", (YLeaf(YType.str, 'classifier-entry-name'), ['str']))),
        ("classifier_entry_descr", (YLeaf(YType.str, 'classifier-entry-descr'), ['str']))),
        ("classifier_entry_filter_operation", (YLeaf(YType.identityref, 'classifier-entry-filter-operation'), ['class:ClassifierEntryFilterOperationType'])))

    self.classifier_entry_name = None
    self.classifier_entry_descr = None
    self.classifier_entry_filter_operation = None
    self._segment_path = lambda: "color"
    self._is_frozen = True
```
def __setattr__(self, name, value):

class SucceedAction(Entity):
    
    confirm action

    .. attribute:: meter_action_type

    meter action type
    
    **type**: :py:class:`MeterActionType <ydk.models.ietf.ietf_diffserv_action.MeterActionType>`

    .. attribute:: next_meter_id

    next meter identifier
    
    **type**: int

    **range:** 0..65535

    .. attribute:: dscp

    dscp marking
    
    **type**: int

    **range:** 0..63

    .. attribute:: drop_action

    always drop algorithm
    
    **type**: :py:class:`Empty<ydk.types.Empty>`

    __init__(self):

        self.yang_name = "succeed-action"
        self.yang_parent_name = "meter-list"
        self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict()
self._leafs = OrderedDict[
    ('meter_action_type', (YLeaf(YType.identityref, 'meter-action-type'),
        [('ydk.models.ietf.ietf_diffserv_action', 'MeterActionType')]))],
    ('next_meter_id', (YLeaf(YType.uint16, 'next-meter-id'), [int])),
    ('dscp', (YLeaf(YType.uint8, 'dscp'), [int])),
    ('drop_action', (YLeaf(YType.empty, 'drop-action'), [Empty])),
]
self.meter_action_type = None
self.next_meter_id = None
self.dscp = None
self.drop_action = None
self._segment_path = lambda: "succeed-action"
self._is_frozen = True

def __setattr__(self, name, value):

class FailAction(Entity):
    
    exceed action

    .. attribute:: meter_action_type

    meter action type

    **type**: :py:class: `YLeaf <ydk.models.ietf.ietf_diffserv_action.MeterActionType>`

    .. attribute:: next_meter_id

    next meter identifier

    **type**: int

    **range**: 0..65535

    .. attribute:: dscp

    dscp marking

    **type**: int

    **range**: 0..63

    .. attribute:: drop_action

    always drop algorithm
class MinRateCfg(Entity):
    """
    min guaranteed bandwidth
    """
    .. attribute:: min_rate

    minimum rate

    **type**:: int

    **range:** 0..18446744073709551615
**units**: bits-per-second

.. attribute:: absolute_rate_metric

Metric

**type**: :py:class:`Metric <ydk.models.ietf.policy_types.Metric>`

**default value**: none

.. attribute:: absolute_rate_units

Rate basic units

**type**: :py:class:`RateUnit <ydk.models.ietf.policy_types.RateUnit>`

.. attribute:: rate_percent

percent

**type**: int

**range**: 1..100

.. attribute:: rate_ratio

**type**: int

**range**: 1..65532

.. attribute:: bw_excess_share_cfg

share the bandwidth remaning


```python

def __init__(self):
    self.yang_name = "min-rate-cfg"
    self.yang_parent_name = "classifier-action-entry-cfg"

```


```python
self.is_top_level_class = False
self.has_list_ancestor = True
self._list_key_names = []


self._leafs = OrderedDict([(‘min_rate’, (YLeaf(YType.uint64, ‘min-rate’), [‘int’])),
(‘absolute_rate_metric’, (YLeaf(YType.enumeration, ‘absolute-rate-metric’),
[‘ydk.models.ietf.policy_types.Metric’], ‘int’)),
(‘absolute_rate_units’, (YLeaf(YType.enumeration, ‘absolute-rate-units’),
[‘ydk.models.ietf.policy_types.RateUnit’], ‘int’)),
(‘rate_percent’, (YLeaf(YType.uint8, ‘rate-percent’), [‘int’])),
(‘rate_ratio’, (YLeaf(YType.uint32, ‘rate-ratio’), [‘int’])),
])

self.min_rate = None
self.absolute_rate_metric = None
self.absolute_rate_units = None
self.rate_percent = None
self.rate_ratio = None


self.bw_excess_share_cfg.parent = self
self._children_name_map["bw_excess_share_cfg"] = "bw-excess-share-cfg"
self._segment_path = lambda: "ietf-diffserv-action:min-rate-cfg"
self._is_frozen = True


class BwExcessShareCfg(Entity):
    ===
    share the bandwidth remaining

    .. attribute:: value

    percentage or ratio value

    **type**: int

    **range**: 0..4294967295

    .. attribute:: absolute_rate_metric

    Metric

    **type**: :py:class:`Metric <ydk.models.ietf.policy_types.Metric>`
```
**default value**: none

.. attribute:: absolute_rate_units

Rate basic units

**type**: :py:class:`RateUnit <ydk.models.ietf.policy_types.RateUnit>`

.. attribute:: rate_percent

percent

**type**: int

**range**: 1..100

.. attribute:: rate_ratio

**type**: int

**range**: 1..65532

---

_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "bw-excess-share-cfg"
    self.yang_parent_name = "min-rate-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([(
        'value', (YLeaf(YType.uint32, 'value'), ['int'])),
        ('absolute_rate_metric', (YLeaf(YType.enumeration, 'absolute-rate-metric'), [YLeaf(YType.enumeration, 'absolute-rate-units'), YLeaf(YType.enumeration, 'absolute-rate-units')]),
        ('value', (YLeaf(YType.uint32, 'value'), ['int']))),
        ('rate_percent', (YLeaf(YType.uint8, 'rate-percent'), ['int'])),
        ('rate_ratio', (YLeaf(YType.uint32, 'rate-ratio'), ['int'])))

    self.value = None
self.absolute_rate_metric = None
self.absolute_rate_units = None
self.rate_percent = None
self.rate_ratio = None
self._segment_path = lambda: "bw-excess-share-cfg"
self._is_frozen = True

def __setattr__(self, name, value):

class MaxRateCfg(Entity):
    '''
    maximum rate attributes
    .. attribute:: absolute_rate

    rate in bits per second
    **type**:: int

    **range**: 0..18446744073709551615

    **units**: bits-per-second

    .. attribute:: burst_size

    burst size
    **type**:: int

    **range**: 0..18446744073709551615

    **units**: bytes

    .. attribute:: burst_interval

    burst interval
    **type**:: int

    **range**: 0..18446744073709551615

    **units**: microsecond

    .. attribute:: absolute_rate_metric

    Metric
    **type**:: :py:class:`Metric <ydk.models.ietf.policy_types.Metric>`
**default value**: none

.. attribute:: absolute_rate_units

Rate basic units

**type**: :py:class:`RateUnit <ydk.models.ietf.policy_types.RateUnit>`

.. attribute:: rate_percent

percent

**type**: int

**range**: 1..100

.. attribute:: rate_ratio

**type**: int

**range**: 1..65532

```python
_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "max-rate-cfg"
    self.yang_parent_name = "classifier-action-entry-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict({
        'absolute_rate': (YLeaf(YType.uint64, 'absolute-rate'), ["int"]),
        'burst_size': (YLeaf(YType.uint64, 'burst-size'), ["int"]),
        'burst_interval': (YLeaf(YType.uint64, 'burst-interval'), ["int"]),
        'absolute_rate_metric': (YLeaf(YType.enumeration, 'absolute-rate-metric'),
        [('ydk.models.ietf.policy_types', 'Metric', '')]),
        'absolute_rate_units': (YLeaf(YType.enumeration, 'absolute-rate-units'),
        [('ydk.models.ietf.policy_types', 'RateUnit', '')]),
        'rate_percent': (YLeaf(YType.uint8, 'rate-percent'), ["int"]),
        'rate_ratio': (YLeaf(YType.uint32, 'rate-ratio'), ["int"]),
    })
```
self.absolute_rate = None
self.burst_size = None
self.burst_interval = None
self.absolute_rate_metric = None
self.absolute_rate_units = None
self.rate_percent = None
self.rate_ratio = None
self._segment_path = lambda: "ietf-diffserv-action:max-rate-cfg"
self._is_frozen = True

def __setattr__(self, name, value):
                          ['absolute_rate', 'burst_size', 'burst_interval', 'absolute_rate_metric', 'absolute_rate_units', 'rate_percent', 'rate_ratio'],
                          name, value)

class DropCfg(Entity):
    """
    Always Drop configuration container
    .. attribute:: drop_action

    always drop algorithm
    **type:** :py:class:`Empty<ydk.types.Empty>`
    """

    _prefix = 'action'
    _revision = '2015-04-07'

def __init__(self):
    self.yang_name = "drop-cfg"
    self.yang_parent_name = "classifier-action-entry-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([('drop_action', (YLeaf(YType.empty, 'drop-action'), ['Empty']))])
    self.drop_action = None
    self._segment_path = lambda: "ietf-diffserv-action:drop-cfg"
    self._is_frozen = True
def __setattr__(self, name, value):
    ['drop_action'], name, value)

class TailDropCfg(Entity):
    """
    Tail Drop configuration container
    .. attribute:: qlimit_dscp_thresh

    the queue limit per dscp range
    """
    _prefix = 'action'
    _revision = '2015-04-07'

def __init__(self):

    self.yang_name = "tail-drop-cfg"
    self.yang_parent_name = "classifier-action-entry-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict()
    self.qlimit_dscp_thresh = YList(self)

    self._prefix = 'action'
    self._revision = '2015-04-07'

    def __setattr__(self, name, value):
        name, value)

    class QlimitDscpThresh(Entity):
        """
        the queue limit per dscp range
        """
.. attribute:: dscp_min (key)

Minimum of dscp range
**type**: int

**range**: 0..63

.. attribute:: dscp_max (key)

Maximum of dscp range
**type**: int

**range**: 0..63

.. attribute:: threshold

threshold
**type**: :py:class:`Threshold`

<
limitDscpThresh.Threshold>

***

_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):

  self.yang_name = "qlimit-dscp-thresh"
  self.yang_parent_name = "tail-drop-cfg"
  self.is_top_level_class = False
  self.has_list_ancestor = True
  self.yang_key_names = ['dscp_min', 'dscp_max']
  self._leafs = OrderedDict(
    ('dscp_min', YLeaf(YType.uint8, 'dscp-min'), ['int']),
    ('dscp_max', YLeaf(YType.uint8, 'dscp-max'), ['int']),
  )
  self.dscp_min = None
  self.dscp_max = None

self.threshold.parent = self
self._children_name_map["threshold"] = "threshold"
self._segment_path = lambda: "qlimit-dscp-thresh" + ":[dscp-min='" + str(self.dscp_min) + '"'] + 
"[dscp-max='" + str(self.dscp_max) + '"']"
self._is_frozen = True

def __setattr__(self, name, value):
    h, ['dscp_min', 'dscp_max'], name, value)

class Threshold(Entity):
    
    threshold

    .. attribute:: threshold_size

    Threshold size
    **type**: int

    **range**: 0..18446744073709551615

    **units**: bytes

    .. attribute:: threshold_interval

    Threshold interval
    **type**: int

    **range**: 0..18446744073709551615

    **units**: microsecond


_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):
    f).__init__()

    self.yang_name = "threshold"
    self.yang_parent_name = 'qlimit-dscp-thresh'
    self.is_top_level_class = False
    self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([(
    (YLeaf(YType.uint64, 'threshold-size'), ['int']),
    (YLeaf(YType.uint64, 'threshold-interval'), ['int']),
)]
self.threshold_size = None
self.threshold_interval = None
self._segment_path = lambda: "threshold"
sel.is_frozen = True

def __setattr__(self, name, value):

class RandomDetectCfg(Entity):
    
    Random Detect configuration container

    .. attribute:: exp_weighting_const

    Exponential weighting constant factor for red profile
    **type**: int
    **range**: 0..4294967295

    .. attribute:: red_min_thresh

    Minimum threshold
    **type**: :py:class:`RedMinThresh`
<

    .. attribute:: red_max_thresh

    Maximum threshold
    **type**: :py:class:`RedMaxThresh`
<

    .. attribute:: mark_probability

    Mark probability
    **type**: int
    **range**: 1..1000
```python
_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):
    self.yang_name = "random-detect-cfg"
    self.yang_parent_name = "classifier-action-entry-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        ("red-min-thresh", (YLeaf(YType.uint32, 'exp-weighting-const'), ['int'])),
        ("mark_probability", (YLeaf(YType.uint32, 'mark-probability'), ['int'])),
    )
    self.exp_weighting_const = None
    self.mark_probability = None

    self.red_min_thresh.parent = self
    self._children_name_map["red_min_thresh"] = "red-min-thresh"

    self.red_max_thresh.parent = self
    self._children_name_map["red_max_thresh"] = "red-max-thresh"

    self._segment_path = lambda: "ietf-diffserv-action:random-detect-cfg"
    self._is_frozen = True

    def __setattr__(self, name, value):
            ['exp_weighting_const', 'mark_probability'], name, value)

    class RedMinThresh(Entity):
        Minimum threshold
```

---

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.. attribute:: threshold

    threshold


```python

 def __init__(self):

    self.yang_name = "red-min-thresh"
    self.yang_parent_name = "random-detect-cfg"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_parent_names = []
    self._leafs = OrderedDict()

    self.threshold.parent = self
    self.threshold._children_name_map['threshold'] = 'threshold'
    self.segment_path = lambda: "red-min-thresh"
    self.is_frozen = True

    def __setattr__(self, name, value):

class Threshold(Entity):

    threshold

    .. attribute:: threshold_size

    Threshold size

    *type*\ int
```
**range:** 0..18446744073709551615  
**units**: bytes

.. attribute:: threshold_interval

Threshold interval

**type**: int

**range:** 0..18446744073709551615  
**units**: microsecond

---

_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "threshold"
    self.yang_parent_name = "red-min-thresh"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'threshold_size': (YLeaf(YType.uint64, 'threshold-size'), ['int']),
        'threshold_interval': (YLeaf(YType.uint64, 'threshold-interval'), ['int']),
    })
    self.threshold_size = None
    self.threshold_interval = None
    self._segment_path = lambda: "threshold"
    self._is_frozen = True

    def __setattr__(self, name, value):

    def __getattr__(self, name):
        return None

    def _get_type_tag(self):
        return self._get_entity_path().replace("/", "\")

    def _get_type_name(self):
        return "RedMinThresh"

    def _get_entity_path(self):
        path = "threshold"
        path = path + ("/%s" % self._yang_key_names)
        return path

    def __str__(self):
        return self._yang_key_names

class RedMaxThresh(Entity):
    ---

Maximum threshold
**range:** 0..18446744073709551615

**units:** bytes

.. attribute:: threshold_interval

Threshold interval

**type:** int

**range:** 0..18446744073709551615

**units:** microsecond

```python
_prefix = 'action'
_revision = '2015-04-07'

def __init__(self):

    self.yang_name = "threshold"
    self.yang_parent_name = "red-max-thresh"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'threshold_size': (YLeaf(YType.uint64, 'threshold-size'), ['int']),
        'threshold_interval': (YLeaf(YType.uint64, 'threshold-interval'), ['int']),
    })
    self.threshold_size = None
    self.threshold_interval = None
    self._segment_path = lambda: "threshold"
    self._is_frozen = True

    def __setattr__(self, name, value):

    def clone_ptr(self):
        return self._top_entity

    def _setattr__(self, name, value):

    def clone_ptr(self):
        return self._top_entity

    def _setattr__(self, name, value):

    def clone_ptr(self):
        return self._top_entity

    def _segment_path(self):
        return "threshold"

    def _is_frozen(self):
        return self._is_frozen

    def _set_attribute(self, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False
        self._is_attribute = False

    def _add_leafs(self, path, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _get_attribute(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _set_leafs(self, path, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _add_leafs(self, path, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _get_leafs(self, path, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _parse_node(self, path, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _add_child(self, path, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _get_childs(self, path, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_leafs(self, path, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_children(self, path, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _add_leafs(self, path, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _get_leafs(self, path, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_children(self, path, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_attribute(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _set_attribute(self, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _setattr__(self, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _add_child(self, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _get_childs(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_leafs(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_children(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _parse_node(self, _yang_name, _yang_type, _ylist_key_names, _value):
        return None

    def _set_leafs(self, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _add_leafs(self, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _get_leafs(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_children(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_attribute(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _set_attribute(self, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _setattr__(self, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _add_child(self, _yang_name, _yang_type, _ylist_key_names, _value):
        self._is_frozen = False

    def _get_childs(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_leafs(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _get_children(self, _yang_name, _yang_type, _ylist_key_names):
        return None

    def _parse_node(self, _yang_name, _yang_type, _ylist_key_names, _value):
        return None
```

Found in path(s):
This module contains a collection of YANG definitions for configuring IP implementations.

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This version of this YANG module is part of RFC 7277; see the RFC itself for full legal notices.

class IpAddressOrigin(Enum):
    """
    IpAddressOrigin (Enum Class)
    """
    The origin of an address.

    .. data:: other = 0

    None of the following.

    .. data:: static = 1

    Indicates that the address has been statically configured - for example, using NETCONF or a Command Line Interface.
Indicates an address that has been assigned to this system by a DHCP server.

Indicates an address created by IPv6 stateless autoconfiguration that embeds a link-layer address in its interface identifier.

Indicates an address chosen by the system at random, e.g., an IPv4 address within 169.254/16, an RFC 4941 temporary address, or an RFC 7217 semantically opaque address.

```python
other = Enum.YLeaf(0, "other")
static = Enum.YLeaf(1, "static")
dhcp = Enum.YLeaf(2, "dhcp")
link_layer = Enum.YLeaf(3, "link-layer")
random = Enum.YLeaf(4, "random")
```

class NeighborOrigin(Enum):
    
    NeighborOrigin (Enum Class)

    The origin of a neighbor entry.

    ... data:: other = 0

    None of the following.

    ... data:: static = 1
Indicates that the mapping has been statically configured - for example, using NETCONF or a Command Line Interface.

.. data:: dynamic = 2

Indicates that the mapping has been dynamically resolved using, e.g., IPv4 ARP or the IPv6 Neighbor Discovery protocol.

other = Enum.YLeaf(0, "other")

static = Enum.YLeaf(1, "static")

dynamic = Enum.YLeaf(2, "dynamic")

No license file was found, but licenses were detected in source scan.

module iana-crypt-hash {
    namespace "urn:ietf:params:xml:ns:yang:iana-crypt-hash";
    prefix ianach;

    organization "IANA";
    contact
    "        Internet Assigned Numbers Authority
          
          Postal: ICANN
              12025 Waterfront Drive, Suite 300
              Los Angeles, CA  90094-2536
              United States

              Tel:    +1 310 301 5800
              E-Mail: iana@iana.org";
    description
    "This YANG module defines a type for storing passwords using a hash function and features to indicate which hash functions are supported by an implementation."
The latest revision of this YANG module can be obtained from the IANA web site.

Requests for new values should be made to IANA via email (iana@iana.org).

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The initial version of this YANG module is part of RFC 7317; see the RFC itself for full legal notices."

revision 2014-08-06 {
  description
    "Initial revision.";
  reference
    "RFC 7317: A YANG Data Model for System Management";
}

typedef crypt-hash {
  type string {
    pattern
      '^S0$.+$'
      + '[S1][a-zA-Z0-9.]{1,8}[a-zA-Z0-9.]{22}'
      + '[S5](rounds=\d+)?[a-zA-Z0-9.]{1,16}[a-zA-Z0-9.]{43}'
      + '[S6](rounds=\d+)?[a-zA-Z0-9.]{1,16}[a-zA-Z0-9.]{86}'
    }
  description
    "The crypt-hash type is used to store passwords using a hash function. The algorithms for applying the hash function and encoding the result are implemented in various UNIX systems as the function crypt(3).

    A value of this type matches one of the forms:

    $S0$<clear text password>
    $<id>$<salt>$<password hash>
    $<id>$<parameter>$<salt>$<password hash>

    The 'S0' prefix signals that the value is clear text. When such a value is received by the server, a hash value is
calculated, and the string '$<id>$<salt>$' or $<id>$<parameter>$<salt>$ is prepended to the result. This value is stored in the configuration data store.

If a value starting with '$<id>$', where <id> is not '0', is received, the server knows that the value already represents a hashed value and stores it 'as is' in the data store.

When a server needs to verify a password given by a user, it finds the stored password hash string for that user, extracts the salt, and calculates the hash with the salt and given password as input. If the calculated hash value is the same as the stored value, the password given by the client is accepted.

This type defines the following hash functions:

```
 id | hash function | feature
---+---------------+-------------------
 1 | MD5           | crypt-hash-md5
 5 | SHA-256       | crypt-hash-sha-256
 6 | SHA-512       | crypt-hash-sha-512
```

The server indicates support for the different hash functions by advertising the corresponding feature.

reference
  "IEEE Std 1003.1-2008 - crypt() function
  RFC 1321: The MD5 Message-Digest Algorithm
  FIPS.180-4.2012: Secure Hash Standard (SHS)";

feature crypt-hash-md5 {
  description
  "Indicates that the device supports the MD5 hash function in 'crypt-hash' values."
  reference "RFC 1321: The MD5 Message-Digest Algorithm";
}

feature crypt-hash-sha-256 {
  description
  "Indicates that the device supports the SHA-256 hash function in 'crypt-hash' values."
}

feature crypt-hash-sha-512 {
  description
  "Indicates that the device supports the SHA-512 hash function in 'crypt-hash' values."
}
class ActionType(Enum):
    """
    ActionType (Enum Class)
    """

    Action taken by the server when a particular rule matches.

    .. data:: permit = 0
Requested action is permitted.

.. data:: deny = 1

Requested action is denied.

```
permit = Enum.YLeaf(0, "permit")

deny = Enum.YLeaf(1, "deny")
```

class Nacm(Entity):

```
Parameters for NETCONF Access Control Model.

.. attribute:: enable_nacm

   Enables or disables all NETCONF access control enforcement. If 'true', then enforcement is enabled. If 'false', then enforcement is disabled
   **type**: bool

   **default value**: true

.. attribute:: read_default

   Controls whether read access is granted if no appropriate rule is found for a particular read request
   **type**: :py:class:`ActionType <ydk.models.ietf.ietf_netconf_acm.ActionType>`

   **default value**: permit

.. attribute:: write_default

   Controls whether create, update, or delete access is granted if no appropriate rule is found for a particular write request
   **type**: :py:class:`ActionType <ydk.models.ietf.ietf_netconf_acm.ActionType>`

   **default value**: deny

.. attribute:: exec_default

   Controls whether exec access is granted if no appropriate rule is found for a particular protocol operation request
   **type**: :py:class:`ActionType <ydk.models.ietf.ietf_netconf_acm.ActionType>`

   **default value**: permit
.. attribute:: enable_external_groups

   Controls whether the server uses the groups reported by the NETCONF transport layer when it assigns the user to a set of NACM groups. If this leaf has the value 'false', any group names reported by the transport layer are ignored by the server.
   **type**: bool
   **default value**: True

.. attribute:: denied_operations

   Number of times since the server last restarted that a protocol operation request was denied
   **type**: int
   **range**: 0..4294967295
   **mandatory**: True

.. attribute:: denied_data_writes

   Number of times since the server last restarted that a protocol operation request to alter a configuration datastore was denied
   **type**: int
   **range**: 0..4294967295
   **mandatory**: True

.. attribute:: denied_notifications

   Number of times since the server last restarted that a notification was dropped for a subscription because access to the event type was denied
   **type**: int
   **range**: 0..4294967295
   **mandatory**: True

.. attribute:: groups

   NETCONF Access Control Groups
   **type**: :py:class:`Groups <ydk.models.ietf.ietf_netconf_acm.Nacm.Groups>`

.. attribute:: rule_list

   An ordered collection of access control rules
   **type**: list of :py:class:`RuleList <ydk.models.ietf.ietf_netconf_acm.Nacm.RuleList>`
def __init__(self):
    super(Nacm, self).__init__()
    self._top_entity = None

    self.yang_name = "nacm"
    self.yang_parent_name = "ietf-netconf-acm"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([(
        "groups", (YLeaf(YType.list, "groups"), (Nacm.Groups(), "groups])),
        ("rule-list", (YLeaf(YType.list, "rule-list"), (Nacm.RuleList(), "rule-list"))))
    self._leafs = OrderedDict([(
        ("enable-nacm", (YLeaf(YType.boolean, "enable-nacm"), ["bool"])),
        ("read-default", (YLeaf(YType.enumeration, "read-default"), ["ydk.models.ietf.ietf_netconf_acm","ActionType", "]"))),
        ("write-default", (YLeaf(YType.enumeration, "write-default"), ["ydk.models.ietf.ietf_netconf_acm","ActionType", "]"))),
        ("exec-default", (YLeaf(YType.enumeration, "exec-default"), ["ydk.models.ietf.ietf_netconf_acm","ActionType", "]"))))

    self.enable_nacm = None
    self.read_default = None
    self.write_default = None
    self.exec_default = None
    self.enable_external_groups = None
    self.denied_operations = None
    self.denied_data_writes = None
    self.denied_notifications = None

    self.groups = Nacm.Groups()
    self.groups.parent = self
    self._children_name_map["groups"] = "groups"

    self.rule_list = YList(self)
    self._segment_path = lambda: "ietf-netconf-acm:nacm"
    self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(Nacm, ['enable_nacm', 'read_default', 'write_default', 'exec_default',
                              'enable_external_groups', 'denied_operations', 'denied_data_writes', 'denied_notifications'], name, value)

class Groups(Entity):
    '''
    NETCONF Access Control Groups.
    .. attribute:: group
        One NACM Group Entry. This list will only contain configured entries, not any entries learned from any
        transport protocols
    '''

    _prefix = 'nacm'
    _revision = '2012-02-22'

def __init__(self):
    super(Nacm.Groups, self).__init__()

    self.yang_name = "groups"
    self.yang_parent_name = "nacm"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self._child_classes = OrderedDict(("group", "Nacm.Groups.Group"))
    self._leafs = OrderedDict()

    self.group = YList(self)
    self.segment_path = lambda: "groups"
    self.absolute_path = lambda: "ietf-netconf-acm:nacm/%s" % self.segment_path()
    self.is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Nacm.Groups, [], name, value)

class Group(Entity):
    '''
    One NACM Group Entry. This list will only contain
    configured entries, not any entries learned from
    any transport protocols.
    '''

    _prefix = 'nacm'
    _revision = '2012-02-22'

def __init__(self):
    super(Nacm.Groups, self).__init__()

    self.yang_name = "group"
    self.yang_parent_name = "nacm"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self._child_classes = OrderedDict()
    self._leafs = {"name": YLeaf("name", "nacm")}

    self.group = YLeaf(self)
    self._segment_path = lambda: "group"
    self._absolute_path = lambda: "ietf-netconf-acm:nacm/%s" % self.segment_path()
.. attribute:: name  (key)

Group name associated with this entry

**type**: str

**pattern**: ^[^\"\*].*$

.. attribute:: user_name

Each entry identifies the username of a member of the group associated with this entry

**type**: list of str

**length**: 1..18446744073709551615

```python
_prefix = 'nacm'
_revision = '2012-02-22'

def __init__(self):
    super(Nacm.Groups.Group, self).__init__()

    self.yang_name = "group"
    self.yang_parent_name = "groups"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = ['name']
    self._child_classes = OrderedDict(
    )
    self._leafs = OrderedDict(
        ('name', (YLeaf(YType.str, 'name'), ['str'])),
        ('user_name', (YLeafList(YType.str, 'user-name'), ['str'])),
    )
    self.name = None
    self.user_name = []
    self._segment_path = lambda: "group" + "[name='" + str(self.name) + "']"
    self._absolute_path = lambda: "ietf-netconf-acm:nacm/groups/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(Nacm.Groups.Group, ['name', 'user_name'], name, value)

class RuleList(Entity):

    """
    An ordered collection of access control rules.
    """
```
.. attribute:: name (key)

Arbitrary name assigned to the rule-list

**type**: str

**length**: 1..18446744073709551615

.. attribute:: group

List of administrative groups that will be assigned the associated access rights defined by the 'rule' list. The string '\*' indicates that all groups apply to the entry

**type**: union of the below types:

**type**: list of str

**pattern**: \*

**type**: list of str

**pattern**: [^\*].*

.. attribute:: rule

One access control rule. Rules are processed in user-defined order until a match is found. A rule matches if 'module\-name', 'rule\-type', and 'access\-operations' match the request. If a rule matches, the 'action' leaf determines if access is granted or not

self.name = None
self.group = []

self.rule = YList(self)
self._segment_path = lambda: "rule-list" + "[name='" + str(self.name) + "]"
self._absolute_path = lambda: "ietf-netconf-acm:nacm/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Nacm.RuleList, ['name', 'group'], name, value)

class Rule(Entity):
    """
    One access control rule.
    """

    Rules are processed in user-defined order until a match is found. A rule matches if 'module-name', 'rule-type', and 'access-operations' match the request. If a rule matches, the 'action' leaf determines if access is granted or not.

    .. attribute:: name  (key)

    Arbitrary name assigned to the rule
    **type**: str

    **length:** 1..18446744073709551615

    .. attribute:: module_name

    Name of the module associated with this rule. This leaf matches if it has the value '*' or if the object being accessed is defined in the module with the specified module name
    **type**: union of the below types:

    **type**: str

    **pattern:** **\**

    **type**: str

    **default value**: *

    .. attribute:: rpc_name

    This leaf matches if it has the value '*' or if its value equals the requested protocol operation name
    **type**: union of the below types:
This leaf matches if it has the value ‘\*’ or if its value equals the requested notification name

- attribute:: notification_name

Data Node Instance Identifier associated with the data node controlled by this rule. Configuration data or state data instance identifiers start with a top-level data node. A complete instance identifier is required for this type of path value. The special value ‘/’ refers to all possible datastore contents

- attribute:: path

Access operations associated with this rule. This leaf matches if it has the value ‘\*’ or if the bit corresponding to the requested operation is set

- attribute:: access_operations

The access control action associated with the rule. If a rule is determined to match a particular request, then this object is used to determine whether to permit or deny the request

- attribute:: action
.. attribute:: comment

A textual description of the access rule

**type**: str

....

_prefix = 'nacm'
_revision = '2012-02-22'

def __init__(self):
    super(Nacm.RuleList.Rule, self).__init__()

    self.yang_name = "rule"
    self.yang_parent_name = "rule-list"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['name']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('name', (YLeaf(YType.str, 'name'), ['str'])),
        ('module-name', (YLeaf(YType.str, 'module-name'), ['str', 'str'])),
        ('rpc-name', (YLeaf(YType.str, 'rpc-name'), ['str', 'str'])),
        ('notification-name', (YLeaf(YType.str, 'notification-name'), ['str', 'str'])),
        ('path', (YLeaf(YType.str, 'path'), ['str'])),
        ('access-operations', (YLeaf(YType.str, 'access-operations'), ['str', 'Bits'])),
        ('action', (YLeaf(YType.enumeration, 'action'), [('ydk.models.ietf.ietf_netconf_acm', 'ActionType', '')])),
        ('comment', (YLeaf(YType.str, 'comment'), ['str'])),
    )
    self.name = None
    self.module_name = None
    self.rpc_name = None
    self.notification_name = None
    self.path = None
    self.access_operations = None
    self.action = None
    self.comment = None
    self._segment_path = lambda: "rule" + "[name=" + str(self.name) + "]"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(Nacm.RuleList.Rule, ["name", "module-name", "rpc-name", "notification-name", "path", "access-operations", "action", "comment"], name, value)

    def clone_ptr(self):
        self._top_entity = Nacm()
return self._top_entity

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_netconf_acm.py
No license file was found, but licenses were detected in source scan.

module ietf-ipv6-unicast-routing {

    namespace "urn:ietf:params:xml:ns:yang:ietf-ipv6-unicast-routing";

    prefix "v6ur";

    import ietf-routing {
        prefix "rt";
    }

    import ietf-inet-types {
        prefix "inet";
    }

    import ietf.interfaces {
        prefix "if";
    }

    import ietf-ip {
        prefix "ip";
    }

    organization
        "IETF NETMOD (NETCONF Data Modeling Language) Working Group";

    contact
        "WG Web:  <http://tools.ietf.org/wg/netmod/>
        WG List:  <mailto:netmod@ietf.org>
        WG Chair: Thomas Nadeau
            <mailto:tnadeau@lucidvision.com>
        WG Chair: Juergen Schoenwaelder
            <mailto:j.schoenwaelder@jacobs-university.de>
        Editor:  Ladislav Lhotka
            <mailto:lhotka@nic.cz>");

    description
        "This YANG module augments the 'ietf-routing' module with basic
        configuration and state data for IPv6 unicast routing."
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The key words 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in the module text are to be interpreted as described in RFC 2119 (http://tools.ietf.org/html/rfc2119).

This version of this YANG module is part of RFC XXXX (http://tools.ietf.org/html/rfcXXXX); see the RFC itself for full legal notices.

revision 2015-05-25 {
  description
    "Initial revision.";
  reference
    "RFC XXXX: A YANG Data Model for Routing Management";
}

/* Identities */

identity ipv6-unicast {
  base rt:ipv6;
  description
    "This identity represents the IPv6 unicast address family.";
}

/* State data */

/* Oper data not available causes REST interface timeout Mark Collins 11.5.15
augment "/if:interfaces-state/if:interface/ip:ipv6" {
  description
    "Augment interface state data with IPv6-specific parameters of router interfaces.";
  container ipv6-router-advertisements {
    description
      "Parameters of IPv6 Router Advertisements.";
    leaf send-advertisements {
      type boolean;
      description
        "A flag indicating whether or not the router sends periodic
Router Advertisements and responds to Router Solicitations.

leaf max-rtr-adv-interval {
  type uint16 {
    range "4..1800";
  }
  units "seconds";
  description
    "The maximum time allowed between sending unsolicited multicast Router Advertisements from the interface.";
}

leaf min-rtr-adv-interval {
  type uint16 {
    range "3..1350";
  }
  units "seconds";
  description
    "The minimum time allowed between sending unsolicited multicast Router Advertisements from the interface.";
}

leaf managed-flag {
  type boolean;
  description
    "The value that is placed in the 'Managed address configuration' flag field in the Router Advertisement.";
}

leaf other-config-flag {
  type boolean;
  description
    "The value that is placed in the 'Other configuration' flag field in the Router Advertisement.";
}

leaf link-mtu {
  type uint32;
  description
    "The value that is placed in MTU options sent by the router. A value of zero indicates that no MTU options are sent.";
}

leaf reachable-time {
  type uint32 {
    range "0..3600000";
  }
  units "milliseconds";
  description
    "The value that is placed in the Reachable Time field in the Router Advertisement messages sent by the router. A
value of zero means unspecified (by this router)."
}
leaf retrans-timer {
    type uint32;
    units "milliseconds";
    description
    "The value that is placed in the Retrans Timer field in the Router Advertisement messages sent by the router. A value of zero means unspecified (by this router)."
}
leaf cur-hop-limit {
    type uint8;
    description
    "The value that is placed in the Cur Hop Limit field in the Router Advertisement messages sent by the router. A value of zero means unspecified (by this router)."
}
leaf default-lifetime {
    type uint16 {
        range "0..9000";
    }
    units "seconds";
    description
    "The value that is placed in the Router Lifetime field of Router Advertisements sent from the interface, in seconds. A value of zero indicates that the router is not to be used as a default router."
}
container prefix-list {
    description
    "A list of prefixes that are placed in Prefix Information options in Router Advertisement messages sent from the interface.

    By default, these are all prefixes that the router advertises via routing protocols as being on-link for the interface from which the advertisement is sent."
list prefix {
    key "prefix-spec";
    description
    "Advertised prefix entry and its parameters.";
    leaf prefix-spec {
        type inet:ipv6-prefix;
        description
        "IPv6 address prefix."
    }
    leaf valid-lifetime {
        type uint32;
    }
}
units "seconds";
description
"The value that is placed in the Valid Lifetime in the Prefix Information option. The designated value of all 1's (0xffffffff) represents infinity.

An implementation SHOULD keep this value constant in consecutive advertisements except when it is explicitly changed in configuration."
);

leaf on-link-flag {
  type boolean;
description
"The value that is placed in the on-link flag ('L-bit') field in the Prefix Information option.";
}

leaf preferred-lifetime {
  type uint32;
  units "seconds";
description
"The value that is placed in the Preferred Lifetime in the Prefix Information option, in seconds. The designated value of all 1's (0xffffffff) represents infinity.

An implementation SHOULD keep this value constant in consecutive advertisements except when it is explicitly changed in configuration."
);

leaf autonomous-flag {
  type boolean;
description
"The value that is placed in the Autonomous Flag field in the Prefix Information option."
"
}

*/
 + "rt:routes/rt:route" {
when ".//rt:address-family = 'v6ur:ipv6-unicast'" {
description
"This augment is valid only for IPv6 unicast.";
}
description
"This leaf augments an IPv6 unicast route.";
leaf destination-prefix {
  type inet:ipv6-prefix;
  description
  "IPv6 destination prefix."
}
} /*
  + "rt:routes/rt:route/rt:next-hop/rt:next-hop-options/"
  + "rt:simple-next-hop" {
when "./././.rt:address-family = 'v6ur:ipv6-unicast'" {
  description
  "This augment is valid only for IPv6 unicast."
}
} */

/* This leaf augments the 'simple-next-hop' case of IPv6 unicast routes.";
leaf next-hop-address {
  type inet:ipv6-address;
  description
  "IPv6 address of the next-hop."
}
} */

/* Configuration data */
augment "/if:interfaces/if:interface/ip:ipv6" {
  description
  "Augment interface configuration with IPv6-specific parameters
  of router interfaces.";
  container ipv6-router-advertisements {
    description
    "Configuration of IPv6 Router Advertisements.";
    leaf send-advertisements {
      type boolean;
      default "false";
      description
      "A flag indicating whether or not the router sends periodic
      Router Advertisements and responds to Router
      Solicitations."
      reference
      "RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
      AdvSendAdvertisements."
    }
    leaf max-rtr-adv-interval {
      type uint16 {
        range "4..1800";
      }
      units "seconds";
    }
  }
} /*
default "600";
description
"The maximum time allowed between sending unsolicited multicast Router Advertisements from the interface."
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - MaxRtrAdvInterval."
}
leaf min-rtr-adv-interval {

type uint16 {
 range "3..1350";
}
units "seconds";
must ",. <= 0.75 * .(/max-rtr-adv-interval" {

description
"The value MUST NOT be greater than 75 % of 'max-rtr-adv-interval'."
}
description
"The minimum time allowed between sending unsolicited multicast Router Advertisements from the interface.

The default value to be used operationally if this leaf is not configured is determined as follows:

- if max-rtr-adv-interval >= 9 seconds, the default value is 0.33 * max-rtr-adv-interval;

- otherwise it is 0.75 * max-rtr-adv-interval.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - MinRtrAdvInterval."
}
leaf managed-flag {

type boolean;
default "false";
description
"The value to be placed in the 'Managed address configuration' flag field in the Router Advertisement."
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvManagedFlag."
}
leaf other-config-flag {

type boolean;
default "false";
description
"The value to be placed in the 'Other configuration' flag
field in the Router Advertisement.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
AdvOtherConfigFlag.";
}
leaf link-mtu {
  type uint32;
default "0";
description
  "The value to be placed in MTU options sent by the router.
   A value of zero indicates that no MTU options are sent.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
AdvLinkMTU.";
}
leaf reachable-time {
  type uint32 {
    range "0..3600000";
  }
  units "milliseconds";
default "0";
description
  "The value to be placed in the Reachable Time field in the
   Router Advertisement messages sent by the router. A value
   of zero means unspecified (by this router).";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
AdvReachableTime.";
}
leaf retrans-timer {
  type uint32;
  units "milliseconds";
default "0";
description
  "The value to be placed in the Retrans Timer field in the
   Router Advertisement messages sent by the router. A value
   of zero means unspecified (by this router).";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
AdvRetransTimer.";
}
leaf cur-hop-limit {
  type uint8;
description
  "The value to be placed in the Cur Hop Limit field in the
   Router Advertisement messages sent by the router. A value
   of zero means unspecified (by this router).";
If this parameter is not configured, the device SHOULD use the value specified in IANA Assigned Numbers that was in effect at the time of implementation.

reference

leaf default-lifetime {
  type uint16 {
    range "0..9000";
  }
  units "seconds";
  description
  "The value to be placed in the Router Lifetime field of Router Advertisements sent from the interface, in seconds. It MUST be either zero or between max-rtr-adv-interval and 9000 seconds. A value of zero indicates that the router is not to be used as a default router. These limits may be overridden by specific documents that describe how IPv6 operates over different link layers.

  If this parameter is not configured, the device SHOULD use a value of 3 * max-rtr-adv-interval.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvDefaultLifetime.";
}

container prefix-list {
  description
  "Configuration of prefixes to be placed in Prefix Information options in Router Advertisement messages sent from the interface.

  Prefixes that are advertised by default but do not have their entries in the child 'prefix' list are advertised with the default values of all parameters.

  The link-local prefix SHOULD NOT be included in the list of advertised prefixes.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvPrefixList.";
list prefix {
  key "prefix-spec";
  description
  "Configuration of an advertised prefix entry.";
leaf prefix-spec {
  type inet:ipv6-prefix;
  description
    "IPv6 address prefix."
}

choice control-adv-prefixes {
  default "advertise";
  description
    "The prefix either may be explicitly removed from the set of advertised prefixes, or parameters with which it is advertised may be specified (default case)."
  leaf no-advertise {
    type empty;
    description
      "The prefix will not be advertised.

      This can be used for removing the prefix from the default set of advertised prefixes."
  }
  case advertise {
    leaf valid-lifetime {
      type uint32;
      units "seconds";
      default "2592000";
      description
        "The value to be placed in the Valid Lifetime in the Prefix Information option. The designated value of all 1's (0xffffffff) represents infinity.";
      reference
        "RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvValidLifetime."
    }
    leaf on-link-flag {
      type boolean;
      default "true";
      description
        "The value to be placed in the on-link flag ('L-bit') field in the Prefix Information option.";
      reference
        "RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvOnLinkFlag."
    }
    leaf preferred-lifetime {
      type uint32;
      units "seconds";
      must ". <= ../valid-lifetime"
description
"This value MUST NOT be greater than
valid-lifetime.";
}
default "604800";
description
"The value to be placed in the Preferred Lifetime
in the Prefix Information option. The designated
value of all 1's (0xffffffff) represents
infinity.";
reference
"RFC 4861: Neighbor Discovery for IP version 6
(IPv6) - AdvPreferredLifetime.";
}
leaf autonomous-flag {
type boolean;
default "true";
description
"The value to be placed in the Autonomous Flag
field in the Prefix Information option.";
reference
"RFC 4861: Neighbor Discovery for IP version 6
(IPv6) - AdvAutonomousFlag.";
}
}
}
}

augment "/rt:routing/rt:routing-instance/rt:routing-protocols/"
  + "/rt:routing-protocol/rt:static-routes" {
description
"This augment defines the configuration of the 'static'
pseudo-protocol with data specific to IPv6 unicast.";
container ipv6 {
description
"Configuration of a 'static' pseudo-protocol instance
consists of a list of routes.";
list route {
  key "destination-prefix";
  ordered-by "user";
  description
"A user-ordered list of static routes.";
  leaf destination-prefix {
    type inet:ipv6-prefix;
    mandatory "true";
  }
}
description
"IPv6 destination prefix.;"
}
leaf description {
  type string;
  description
  "Textual description of the route.;"
}
container next-hop {
  description
  "Configuration of next-hop.;"
  uses rt:next-hop-content {
    augment "next-hop-options" {
      description
      "Add next-hop address case.;"
    leaf next-hop-address {
      type inet:ipv6-address;
      description
      "IPv6 address of the next-hop.;"
    }
    }
  }
}
/* RPC operations */

augment "/rt:fib-route/rt:input/rt:destination-address" {
  when "rt:address-family='v6ur:ipv6-unicast'" {
    description
    "This augment is valid only for IPv6 unicast.;"
  }
  description
  "This leaf augments the 'rt:destination-address' parameter of
  the 'rt:fib-route' operation.;"
leaf address {
  type inet:ipv6-address;
  description
  "IPv6 destination address.;"
}
}

augment "/rt:fib-route/rt:output/rt:route" {
  when "rt:address-family='v6ur:ipv6-unicast'" {
    description
    "This augment is valid only for IPv6 unicast.;"
description "This leaf augments the reply to the 'rt:route' operation.";
leaf destination-prefix {
  type inet:ipv6-prefix;
  description "IPv6 destination prefix.";
}

augment "/rt:fib-route/rt:output/rt:route/rt:next-hop/
  + "rt:next-hop-options/rt:next-hop" {
    when "/rt:route/rt:address-family=\"v6ur:ipv6-unicast\"" {
      description "This augment is valid only for IPv6 unicast.";
    }
  }
  + "rt:route-options/rt:next-hop-options/rt:next-hop-option" {
      description "This augment is valid only for IPv6 unicast.";
    }
  }
  + "rt:route-options/rt:next-hop-options/rt:next-hop-option/rt:match" {
    when "/rt:route/rt:route-selector/rt:route-selector-value/rt:match/rt:match-key=\"v6ur:ipv6-unicast\"" {
      description "This augment is valid only for IPv6 unicast.";
    }
  }
}

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/_yang/ietf-ipv6-unicast-routing.yang
No license file was found, but licenses were detected in source scan.

module ietf-netconf-notifications {


  prefix ncn;

  import ietf-inet-types { prefix inet; }
  import ietf-netconf { prefix nc; }

  organization "IETF NETCONF (Network Configuration Protocol) Working Group";

  contact "WG Web: <http://tools.ietf.org/wg/netconf/>"
This module defines a YANG data model for use with the NETCONF protocol that allows the NETCONF client to receive common NETCONF base event notifications.

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This version of this YANG module is part of RFC 6470; see the RFC itself for full legal notices.”;

revision "2012-02-06" {
  description
    "Initial version.";
  reference
    "RFC 6470: NETCONF Base Notifications";
}

grouping common-session-parms {
  description
    "Common session parameters to identify a management session.";

  leaf username {
    type string;
    mandatory true;
    description
      "Name of the user for the session.";
  }
}
leaf session-id {
    type nc:session-id-or-zero-type;
    mandatory true;
    description
        "Identifier of the session.
        A NETCONF session MUST be identified by a non-zero value.
        A non-NETCONF session MAY be identified by the value zero."
}

leaf source-host {
    type inet:ip-address;
    description
        "Address of the remote host for the session."
}

grouping changed-by-parms {
    description
        "Common parameters to identify the source
        of a change event, such as a configuration
        or capability change."
    container changed-by {
        description
            "Indicates the source of the change.
            If caused by internal action, then the
            empty leaf 'server' will be present.
            If caused by a management session, then
            the name, remote host address, and session ID
            of the session that made the change will be reported."
        choice server-or-user {
            mandatory true;
            leaf server {
                type empty;
                description
                    "If present, the change was caused
                    by the server."
            }
            case by-user {
                uses common-session-parms;
            }
        }
    }
}

notification netconf-config-change {
    description
"Generated when the NETCONF server detects that the <running> or <startup> configuration datastore has been changed by a management session. The notification summarizes the edits that have been detected.

The server MAY choose to also generate this notification while loading a datastore during the boot process for the device."

uses changed-by-params;

leaf datastore {
  type enumeration {
    enum running {
      description "The <running> datastore has changed.";
    }
    enum startup {
      description "The <startup> datastore has changed";
    }
  }
  default "running";
  description "Indicates which configuration datastore has changed.";
}

list edit {
  description "An edit record SHOULD be present for each distinct edit operation that the server has detected on the target datastore. This list MAY be omitted if the detailed edit operations are not known. The server MAY report entries in this list for changes not made by a NETCONF session (e.g., CLI).";

  leaf target {
    type instance-identifier;
    description "Topmost node associated with the configuration change. A server SHOULD set this object to the node within the datastore that is being altered. A server MAY set this object to one of the ancestors of the actual node that was changed, or omit this object, if the exact node is not known.";
  }

  leaf operation {
    type nc:edit-operation-type;
  }
}
description
"Type of edit operation performed.
A server MUST set this object to the NETCONF edit
operation performed on the target datastore.";
}
} // list edit
} // notification netconf-config-change

notification netconf-capability-change {

description
"Generated when the NETCONF server detects that
the server capabilities have changed.
Indicates which capabilities have been added, deleted,
and/or modified. The manner in which a server
capability is changed is outside the scope of this
document.";

uses changed-by-parms;

leaf-list added-capability {

type inet:uri;

description
"List of capabilities that have just been added.";
}

leaf-list deleted-capability {

type inet:uri;

description
"List of capabilities that have just been deleted.";
}

leaf-list modified-capability {

type inet:uri;

description
"List of capabilities that have just been modified.
A capability is considered to be modified if the
base URI for the capability has not changed, but
one or more of the parameters encoded at the end of
the capability URI have changed.
The new modified value of the complete URI is returned.";
}
} // notification netconf-capability-change

notification netconf-session-start {

description
"Generated when a NETCONF server detects that a
NETCONF session has started. A server MAY generate
this event for non-NETCONF management sessions."
Indicates the identity of the user that started
the session.;
uses common-session-parms;
} // notification netconf-session-start

notification netconf-session-end {

description
"Generated when a NETCONF server detects that a
NETCONF session has terminated.
A server MAY optionally generate this event for
non-NETCONF management sessions. Indicates the
identity of the user that owned the session,
and why the session was terminated.";

uses common-session-parms;

leaf killed-by {
when ".*/termination-reason = 'killed'";
type nc:session-id-type;
description
"The ID of the session that directly caused this session
to be abnormally terminated. If this session was abnormally
terminated by a non-NETCONF session unknown to the server,
then this leaf will not be present.";
}

leaf termination-reason {

type enumeration {
enum "closed" {

description
"The session was terminated by the client in normal
fashion, e.g., by the NETCONF <close-session>
protocol operation.";
}
enum "killed" {

description
"The session was terminated in abnormal
fashion, e.g., by the NETCONF <kill-session>
protocol operation.";
}
enum "dropped" {

description
"The session was terminated because the transport layer
connection was unexpectedly closed.";
}
enum "timeout" {

description
"The session was terminated because of inactivity,
e.g., waiting for the <hello> message or <rpc>
messages.;

enum "bad-hello" {
  description
  "The client's <hello> message was invalid."
};

enum "other" {
  description
  "The session was terminated for some other reason."
};

mandatory true;

description
  "Reason the session was terminated."
};

} // notification netconf-session-end

notification netconf-confirmed-commit {

description
  "Generated when a NETCONF server detects that a
  confirmed-commit event has occurred. Indicates the event
  and the current state of the confirmed-commit procedure
  in progress.";

reference
  "RFC 6241, Section 8.4";

uses common-session-params {
  when "confirm-event != 'timeout'";
}

leaf confirm-event {

type enumeration {
  enum "start" {
    description
    "The confirmed-commit procedure has started."
  }

  enum "cancel" {
    description
    "The confirmed-commit procedure has been canceled,
    e.g., due to the session being terminated, or an
    explicit <cancel-commit> operation."
  }

  enum "timeout" {
    description
    "The confirmed-commit procedure has been canceled
    due to the confirm-timeout interval expiring.
    The common session parameters will not be present
  }

  enum "bad-hello" {
    description
    "The client's <hello> message was invalid."
  }

  enum "other" {
    description
    "The session was terminated for some other reason."
  }

  mandatory true;

  description
  "Reason the session was terminated."
};

} // notification netconf-session-end
in this sub-mode.
}
enum "extend" {
    description
    "The confirmed-commit timeout has been extended, e.g., by a new <confirmed-commit> operation."
}
enum "complete" {
    description
    "The confirmed-commit procedure has been completed."
}
}
mandatory true;
description
"Indicates the event that caused the notification."
}
leaf timeout {
    when
    "./confirm-event = 'start' or ./confirm-event = 'extend';"
type uint32;
    units "seconds";
description
    "The configured timeout value if the event type is 'start' or 'extend'. This value represents the approximate number of seconds from the event time when the 'timeout' event might occur."
}
} // notification netconf-confirmed-commit

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/_yang/ietf-netconf-notifications.yang
No license file was found, but licenses were detected in source scan.

module ietf-netconf-acm {

    namespace "urn:ietf:params:xml:ns:yang:ietf-netconf-acm";

    prefix "nacm";

    import ietf-yang-types {
        prefix yang;
    }

    organization
"IETF NETCONF (Network Configuration) Working Group";

contact
"WG Web: <http://tools.ietf.org/wg/netconf/>
WG List: <mailto:netconf@ietf.org>

WG Chair: Mehmet Ersue
<mailto:mehmet.ersue@nsn.com>

WG Chair: Bert Wijnen
<mailto:bertietf@bwijnen.net>

Editor: Andy Bierman
<mailto:andy@yumaworks.com>

Editor: Martin Bjorklund
<mailto:mbj@tail-f.com>";

description
"NETCONF Access Control Model.

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This version of this YANG module is part of RFC 6536; see the RFC itself for full legal notices.";

revision "2012-02-22" {
  description
    "Initial version";
  reference
    "RFC 6536: Network Configuration Protocol (NETCONF) Access Control Model";
}

/*
 * Extension statements
 */

extension default-deny-write {
  description
"Used to indicate that the data model node represents a sensitive security system parameter.

If present, and the NACM module is enabled (i.e., /nacm/enable-nacm object equals 'true'), the NETCONF server will only allow the designated 'recovery session' to have write access to the node. An explicit access control rule is required for all other users.

The 'default-deny-write' extension MAY appear within a data definition statement. It is ignored otherwise.

}  

extension default-deny-all {  
description  
"Used to indicate that the data model node controls a very sensitive security system parameter.

If present, and the NACM module is enabled (i.e., /nacm/enable-nacm object equals 'true'), the NETCONF server will only allow the designated 'recovery session' to have read, write, or execute access to the node. An explicit access control rule is required for all other users.

The 'default-deny-all' extension MAY appear within a data definition statement, 'rpc' statement, or 'notification' statement. It is ignored otherwise.

}  

/*  
 * Derived types  
 */

typedef user-name-type {  
type string {  
   length "1..max";
   
   description  
   "General Purpose Username string."
   
}  

typedef matchall-string-type {  
type string {  
   pattern '\*';
   
   description  
   "The string containing a single asterisk '*' is used to conceptually represent all possible values
typedef access-operations-type {

type bits {

  bit create {
    description "Any protocol operation that creates a new data node.";
  }

  bit read {
    description "Any protocol operation or notification that returns the value of a data node.";
  }

  bit update {
    description "Any protocol operation that alters an existing data node.";
  }

  bit delete {
    description "Any protocol operation that removes a data node.";
  }

  bit exec {
    description "Execution access to the specified protocol operation.";
  }

} description "NETCONF Access Operation.";
}

typedef group-name-type {

type string {
  length "1..max";
  pattern '[^\*].*';
}

description "Name of administrative group to which users can be assigned.";
}

typedef action-type {

type enumeration {

  enum permit {
    description "Requested action is permitted.";
  }

}
enum deny {
    description
    "Requested action is denied.";
}
}
description
"Action taken by the server when a particular rule matches.";
}

typedef node-instance-identifier {
    type yang:xpath1.0;
    description
    "Path expression used to represent a special data node instance identifier string.

    A node-instance-identifier value is an unrestricted YANG instance-identifier expression. All the same rules as an instance-identifier apply except predicates for keys are optional. If a key predicate is missing, then the node-instance-identifier represents all possible server instances for that key.

    This XPath expression is evaluated in the following context:

    o The set of namespace declarations are those in scope on the leaf element where this type is used.

    o The set of variable bindings contains one variable, 'USER', which contains the name of the user of the current session.

    o The function library is the core function library, but note that due to the syntax restrictions of an instance-identifier, no functions are allowed.

    o The context node is the root node in the data tree.";
}

/*
 * Data definition statements
 */

container nacm {
    nacm:default-deny-all;

    description
"Parameters for NETCONF Access Control Model."

leaf enable-nacm {
    type boolean;
default true;
description
    "Enables or disables all NETCONF access control enforcement. If 'true', then enforcement
    is enabled. If 'false', then enforcement
    is disabled."
}

leaf read-default {
    type action-type;
default "permit";
description
    "Controls whether read access is granted if
    no appropriate rule is found for a
    particular read request."
}

leaf write-default {
    type action-type;
default "deny";
description
    "Controls whether create, update, or delete access
    is granted if no appropriate rule is found for a
    particular write request."
}

leaf exec-default {
    type action-type;
default "permit";
description
    "Controls whether exec access is granted if no appropriate
    rule is found for a particular protocol operation request."
}

leaf enable-external-groups {
    type boolean;
default true;
description
    "Controls whether the server uses the groups reported by the
    NETCONF transport layer when it assigns the user to a set of
    NACM groups. If this leaf has the value 'false', any group
    names reported by the transport layer are ignored by the
    server."
}
leaf denied-operations {
  type yang:zero-based-counter32;
  config false;
  mandatory true;
  description
  "Number of times since the server last restarted that a
  protocol operation request was denied.";
}

leaf denied-data-writes {
  type yang:zero-based-counter32;
  config false;
  mandatory true;
  description
  "Number of times since the server last restarted that a
  protocol operation request to alter
  a configuration datastore was denied.";
}

leaf denied-notifications {
  type yang:zero-based-counter32;
  config false;
  mandatory true;
  description
  "Number of times since the server last restarted that
  a notification was dropped for a subscription because
  access to the event type was denied.";
}

container groups {
  description
  "NETCONF Access Control Groups.";

  list group {
    key name;

    description
    "One NACM Group Entry. This list will only contain
    configured entries, not any entries learned from
    any transport protocols.";

    leaf name {
      type group-name-type;
      description
      "Group name associated with this entry.";
    }
  }
}
leaf-list user-name {
  type user-name-type;
  description
    "Each entry identifies the username of a member of the group associated with this entry.";
}
}
}

list rule-list {
  key "name";
  ordered-by user;
  description
    "An ordered collection of access control rules.";
}

leaf name {
  type string {
    length "1..max";
  }
  description
    "Arbitrary name assigned to the rule-list.";
}

leaf-list group {
  type union {
    type matchall-string-type;
    type group-name-type;
  }
  description
    "List of administrative groups that will be assigned the associated access rights defined by the 'rule' list.

The string '*' indicates that all groups apply to the entry.";
}

list rule {
  key "name";
  ordered-by user;
  description
    "One access control rule.

Rules are processed in user-defined order until a match is found. A rule matches if 'module-name', 'rule-type', and 'access-operations' match the request. If a rule matches, the 'action' leaf determines if access is granted or not.";
leaf name {
  type string {
    length "1..max";
  }
  description
  "Arbitrary name assigned to the rule."
}

leaf module-name {
  type union {
    type matchall-string-type;
    type string;
  }
  default "*";
  description
  "Name of the module associated with this rule.

  This leaf matches if it has the value '*' or if the
  object being accessed is defined in the module with the
  specified module name.";
}

choice rule-type {
  description
  "This choice matches if all leafs present in the rule
  match the request. If no leafs are present, the
  choice matches all requests.";
  case protocol-operation {
    leaf rpc-name {
      type union {
        type matchall-string-type;
        type string;
      }
      description
      "This leaf matches if it has the value '*' or if
      its value equals the requested protocol operation
      name.";
    }
  }
  case notification {
    leaf notification-name {
      type union {
        type matchall-string-type;
        type string;
      }
      description
      "This leaf matches if it has the value '*' or if its
      value equals the requested notification name.";
    }
  }
}
case data-node {
    leaf path {
        type node-instance-identifier;
        mandatory true;
        description
        "Data Node Instance Identifier associated with the
data node controlled by this rule."
        Configuration data or state data instance
        identifiers start with a top-level data node. A
        complete instance identifier is required for this
        type of path value.
        The special value '/' refers to all possible
dataset contents."
    }
}

leaf access-operations {
    type union {
        type matchall-string-type;
        type access-operations-type;
    }
    default ",*";
    description
    "Access operations associated with this rule.
    This leaf matches if it has the value ",*" or if the
    bit corresponding to the requested operation is set."
}

leaf action {
    type action-type;
    mandatory true;
    description
    "The access control action associated with the
    rule. If a rule is determined to match a
    particular request, then this object is used
to determine whether to permit or deny the
    request."
}

leaf comment {
    type string;
    description
    ""
"A textual description of the access rule."

NETCONF Monitoring Module.
All elements in this module are read-only.

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This version of this YANG module is part of RFC 6022; see the RFC itself for full legal notices.

class NetconfDatastoreType(Enum):
    running = 0

.. data:: running = 0
.. data:: candidate = 1

.. data:: startup = 2

running = Enum.YLeaf(0, "running")
candidate = Enum.YLeaf(1, "candidate")
startup = Enum.YLeaf(2, "startup")

class SchemaFormat(Identity):
    
    Base identity for data model schema languages.

    
    _prefix = 'ncm'
    _revision = '2010-10-04'

tag="ietf-netconf-monitoring:schema-format"):  
        super(SchemaFormat, self).__init__(ns, pref, tag)

class Transport(Identity):
    
    Base identity for NETCONF transport types.

    
    _prefix = 'ncm'
    _revision = '2010-10-04'

tag="ietf-netconf-monitoring:transport"):  
        super(Transport, self).__init__(ns, pref, tag)

class GetSchema(Entity):
This operation is used to retrieve a schema from the NETCONF server.

Positive Response:
The NETCONF server returns the requested schema.

Negative Response:
If requested schema does not exist, the <error-tag> is 'invalid-value'.

If more than one schema matches the requested parameters, the <error-tag> is 'operation-failed', and <error-app-tag> is 'data-not-unique'.

.. attribute:: input


.. attribute:: output


```python
_prefix = 'ncm'
_revision = '2010-10-04'

def __init__(self):
    super(GetSchema, self).__init__()
    self._top_entity = None

    self.yang_name = "get-schema"
    self.yang_parent_name = "ietf-netconf-monitoring"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
)
    self._leafs = OrderedDict(
        input=GetSchema.Input()
    )

    self.input = GetSchema.Input()
    self.input.parent = self
    self._children_name_map["input"] = "input"
```
self.output = GetSchema.Output()
self.output.parent = self
self._children_name_map["output"] = "output"
self._segment_path = lambda: "ietf-netconf-monitoring:get-schema"
self._is_frozen = True

class Input(Entity):
    
    .. attribute:: identifier

    Identifier for the schema list entry
    **type**: str

    **mandatory**: True

    .. attribute:: version

    Version of the schema requested. If this parameter is not present, and more than one version of the schema exists on the server, a 'data-not-unique' error is returned, as described above
    **type**: str

    .. attribute:: format

    The data modeling language of the schema. If this parameter is not present, and more than one formats of the schema exists on the server, a 'data-not-unique' error is returned, as described above
    **type**: :py:class:`SchemaFormat <ydk.models.ietf.ietf_netconf_monitoring.SchemaFormat>`

    

    _prefix = 'ncm'
    _revision = '2010-10-04'

def __init__(self):
    super(GetSchema.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "get-schema"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([ ('identifier', (YLeaf(YType.str, 'identifier'), ['str'])), ('version', (YLeaf(YType.str, 'version'), []))])
    self._children_name_map = OrderedDict([ ('identifier', 'identifier')])
    self._seg_path = lambda: "ietf-netconf-monitoring:get-schema"
('version', (YLeaf(YType.str, 'version'), ['str'])),
('format', (YLeaf(YType.identityref, 'format'), [('ydk.models.ietf.ietf_netconf_monitoring', 'SchemaFormat')]),
'SchemaFormat'))),
)
self.identifier = None
self.version = None
self.format = None
self._segment_path = lambda: "input"
self._absolute_path = lambda: "ietf-netconf-monitoring:get-schema/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(GetSchema.Input, ['identifier', 'version', 'format'], name, value)

class Output(Entity):
    
    .. attribute:: data

    Contains the schema content

    **type**: anyxml

    

    _prefix = 'ncm'
    _revision = '2010-10-04'

def __init__(self):
    super(GetSchema.Output, self).__init__()

    self.yang_name = "output"
    self.yang_parent_name = "get-schema"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('data', (YLeaf(YType.str, 'data'), ['str']))
    )
    self.data = None
    self._segment_path = lambda: "output"
    self._absolute_path = lambda: "ietf-netconf-monitoring:get-schema/%s" % self._segment_path()
    self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(GetSchema.Output, ['data'], name, value)

def clone_ptr(self):
    self._top_entity = GetSchema()
    return self._top_entity

class NetconfState(Entity):

    The netconf-state container is the root of the monitoring
data model.

    .. attribute:: capabilities

        Contains the list of NETCONF capabilities supported by the server
        **type**: :py:class:`Capabilities <ydk.models.ietf.ietf_netconf_monitoring.NetconfState.Capabilities>`

    .. attribute:: datastores

        Contains the list of NETCONF configuration datastores
        **type**: :py:class:`Datastores <ydk.models.ietf.ietf_netconf_monitoring.NetconfState.Datastores>`

    .. attribute:: schemas

        Contains the list of data model schemas supported by the server
        **type**: :py:class:`Schemas <ydk.models.ietf.ietf_netconf_monitoring.NetconfState.Schemas>`

    .. attribute:: sessions

        The sessions container includes session-specific data for NETCONF management sessions. The session list
        MUST include all currently active NETCONF sessions
        **type**: :py:class:`Sessions <ydk.models.ietf.ietf_netconf_monitoring.NetconfState.Sessions>`

    .. attribute:: statistics

        Statistical data pertaining to the NETCONF server

    ..

    _prefix = 'ncm'

    _revision = '2010-10-04'

    def __init__(self):
        super(NetconfState, self).__init__()
        self._top_entity = None
self.yang_name = "netconf-state"
self.yang_parent_name = "ietf-netconf-monitoring"
self.is_top_level_class = True
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([
    ("capabilities", ("capabilities", NetconfState.Capabilities)),
    ("datastores", ("datastores", NetconfState.Datastores)),
    ("schemas", ("schemas", NetconfState.Schemas)),
    ("sessions", ("sessions", NetconfState.Sessions)),
    ("statistics", ("statistics", NetconfState.Statistics))
])
self._leafs = OrderedDict()
self.capabilities = NetconfState.Capabilities()
self.capabilities.parent = self
self._children_name_map["capabilities"] = "capabilities"
self.datastores = NetconfState.Datastores()
self.datastores.parent = self
self._children_name_map["datastores"] = "datastores"
self.schemas = NetconfState.Schemas()
self.schemas.parent = self
self._children_name_map["schemas"] = "schemas"
self.sessions = NetconfState.Sessions()
self.sessions.parent = self
self._children_name_map["sessions"] = "sessions"
self.statistics = NetconfState.Statistics()
self.statistics.parent = self
self._children_name_map["statistics"] = "statistics"
self._segment_path = lambda: "ietf-netconf-monitoring:netconf-state"
self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(NetconfState, [], name, value)

class Capabilities(Entity):
    ""
    Contains the list of NETCONF capabilities supported by the server.
    
    .. attribute:: capability

    List of NETCONF capabilities supported by the server

    **type**:: list of str
```python
class Capabilities(Entity):
    _prefix = 'ncm'
    _revision = '2010-10-04'

    def __init__(self):
        super(NetconfState.Capabilities, self).__init__()

        self.yang_name = "capabilities"
        self.yang_parent_name = "netconf-state"
        self.is_top_level_class = False
        self.has_list_ancestor = False
        self.yang_key_names = []
        self._child_classes = OrderedDict({})
        self._leafs = OrderedDict({
            'capability': (YLeafList(YType.str, 'capability'), ['str'])
        })
        self.capability = []

    def __setattr__(self, name, value):
        self._perform_setattr(NetconfState.Capabilities, ['capability'], name, value)

class Datastores(Entity):
    _prefix = 'ncm'
    _revision = '2010-10-04'

    def __init__(self):
        super(NetconfState.Datastores, self).__init__()

        self.yang_name = "datastores"

        .. attribute:: datastore

            List of NETCONF configuration datastores supported by the NETCONF server and related information

            type: list of :py:class:`Datastore`

            List of NETCONF configuration datastores supported by the NETCONF server and related information
```
List of NETCONF configuration datastores supported by
the NETCONF server and related information.

.. attribute:: name  (key)

Name of the datastore associated with this list entry

**type**: :py:class:`NetconfDatastoreType`

The NETCONF <lock> and <partial-lock> operations allow a client to lock specific resources in a datastore. The NETCONF server will prevent changes to the locked resources by all sessions except the one that acquired the lock(s). Monitoring information is provided for each datastore entry including details such as the session that acquired the lock, the type of lock (global or partial) and the list of locked resources. Multiple locks per datastore are supported

**presence node**: True

.. _setattr__:

```
def __setattr__(self, name, value):
    self._perform_setattr(NetconfState.Datastores, [], name, value)
```

```py
class Datastore(Entity):
    """
    List of NETCONF configuration datastores supported by
    the NETCONF server and related information.
    .. attribute:: name  (key)
    Name of the datastore associated with this list entry
    **type**: :py:class:`NetconfDatastoreType`
    <ydk.models.ietf.ietf_netconf_monitoring.NetconfDatastoreType>

    .. attribute:: locks
    The NETCONF <lock> and <partial-lock> operations allow a client to lock specific resources in a datastore. The NETCONF server will prevent changes to the locked resources by all sessions except the one that acquired the lock(s). Monitoring information is provided for each datastore entry including details such as the session that acquired the lock, the type of lock (global or partial) and the list of locked resources. Multiple locks per datastore are supported
    **type**: :py:class:`Locks`

    **presence node**: True
```

```
The NETCONF `<lock>` and `<partial-lock>` operations allow a client to lock specific resources in a datastore. The NETCONF server will prevent changes to the locked resources by all sessions except the one that acquired the lock(s).

Monitoring information is provided for each datastore entry including details such as the session that acquired the lock, the type of lock (global or partial) and the list of locked resources. Multiple locks per datastore are supported.

.. attribute:: global_lock

Present if the global lock is set

**type**: :py:class:`GlobalLock`

.. attribute:: partial_lock

List of partial locks

**type**: list of :py:class:`PartialLock`
This class is a :ref:`presence class<presence-class>`

```python
_prefix = 'ncm'
_revision = '2010-10-04'

def __init__(self):
    super(NetconfState.Datastores.Datastore.Locks, self).__init__()

    self.yang_name = "locks"
    self.yang_parent_name = "datastore"
    self.is_top_level_class = False
    self.has_list_parent = True
    self.ylist_key_names = []
    self.is_presence_container = True
    self._leafs = OrderedDict()

    self.global_lock.parent = self
    self._children_name_map["global_lock"] = "global-lock"

    self.partial_lock = YList(self)
    self._segment_path = lambda: "locks"
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(NetconfState.Datastores.Datastore.Locks, [], name, value)

class GlobalLock(Entity):
    """
    Present if the global lock is set.

    .. attribute:: locked_by_session

    The session ID of the session that has locked this resource. Both a global lock and a partial lock MUST contain the NETCONF session\-id. If the lock is held by a session that is not managed by the NETCONF server (e.g., a CLI session), a session id of 0 (zero) is reported

    **type**: int
```
**range:** 0..4294967295

**mandatory:** True

.. _prefix = 'ncm'

.. _revision = '2010-10-04'

def __init__(self):

    self.yang_name = "global-lock"
    self.yang_parent_name = "locks"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    )
    self._leafs = OrderedDict(
        (YLeaf(YType.uint32, 'locked-by-session'), ['int']),
        (YLeaf(YType.str, 'locked-time'), ['str']),
    )
    self.locked_by_session = None
    self.locked_time = None
    self._segment_path = lambda: "global-lock"
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(NetconfState.Datastores.Datastore.Locks.GlobalLock, ['locked_by_session', 'locked_time'], name, value)

class PartialLock(Entity):
    ..
    List of partial locks.

    .. _prefix = 'ncm'

    .. _revision = '2010-10-04'
This is the lock id returned in the <partial-lock> response

**type**: int

**range**: 0..4294967295

.. attribute:: locked_by_session

The session ID of the session that has locked this resource. Both a global lock and a partial lock MUST contain the NETCONF session-id. If the lock is held by a session that is not managed by the NETCONF server (e.g., a CLI session), a session id of 0 (zero) is reported

**type**: int

**range**: 0..4294967295

**mandatory**

.. attribute:: locked_time

The date and time of when the resource was locked

**type**: str

**pattern**: \d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}(\.\d+)?(Z|[\+\-]\d{2}:\d{2})

**mandatory**

.. attribute:: select

The xpath expression that was used to request the lock. The select expression indicates the original intended scope of the lock

**type**: list of str

.. attribute:: locked_node

The list of instance-identifiers (i.e., the locked nodes). The scope of the partial lock is defined by the list of locked nodes

**type**: list of str
self.yang_name = "partial-lock"
self.yang_parent_name = "locks"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['lock_id']
self._child_classes = OrderedDict([])
self._leafs = OrderedDict(
    (YLeaf(YType.uint32, 'lock-id'), ['int']),
    (YLeaf(YType.uint32, 'locked-by-session'), ['int']),
    (YLeaf(YType.str, 'locked-time'), ['str']),
    (YLeafList(YType.str, 'select'), ['str']),
    (YLeafList(YType.str, 'locked-node'), ['str'])),
)
self.lock_id = None
self.locked_by_session = None
self.locked_time = None
self.select = []
self.locked_node = []
self._segment_path = lambda: "partial-lock" + "[lock-id='" + str(self.lock_id) + "']"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(NetconfState.Datastores.Datastore.Locks.PartialLock, ['lock_id', 'locked_by_session', 'locked_time', 'select', 'locked_node'], name, value)

class Schemas(Entity):
    
    Contains the list of data model schemas supported by the server.
    .. attribute:: schema

    List of data model schemas supported by the server

    ..

_prefix = 'ncm'
_revision = '2010-10-04'

def __init__(self):
    super(NetconfState.Schemas, self).__init__()
    self.yang_name = "schemas"
self.yang_parent_name = "netconf-state"
self.is_top_level_class = False
self.has_list_ancestor = False
self.yang_list_key_names = []
self._child_classes = OrderedDict([("schema", ("schema", NetconfState.Schemas.Schema)))])
self._leafs = OrderedDict()

self.schema = YList(self)
self._segment_path = lambda: "schemas"
self._absolute_path = lambda: "ietf-netconf-monitoring:netconf-state/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(NetconfState.Schemas, [], name, value)

class Schema(Entity):
    
    List of data model schemas supported by the server.

    .. attribute:: identifier (key)

        Identifier to uniquely reference the schema. The identifier is used in the <get-schema> operation and may be
        used for other purposes such as file retrieval. For modeling languages that support or require a data model name
        (e.g., YANG module name) the identifier MUST match that name. For YANG data models, the identifier is the
        name of the module or submodule. In other cases, an identifier such as a filename MAY be used instead

        **type**: str

    .. attribute:: version (key)

        Version of the schema supported. Multiple versions MAY be supported simultaneously by a NETCONF
        server. Each version MUST be reported individually in the schema list, i.e., with same identifier, possibly different
        location, but different version. For YANG data models, version is the value of the most recent YANG 'revision'
        statement in the module or submodule, or the empty string if no 'revision' statement is present

        **type**: str

    .. attribute:: format (key)

        The data modeling language the schema is written in (currently xsd, yang, yin, rng, or rnc). For YANG data
        models, 'yang' format MUST be supported and 'yin' format MAY also be provided

        **type**: :py:class:`SchemaFormat <ydk.models.ietf.ietf_netconf_monitoring.SchemaFormat>`

    .. attribute:: namespace

        The XML namespace defined by the data model. For YANG data models, this is the module's namespace. If the
        list entry describes a submodule, this field contains the namespace of the module to which the submodule
        belongs

        **type**: str
**mandatory**: True

.. attribute:: location

One or more locations from which the schema can be retrieved. This list SHOULD contain at least one entry per schema. A schema entry may be located on a remote file system (e.g., reference to file system for ftp retrieval) or retrieved directly from a server supporting the `<get-schema>` operation (denoted by the value 'NETCONF')

**type**: union of the below types:

**type**: list of :py:class:`Location

**type**: list of str

```
_prefix = 'ncm'
_revision = '2010-10-04'

def __init__(self):
    super(NetconfState.Schemas.Schema, self).__init__()

    self.yang_name = "schema"
    self.yang_parent_name = "schemas"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = ['identifier','version','format']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('identifier', (YLeaf(YType.str, 'identifier'), ['str'])),
        ('version', (YLeaf(YType.str, 'version'), ['str'])),
        ('format', (YLeaf(YType.identityref, 'format'), ["ydk.models.ietf.ietf_netconf_monitoring', 'SchemaFormat'])),
        ('namespace', (YLeaf(YType.str, 'namespace'), ['str'])),
        ('location', (YLeafList(YType.str, 'location'), ["ydk.models.ietf.ietf_netconf_monitoring', 'NetconfState', 'Schemas.Schema.Location'])),
    )
    self.identifier = None
    self.version = None
    self.format = None
    self.namespace = None
    self.location = []
    self._segment_path = lambda: "schema" + '[' + str(self.identifier) + '"' + str(self.version) + '"' + str(self.format) + '"'
    self._absolute_path = lambda: "ietf-netconf-monitoring:netconf-state/schemas/%s" % self._segment_path
```
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(NetconfState.Schemas.Schema, ['identifier', 'version', 'format', 'namespace', 'location'], name, value)

class Location(Enum):
    """
    Location (Enum Class)
    
    One or more locations from which the schema can be
    
    retrieved. This list SHOULD contain at least one
    
    entry per schema.
    
    A schema entry may be located on a remote file system
    
    (e.g., reference to file system for ftp retrieval) or
    
    retrieved directly from a server supporting the
    
    <get\-schema> operation (denoted by the value 'NETCONF').
    
    .. data:: NETCONF = 0
    """

    NETCONF = Enum.YLeaf(0, "NETCONF")

class Sessions(Entity):
    """
    The sessions container includes session\-specific data for
    NETCONF management sessions. The session list MUST include
    all currently active NETCONF sessions.
    
    .. attribute:: session
    
    All NETCONF sessions managed by the NETCONF server MUST be reported in this list
    **type**\:: list of :py:attr:`Session`
    
    <ydk.models.ietf.ietf_netconf_monitoring.NetconfState.Sessions.Session>``
def __init__(self):
    super(NetconfState.Sessions, self).__init__()

    self.yang_name = "sessions"
    self.yang_parent_name = "netconf-state"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yang_key_names = []
    self._child_classes = OrderedDict([
        ("session", ("session", NetconfState.Sessions.Session))
    ])
    self._leafs = OrderedDict()

    self.session = YList(self)
    self._segment_path = lambda: "sessions"
    self._absolute_path = lambda: "ietf-netconf-monitoring:netconf-state/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(NetconfState.Sessions, [], name, value)

    class Session(Entity):
        """
        All NETCONF sessions managed by the NETCONF server
        MUST be reported in this list.
        """

        .. attribute:: session_id  (key)

        Unique identifier for the session. This value is the NETCONF session identifier, as defined in RFC 4741
        **type**: int

        **range**: 1..4294967295

        .. attribute:: transport

        Identifies the transport for each session, e.g., 'netconf-ssh', 'netconf-soap', etc
        **type**: py:class:`Transport <ydk.models.ietf.ietf_netconf_monitoring.Transport>`

        **mandatory**: True

        .. attribute:: username

        The username is the client identity that was authenticated by the NETCONF transport protocol. The
        algorithm used to derive the username is NETCONF transport protocol specific and in addition specific to the
        authentication mechanism used by the NETCONF transport protocol
        **type**: str
**mandatory**: True

.. attribute:: source_host

Host identifier of the NETCONF client. The value returned is implementation specific (e.g., hostname, IPv4 address, IPv6 address)

**type**: union of the below types:

**type**: str

**pattern**: (([0-9]{1,3}\.){3}[0-9]{1,3})|(\d{1,3}\d{1,3}\d{1,3}\d{1,3})%[a-zA-Z0-9]+)

**type**: str

**pattern**: (([0-9]{1,3}:){0,6}[0-9]{1,3}\d{1,3}:){0,5}(([0-9]{1,3}:){0,4}\d{1,3}\d{1,3}:){0,3}(([0-9]{1,3}:){0,3}\d{1,3}\d{1,3}:){0,2}(([0-9]{1,3}:){0,2}\d{1,3}\d{1,3}:){0,1}(([0-9]{1,3}:){0,1}\d{1,3}\d{1,3}:){0,0}(\d{1,3})\d{1,3}\d{1,3}\d{1,3}\%[a-zA-Z0-9]+)+)

**pattern**: \d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}(\.\d+)?(Z|\d{2}\:\d{2})

**mandatory**: True

.. attribute:: login_time

Time at the server at which the session was established

**type**: str

**pattern**: \d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}(\.\d+)?(Z|\d{2}\:\d{2})

**mandatory**: True

.. attribute:: in_rpcs

Number of correct <rpc> messages received

**type**: int

**range**: 0..4294967295

.. attribute:: in_bad_rpcs

Number of messages received when an <rpc> message was expected, that were not correct <rpc> messages. This includes XML parse errors and errors on the rpc layer

**type**: int

**range**: 0..4294967295
.. attribute:: out_rpc_errors

Number of <rpc-reply> messages sent that contained an <rpc-error> element
**type**: int

**range**: 0..4294967295

.. attribute:: out_notifications

Number of <notification> messages sent
**type**: int

**range**: 0..4294967295

```python
_prefix = 'ncm'
_revision = '2010-10-04'

def __init__(self):
    super(NetconfState.Sessions.Session, self).__init__()

    self.yang_name = "session"
    self.yang_parent_name = "sessions"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = ['session_id']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('session_id', (YLeaf(YType.uint32, 'session-id'), ['int'])),
        ('transport', (YLeaf(YType.identityref, 'transport'), ['ydk.models.ietf.ietf_netconf_monitoring.Transport'])),
        ('username', (YLeaf(YType.str, 'username'), ['str'])),
        ('source_host', (YLeaf(YType.str, 'source-host'), ['str','str','str'])),
        ('login_time', (YLeaf(YType.str, 'login-time'), ['str'])),
        ('in_rpcs', (YLeaf(YType.uint32, 'in-rpcs'), ['int'])),
        ('in_bad_rpcs', (YLeaf(YType.uint32, 'in-bad-rpcs'), ['int'])),
        ('out_rpc_errors', (YLeaf(YType.uint32, 'out-rpc-errors'), ['int'])),
        ('out_notifications', (YLeaf(YType.uint32, 'out-notifications'), ['int']))
    )
    self.session_id = None
    self.transport = None
    self.username = None
    self.source_host = None
    self.login_time = None
```
self.in_rpcs = None
self.in_bad_rpcs = None
self.out_rpcs_errors = None
self.out_notifications = None

self._segment_path = lambda: "session" + "[session-id='" + str(self.session_id) + "']"

self._absolute_path = lambda: "ietf-netconf-monitoring:netconf-state/sessions/%s" % self._segment_path()

self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(NetconfState.Sessions.Session, ['session_id', 'transport', 'username', 'source_host',
        'login_time', 'in_rpcs', 'in_bad_rpcs', 'out_rpcs_errors', 'out_notifications'], name, value)

class Statistics(Entity):
    """
    Statistical data pertaining to the NETCONF server.
    """

    .. attribute:: netconf_start_time

    Date and time at which the management subsystem was started
    **type**: str
    **pattern**: \d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}(\.\d+)?Z|\+[\-]\d{2}:\d{2}

    .. attribute:: in_bad_hellos

    Number of sessions silently dropped because an invalid <hello> message was received.  This includes <hello>
    messages with a 'session-id' attribute, bad namespace, and bad capability declarations
    **type**: int
    **range**: 0..4294967295

    .. attribute:: in_sessions

    Number of sessions started.  This counter is incremented when a <hello> message with a <session-id> is sent.
    'in-sessions' \-'in-bad-hellos' =  'number of correctly started netconf sessions'
    **type**: int
    **range**: 0..4294967295

    .. attribute:: dropped_sessions

    Number of sessions that were abnormally terminated, e.g., due to idle timeout or transport close.  This counter is
    not incremented when a session is properly closed by a <close-session> operation, or killed by a <kill-session>
    operation
    **type**: int
    **range**: 0..4294967295
.. attribute:: in_rpcs

Number of correct <rpc> messages received
**type**: int

**range**: 0..4294967295

.. attribute:: in_bad_rpcs

Number of messages received when an <rpc> message was expected, that were not correct <rpc> messages. This includes XML parse errors and errors on the rpc layer
**type**: int

**range**: 0..4294967295

.. attribute:: out_rpc_errors

Number of <rpc-reply> messages sent that contained an <rpc-error> element
**type**: int

**range**: 0..4294967295

.. attribute:: out_notifications

Number of <notification> messages sent
**type**: int

**range**: 0..4294967295

```python
_prefix = 'ncm'
_revision = '2010-10-04'

def __init__(self):
    super(NetconfState.Statistics, self).__init__()

    self.yang_name = "statistics"
    self.yang_parent_name = "netconf-state"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([  
        ('netconf_start_time', (YLeaf(YType.str, 'netconf-start-time'), ['str'])),
    ])
```
('in_bad_hellos', (YLeaf(YType.uint32, 'in-bad-hellos'), ['int'])),
('in_sessions', (YLeaf(YType.uint32, 'in-sessions'), ['int'])),
('dropped_sessions', (YLeaf(YType.uint32, 'dropped-sessions'), ['int'])),
('in_rpcs', (YLeaf(YType.uint32, 'in-rpcs'), ['int'])),
('in_bad_rpcs', (YLeaf(YType.uint32, 'in-bad-rpcs'), ['int'])),
('out_rpc_errors', (YLeaf(YType.uint32, 'out-rpc-errors'), ['int'])),
('out_notifications', (YLeaf(YType.uint32, 'out-notifications'), ['int']))),
]
self.netconf_start_time = None
self.in_bad_hellos = None
self.in_sessions = None
self.dropped_sessions = None
self.in_rpcs = None
self.in_bad_rpcs = None
self.out_rpc_errors = None
self.out_notifications = None
self._segment_path = lambda: "statistics"
self._absolute_path = lambda: "ietf-netconf-monitoring:netconf-state/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(NetconfState.Statistics, ['netconf_start_time', 'in_bad_hellos', 'in_sessions',
    'dropped_sessions', 'in_rpcs', 'in_bad_rpcs', 'out_rpc_errors', 'out_notifications'], name, value)

def clone_ptr(self):
    self._top_entity = NetconfState()
    return self._top_entity

class NetconfBeep(Transport):
    
    NETCONF over Blocks Extensible Exchange Protocol (BEEP).

    
    _prefix = 'ncm'
    _revision = '2010-10-04'

tag="ietf-netconf-monitoring:netconf-beep"):
    super(NetconfBeep, self).__init__(ns, pref, tag)

class NetconfSsh(Transport):
    
    NETCONF over Secure Shell (SSH).
class Rnc(SchemaFormat):
    
    Relax NG Compact Syntax

class Yin(SchemaFormat):
    
    The YIN syntax for YANG.

class Rng(SchemaFormat):
    
    Regular Language for XML Next Generation (RELAX NG).
class Xsd(SchemaFormat):
    
    W3C XML Schema Definition.

class NetconfSoapOverBeep(Transport):
    
    NETCONF over Simple Object Access Protocol (SOAP) over Blocks Extensible Exchange Protocol (BEEP).

class NetconfTls(Transport):
    
    NETCONF over Transport Layer Security (TLS).
class Yang(SchemaFormat):
    ***
    The YANG data modeling language for NETCONF.

class NetconfSoapOverHttps(Transport):
    ***
    NETCONF over Simple Object Access Protocol (SOAP)
    over Hypertext Transfer Protocol Secure (HTTPS).

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/ietf_netconf_monitoring.py
module ietf-netconf-with-defaults {


prefix ncwd;

import ietf-netconf { prefix nc; }

organization
"IETF NETCONF (Network Configuration Protocol) Working Group";

contact
"WG Web: <http://tools.ietf.org/wg/netconf/>

WG List: <netconf@ietf.org>

WG Chair: Bert Wijnen
  <bertietf@bwijnen.net>

WG Chair: Mehmet Ersue
  <mehmet.ersue@nsn.com>

Editor: Andy Bierman
  <andy.bierman@brocade.com>

Editor: Balazs Lengyel
  <balazs.lengyel@ericsson.com>";

description
"This module defines an extension to the NETCONF protocol that allows the NETCONF client to control how default values are handled by the server in particular NETCONF operations.

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This version of this YANG module is part of RFC 6243; see the RFC itself for full legal notices.";
typedef with-defaults-mode {
    description "Possible modes to report default data.";
    reference "RFC 6243; Section 3.";
    type enumeration {
        enum report-all {
            description "All default data is reported.";
            reference "RFC 6243; Section 3.1";
        }
        enum report-all-tagged {
            description "All default data is reported.
            Any nodes considered to be default data
            will contain a 'default' XML attribute,
            set to 'true' or '1'.";
            reference "RFC 6243; Section 3.4";
        }
        enum trim {
            description "Values are not reported if they contain the default.";
            reference "RFC 6243; Section 3.2";
        }
        enum explicit {
            description "Report values that contain the definition of
            explicitly set data.";
            reference "RFC 6243; Section 3.3";
        }
    }
}

grouping with-defaults-parameters {
    description "Contains the <with-defaults> parameter for control"
of defaults in NETCONF retrieval operations.

leaf with-defaults {
    description
        "The explicit defaults processing mode requested.";
    reference
        "RFC 6243; Section 4.5.1";
    type with-defaults-mode;
}

// extending the get-config operation
augment /nc:get-config/nc:input {
    description
        "Adds the <with-defaults> parameter to the
        input of the NETCONF <get-config> operation.";
    reference
        "RFC 6243; Section 4.5.1";
    uses with-defaults-parameters;
}

// extending the get operation
augment /nc:get/nc:input {
    description
        "Adds the <with-defaults> parameter to
        the input of the NETCONF <get> operation.";
    reference
        "RFC 6243; Section 4.5.1";
    uses with-defaults-parameters;
}

// extending the copy-config operation
augment /nc:copy-config/nc:input {
    description
        "Adds the <with-defaults> parameter to
        the input of the NETCONF <copy-config> operation.";
    reference
        "RFC 6243; Section 4.5.1";
    uses with-defaults-parameters;
}

Found in path(s):
No license file was found, but licenses were detected in source scan.

module ietf-diffserv-policy {  
yang-version 1;
prefix policy;

import ietf-diffserv-classifier {  
  prefix classifier;
}

organization "IETF NETMOD (Netmod Working Group) Working Group";
contact
"WG Web:  &lt;http://tools.ietf.org/wg/netmod/&gt;
WG List: &lt;mailto:netmod@ietf.org&gt;

WG Chair: Juergen Schoenwaelder
        &lt;mailto:j.schoenwaelder@jacobs-university.de&gt;

WG Chair: Tom Nadeau
        &lt;mailto:tnadeau@lucidvision.com&gt;

Editor: Aseem Choudhary
        &lt;mailto:asechoud@cisco.com&gt;

Editor: Shitanshu Shah
        &lt;mailto:svshah@cisco.com&gt;";

description
"This module contains a collection of YANG definitions for configuring diffserv specification implementations.

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This version of this YANG module is part of RFC XXXX; see the RFC itself for full legal notices."

revision 2015-04-07 {  
description
"Latest revision of diffserv policy"
reference "RFC XXXX"

} feature policy-template-support {
  description
    " This feature allows policy template to be configured"
}

} feature hierarchial-policy-support {
  description
    " This feature allows hierarchial policy to be configured"
}

grouping policy-generic-attr {
  description
    "Policy Attributes"
  leaf policy-name {
    type string;
    description
      "Diffserv policy name"
  }
  leaf policy-descr {
    type string;
    description
      "Diffserv policy description"
  }
}

identity action-type {
  description
    "This base identity type defines action-types"
}

grouping classifier-action-entry-cfg {
  description
    "List of Configuration of classifier & associated actions"
  list classifier-action-entry-cfg {
    key "action-type"
    ordered-by user;
    description
      "Configuration of classifier & associated actions"
    leaf action-type {
      type identityref {
        base action-type;
      }
      description
        "This defines action type "
    }
  }
}
container policies {
  if-feature policy-template-support;
  description
    "list of policy templates";
  list policy-entry {
    key "policy-name";
    description
      "policy template";
    uses policy-generic-attr;
    list classifier-entry {
      key "classifier-entry-name";
      ordered-by user;
      description
        "Classifier entry configuration in a policy";
      leaf classifier-entry-name {
        type string;
        description
          "Diffserv classifier entry name";
      }
      uses classifier:classifier-entry-inline-attr;
      uses classifier-action-entry-cfg;
    }
  }
}

Found in path(s):
  * /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/_yang/ietf-diffserv-policy.yang

No license file was found, but licenses were detected in source scan.

module ietf-diffserv-action {
  namespace "urn:ietf:params:xml:ns:yang:ietf-diffserv-action";
  prefix action;
  
  import ietf-inet-types { prefix inet; }
  import ietf-diffserv-classifier { prefix classifier; }
  import ietf-diffserv-policy { prefix policy; }
  import policy-types { prefix policy-types; }
  organization "IETF NETMOD (Netmod Working Group) Working Group";
This module contains a collection of YANG definitions for configuring diffserv specification implementations. Copyright (c) 2014 IETF Trust and the persons identified as authors of the code. All rights reserved. Redistribution and use in source and binary forms, with or without modification, is permitted pursuant to, and subject to the license terms contained in, the Simplified BSD License set forth in Section 4.c of the IETF Trust's Legal Provisions Relating to IETF Documents (http://trustee.ietf.org/license-info). This version of this YANG module is part of RFC XXXX; see the RFC itself for full legal notices.

revision 2015-04-07 {
    description
        "Latest revision for diffserv actions";
    reference "RFC XXXX";
}

feature hierarchial-policy-support {
    description
        "This feature allows hierarchial policy to be configured";
}

feature aqm-red-support {
    description
        "This feature allows AQM RED to be configured";
}

feature priority-rate-burst-support {
    description "support rate and burst in priority";
}

grouping dscp-range {
    description
        "dscp range definition";
    leaf dscp-min {
        type inet:dscp;
        description
            "Minimum of dscp range";
    }
    leaf dscp-max {
        type inet:dscp;
    }
description
  "Maximum of dscp range";
}
}

grouping burst {
  description
    "burst size or interval configuration";
  choice burst-type {
    case size {
      leaf burst-size {
        type uint64;
        units "bytes";
        description
          "burst size";
      }
    }
    case interval {
      leaf burst-interval {
        type uint64;
        units "microsecond";
        description
          "burst interval";
      }
    }
  }
  description
    "Choice of burst type";
}
}

grouping threshold {
  description
    "Threshold Parameters";
  container threshold {
    description
      "threshold";
    choice threshold-type {
      case size {
        leaf threshold-size {
          type uint64;
          units "bytes";
          description
            "Threshold size";
        }
      }
      case interval {
        leaf threshold-interval {
          type uint64;
units "microsecond";
description
   "Threshold interval";
}
}
description
   "Choice of threshold type";
}
}

identity marking {
   base policy:action-type;
   description
       "marking action type";
}

identity meter {
   base policy:action-type;
   description
       "meter action type";
}

identity priority {
   base policy:action-type;
   description
       "priority action type";
}

identity min-rate {
   base policy:action-type;
   description
       "min-rate action type";
}

identity max-rate {
   base policy:action-type;
   description
       "max-rate action type";
}

identity algorithmic-drop {
   base policy:action-type;
   description
       "algorithmic-drop action type";
}

identity drop-type {
description
    "drop algorithm";
}

identity always-drop {
    base drop-type;
    description
        "always drop algorithm";
}

identity tail-drop {
    base drop-type;
    description
        "tail drop algorithm";
}

identity random-detect {
    base drop-type;
    description
        "random detect algorithm";
}

identity meter-action-type {
    description
        "action type in a meter";
}

identity meter-action-drop {
    base meter-action-type;
    description
        "drop action type in a meter";
}

identity meter-action-set {
    base meter-action-type;
    description
        "mark action type in a meter";
}

grouping drop {
    leaf drop-action {
        type empty;
        description
            "always drop algorithm";
    }
    description
        "the drop action";
}
grouping queuelimit {
    list qlimit-dscp-thresh {
        key "dscp-min dscp-max";
        uses dscp-range;
        uses threshold;
        description
        "the queue limit per dscp range";
    }
    description
    "the queue limit beyond which queue will not hold any packet";
}

grouping meter-action-params {
    leaf meter-action-type {
        type identityref {
            base meter-action-type;
        }
        description
        "meter action type";
    }
    leaf next-meter-id {
        type uint16;
        description
        "next meter identifier";
    }
    choice val {
        case meter-action-mark {
            uses marking;
            description
            "meter action: mark";
        }
        case meter-action-drop {
            description
            "meter action: drop";
            uses drop;
        }
        description
        " meter action based on choice of meter action type";
    }
    description
    "meter action parameters";
}

grouping meter {
    leaf meter-id {
        type uint16;
        description
        "meter identifier";
    }
}
leaf meter-rate {
    type uint64;
    units "bits-per-second";
    description
    "meter rate";
}

uses burst;

container color {
    uses classifier:classifier-entry-generic-attr;
    description
    "color aware & color blind attributes container";
}

container succeed-action {
    uses meter-action-params;
    description
    "confirm action";
}

container fail-action {
    uses meter-action-params;
    description
    "exceed action";

    description
    "meter attributes";
}

grouping priority {
    leaf priority-level {
        type uint8;
        description
        "priority level";
    }

    description
    "priority attributes";
}

grouping min-rate {
    leaf min-rate {
        type uint64;
        units "bits-per-second";
        description
        "minimum rate";
    }

    description
    "minimum rate grouping";
}

grouping marking {
leaf dscp {
    type inet:dscp;
    description
        "dscp marking";
}

description
    "marking grouping";
}

grouping max-rate {
    leaf absolute-rate {
        type uint64;
        units "bits-per-second";
        description
            "rate in bits per second";
    }
    uses burst;
    description
        "maximum rate attributes";
}

grouping red-threshold {
    container red-min-thresh {
        uses threshold;
        description
            "Minimum threshold";
    }
    container red-max-thresh {
        uses threshold;
        description
            "Maximum threshold";
    }
    leaf mark-probability {
        type uint32 {
            range "1..1000";
        }
        description
            "Mark probability";
    }
    description
        "RED threshold attributes";
}

grouping randomdetect {
    leaf exp-weighting-const {
        type uint32;
        description
            "Exponential weighting constant factor for red profile";
    }
}
Open Source Used In BGP TE Controller Version 4.3.0 1804

uses red-threshold;
description
"Random detect attributes";
}

typedef percent-value-1to100 {
type uint8 {
range "1..100";
}
description "Percent range from 1 to 100";
}

grouping RATE-OPER {
leaf rate {
type uint64;
units "bits-per-second";
description "Rate value";
}

uses RATE-UNIT;
description "Rate value and units operator";
}

grouping RATE-UNIT {
leaf absolute-rate-metric {
type policy-types:metric;
default none;
description "Metric";
}
leaf absolute-rate-units {
type policy-types:rate-unit;
description "Rate basic units";
}
leaf rate-percent {
type percent-value-1to100;
description "percent";
}
leaf rate-ratio {
type uint32 {range "1..65532";}

description "Rate units";
}

augment "/policy:policies/policy:policy-entry" +
/policy:classifier-entry" + "/policy:classifier-action-entry-cfg" + "/policy:action-cfg-params" { 
case marking { 
    container marking-cfg { 
        uses marking; 
        description 
            "Marking configuration container"; 
    } 
}
case priority { 
    container priority-cfg { 
        uses priority; 
        container rate-burst { 
            if-feature priority-rate-burst-support; 
            uses RATE-OPER; 
            uses burst; 
            description "absolute priority rate with/without burst rate" + 
                "and absolute percent"; 
        } 
        description 
            "priority attributes container"; 
    } 
}
case meter { 
    container meter-cfg { 
        list meter-list { 
            key "meter-id"; 
            uses meter; 
            description 
                "Meter configuration"; 
        } 
        description 
            "Meter list configuration container"; 
    } 
}
case min-rate { 
    container min-rate-cfg { 
        uses min-rate; 
        uses RATE-UNIT; 
        container bw-excess-share-cfg { 
            leaf value { 
                type uint32; 
                description "percentage or ratio value"; 
            } 
        uses RATE-UNIT; 
        
        description "share the bandwidth remaining"; 
    }
description
  "min guaranteed bandwidth";
}
}

case max-rate {
  container max-rate-cfg {
    uses max-rate;
    uses RATE-UNIT;
    description
      "maximum rate attributes";
  }
  }
}

case algorithmic-drop {
  choice drop-algorithm {
    case always-drop {
      container drop-cfg {
        uses drop;
        description
          "Always Drop configuration container";
      }
      }
      case tail-drop {
        container tail-drop-cfg {
          uses queuelimit;
          description
            "Tail Drop configuration container";
        }
        }
      case random-detect {
        container random-detect-cfg {
          if-feature aqm-red-support;
          uses randomdetect;
          description
            "Random Detect configuration container";
        }
        }
    }
    description
      "Choice of Drop Algorithm";
  }
  }
}

description
  "Augment the actions to policy entry";
}
}
module ietf-diffserv-classifier {
  yang-version 1;
  prefix classifier;

  import ietf-inet-types {
    prefix inet;
  }
}

organization "IETF NETMOD (Netmod Working Group) Working Group";
contact
"WG Web: <http://tools.ietf.org/wg/netmod/>
    WG List: <mailto:netmod@ietf.org>

    WG Chair: Juergen Schoenwaelder
      <mailto:j.schoenwaelder@jacobs-university.de>

    WG Chair: Tom Nadeau
      <mailto:tnadeau@lucidvision.com>

    Editor: Aseem Choudhary
      <mailto:asechoud@cisco.com>

    Editor: Shitanshu Shah
      <mailto:svshah@cisco.com>";

description
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configuring diffserv specification implementations.

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authors of the code.  All rights reserved.

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(http://trustee.ietf.org/license-info).

This version of this YANG module is part of RFC XXXX; see
the RFC itself for full legal notices.";

revision 2015-04-07 {
description
"Latest revision of diffserv based classifier";
reference "RFC XXXX";
}

feature policy-inline-classifier-config {
    description
    " This feature allows classifier configuration directly under policy."
}

identity filter-type {
    description
    " This is identity of base filter-type"
}

identity dscp {
    base filter-type;
    description
    "DSCP filter-type"
}

identity source-ip-address {
    base filter-type;
    description
    "source-ip-address filter-type"
}

identity destination-ip-address {
    base filter-type;
    description
    "destination-ip-address filter-type"
}

identity source-port {
    base filter-type;
    description
    "source-port filter-type"
}

identity destination-port {
    base filter-type;
    description
    "destination-port filter-type"
}

identity protocol {
    base filter-type;
}
description
"protocol filter-type";
}

identity classifier-entry-filter-operation-type {
  description
  "Classifier entry filter logical operation";
}

identity match-any-filter {
  base classifier-entry-filter-operation-type;
  description
  "Classifier entry filter logical OR operation";
}

identity match-all-filter {
  base classifier-entry-filter-operation-type;
  description
  "Classifier entry filter logical AND operation";
}

grouping filters {
  description
  "Filters in a Classifier entry";
  leaf filter-type {
    type identityref {
      base filter-type;
    }
    description
    "This leaf defines type of the filter";
  }
  leaf filter-logical-not {
    type boolean;
    description
    "This is logical-not operator for a filter. When true, it indicates filter looks for absence of a pattern defined by the filter";
  }
  choice filter-param {
    description
    "Choice of filter types";
    case dscp {
      list dscp-cfg {
        key "dscp-min dscp-max";
      }
    }
  }
}
description
"list of dscp ranges";
leaf dscp-min {
  type inet:dscp;
  description
    "Minimum value of dscp range";
}
leaf dscp-max {
  type inet:dscp;
  description
    "Maximum value of dscp range";
}

description
"Filter containing list of dscp ranges";


case source-ip-address {
  list source-ip-address-cfg {
    key "source-ip-addr";
    description
      "List of source ip address";
    leaf source-ip-addr {
      type inet:ip-prefix;
      description
        "Source ip prefix";
    }
  }
  description
    "Filter containing list of source ip addresses";
}

case destination-ip-address {
  list destination-ip-address-cfg {
    key "destination-ip-addr";
    description
      "List of destination ip address";
    leaf destination-ip-addr {
      type inet:ip-prefix;
      description
        "Destination ip prefix";
    }
  }
  description
    "Filter containing list of destination ip address";
}
case source-port {
list source-port-cfg {
  key "source-port-min source-port-max";
  description
    "list of ranges of source port";
  leaf source-port-min {
    type inet:port-number;
    description
      "minimum value of source port range";
  }
  leaf source-port-max {
    type inet:port-number;
    description
      "maximum value of source port range";
  }
}

description
  "Filter containing list of source-port ranges";
}

case destination-port {
  list destination-port-cfg {
    key "destination-port-min destination-port-max";
    description
      "list of ranges of destination port";
    leaf destination-port-min {
      type inet:port-number;
      description
        "minimum value of destination port range";
    }
    leaf destination-port-max {
      type inet:port-number;
      description
        "maximum value of destination port range";
    }
  }
  description
    "Filter containing list of destination-port ranges";
}

case protocol {
  list protocol-cfg {
    key "protocol-min protocol-max";
    description
      "list of ranges of protocol values";
    leaf protocol-min {
      type uint8 {
        range "0..255";
      }
      description
        "minimum value of protocol range";
    }
    leaf protocol-max {
      type uint8 {
        range "0..255";
      }
      description
        "maximum value of protocol range";
    }
  }
  description
    "Filter containing list of protocol ranges";
}


`leaf protocol-max {
    type uint8 {
        range "0..255";
    }
    description
        "maximum value of protocol range";
}

}`

grouping classifier-entry-generic-attr {
    description
        "Classifier attributes";
    leaf classifier-entry-name {
        type string;
        description
            "Diffserv classifier name";
    }
    leaf classifier-entry-descr {
        type string;
        description
            "Description of the class template";
    }
    leaf classifier-entry-filter-operation {
        type identityref {
            base classifier-entry-filter-operation-type;
        }
        default "match-any-filter";
        description
            "Filters are applicable as any or all filters";
    }
}

grouping classifier-entry-inline-attr {
    description
        "Classifier inline attributes";
    leaf classifier-entry-inline {
        type boolean;
        default "false";
        description
            "Indication of inline classifier entry";
    }
    leaf classifier-entry-filter-oper {
        
`
type identityref {
    base classifier-entry-filter-operation-type;
}
default "match-any-filter";
description
    "Filters are applicable as any or all filters";
} list filter-entry {
    if-feature policy-inline-classifier-config;
    must "./classifier-entry-inline = 'true'" {
        description
            "For inline filter configuration, inline attribute
            must be true";
    }
    key "filter-type filter-logical-not";
    uses filters;
    description
        "Filters configured inline in a policy";
} container classifiers {
    description
        "list of classifier entry";
    list classifier-entry {
        key "classifier-entry-name";
        description
            "classifier entry template";
        uses classifier-entry-generic-attr;
        list filter-entry {
            key "filter-type filter-logical-not";
            uses filters;
            description
                "Filter configuration";
        }
    }
}

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/_yang/ietf-diffserv-classifier.yang
No license file was found, but licenses were detected in source scan.

/*-------------------------------------------------------------------
* policy-types.yang - C3PL type definition yang file
* Oct 2013, Aseem Choudhary - Nazanin Magharei
*---------------------------------------------------------------
module policy-types{
    yang-version 1;
    namespace "urn:ietf:params:xml:ns:yang:c3pl-types";

    prefix policy-types;

    import ietf-diffserv-classifier {
        prefix classifier;
    }

    import ietf-inet-types {
        prefix inet;
    }

    organization "Cisco Systems, Inc.";
    contact
    "Cisco Systems, Inc.
    Customer Service
    Postal: 170 W Tasman Drive
    San Jose, CA 95134
    Tel: +1 1800 553-NETS
    E-mail: cs-yang@cisco.com
    Editor: Nazanin Magharei
    <mailto:nmaghare@cisco.com>";
    description
    "This module contains a collection of YANG groupings
    in filter configurations for policy model.";

    revision "2013-10-07" {
        description "first revision";
        reference "TBD";
    }

    /* policy-type identity definitions */
    identity policy-type {
        description "This is identity of base policy-type";
    }

    identity qos {
        base policy-type;
    }

    *
description "Policy-type QOS (quality of service)";
}

identity pbr {
    base policy-type;
    description "Policy-type PBR (policy based routing)";
}

identity perf-mon {
    base policy-type;
    description "Policy-type PERF-MON (performance monitoring)";
}

identity access-control {
    base policy-type;
    description "Policy-type access-control specific policy-map";
}

identity appnav {
    base policy-type;
    description "Policy-type APPNAV Policy Map";
}

identity control {
    base policy-type;
    description "Policy-type control policy-map";
}

identity inspect {
    base policy-type;
    description "Policy-type Firewall Policy Map";
}

identity packet-service {
    base policy-type;
    description "Policy-type Packet Service Policy Map";
}

identity service {
    base policy-type;
description "
Policy-type policymap service configuration";
}

/* class-type identity definitions */
identity class-type {
    description "
    This is identity of base class-type";
}

identity qos-class {
    base class-type;
    description "
    QOS class-map";
}

identity access-control-class {
    base class-type;
    description "
    Access-control specific class-map";
}

identity appnav-class {
    base class-type;
    description "
    APPNAV Class Map";
}

identity control-class {
    base class-type;
    description "
    Control policy class-map";
}

identity inspect-class {
    base class-type;
    description "
    Firewall Class Map";
}

typedef metric {
    type enumeration {
        enum none;
        enum peta;
        enum tera;
        enum giga;
        enum mega;
        enum kilo;
        enum milli;
    }
}
enum nano;
}
description "metric";
}
typedef rate-unit {

type enumeration {
enum pps;
enum cps;
enum bps;
enum perc;
enum ratio;
}
description "Unit for traffic rate:
pps: packets per sec
cps: cells per sec
bps: bits per sec
perc: percentage
ratio: ratio";
}
typedef direction {

type enumeration{
enum inbound;
enum outbound;
}
description "This typedef defines directional enums used in c3pl.
inbound: Incoming direction.
outbound: Outgoing direction.
";
}

/* filter type identity definitions */

identity cos {
base classifier:filter-type;
description "Filter-type IEEE 802.1Q/ISL class of service/user
priority values";
}

identity cos-inner {
base classifier:filter-type;
description "ATM VC configured as Access VC
class of service/user priority values";
}

identity ipv4-acl-name {
base classifier:filter-type;
description "IPV4 access group list";
}

identity ipv6-acl-name {
    base classifier:filter-type;
description "IPV6 access group list";
}

identity ipv4-acl {
    base classifier:filter-type;
description "IPV4 access group Index";
}

identity ipv6-acl {
    base classifier:filter-type;
description "IPV6 access group Index";
}

identity input-interface {
    base classifier:filter-type;
description "Input interface";
}

identity src-mac {
    base classifier:filter-type;
description "Source MAC address";
}

identity dst-mac {
    base classifier:filter-type;
description "Destination MAC address";
}

identity mpls-exp-top {
    base classifier:filter-type;
description "Multi Protocol Label Switching experimental topmost specific values";
}

identity mpls-exp-imp {
    base classifier:filter-type;
description "Multi Protocol Label Switching experimental imposition specific values";
}

identity packet-length {
    base classifier:filter-type;
description "Layer 3 packet length";
}

identity prec {
    base classifier:filter-type;
    description "IP precedence";
}

identity qos-group {
    base classifier:filter-type;
    description "QOS group";
}

identity vlan {
    base classifier:filter-type;
    description "Vlan";
}

identity vlan-inner {
    base classifier:filter-type;
    description "Vlan-inner";
}

identity atm-clp {
    base classifier:filter-type;
    description "ATM CLP bit";
}

identity atm-vci {
    base classifier:filter-type;
    description "ATM VCI number";
}

identity dei {
    base classifier:filter-type;
    description "Frame-relay DE bit";
}

identity dei-inner {
    base classifier:filter-type;
    description "Frame-relay inner DE bit";
}

identity flow-ip {
    base classifier:filter-type;
    description "Flow IP";
}

identity flow-record {
base classifier:filter-type;
description "Flow record";
}

identity flow-de {
    base classifier:filter-type;
description "Flow DE";
}

identity flow-dlci {
    base classifier:filter-type;
description "Frame-relay DLCI";
}

identity wlan-user-priority {
    base classifier:filter-type;
description "WLAN user priority";
}

identity discard-class {
    base classifier:filter-type;
description "Discard behavior identifier";
}

identity class-map {
    base classifier:filter-type;
description "class-map";
}

identity metadata {
    base classifier:filter-type;
description "metadata";
}

identity application {
    base classifier:filter-type;
description "application";
}

identity security-group-name {
    base classifier:filter-type;
description "security group name";
}

identity security-group-tag {
    base classifier:filter-type;
description "security group tag";
}
identity ip-rtp {
    base classifier:filter-type;
    description "IP RTP port";
}

identity vpls {
    base classifier:filter-type;
    description "VPLS";
}

/* Feature capability definitions */
feature match-cos-support {
    description "Match COS feature support";
}

feature match-cos-inner-support {
    description "Match COS-inner feature support";
}

feature match-ipv4-acl-name-support {
    description "Match IPV4 ACL list feature support";
}

feature match-ipv6-acl-name-support {
    description "Match IPV6 ACL list feature support";
}

feature match-ipv4-acl-support {
    description "Match IPV4 ACL number feature support";
}

feature match-ipv6-acl-support {
    description "Match IPV6 ACL number feature support";
}

feature match-input-interface-support {
    description "Match input interface support";
}

feature match-src-mac-support {
    description "Match source Mac address feature support";
}

feature match-dst-mac-support {
    description "Match destination Mac address feature support";
}

feature protocol-name-support {
    description "Match non-standard protocol feature support";
}

feature match-packet-length-support {
    description "Match packet length feature support";
}

feature match-discard-class-support {
    description "Match discard class feature support";
}

feature match-class-map-support {
description "Match class-map feature support";
}
feature match-qos-group-support {
    description "Match QOS group feature support";
}
feature match-prec-support {
    description "Match IP prencendence feature support";
}
feature match-mpls-exp-imp-support {
    description "Match MPLS experimental imposition feature support";
}
feature match-mpls-exp-top-support {
    description "Match MPLS experimental topmost feature support";
}
feature match-fr-de-support {
    description "Match Frame relay DE feature support";
}
feature match-fr-dlci-support {
    description "Match Frame relay DLCI feature support";
}
feature match-atm-clp-support {
    description "Match ATM CLP feature support";
}
feature match-atm-vci-support {
    description "Match ATM VCI feature support";
}
feature match-vlan-inner-support {
    description "Match Vlan-inner feature support";
}
feature match-vlan-support {
    description "Match VLAN feature support";
}
feature match-dei-support {
    description "Match Frame relay DEI feature support";
}
feature match-dei-inner-support {
    description "Match Frame relay DEI inner feature support";
}
feature match-flow-ip-support {
    description "Match Flow IP feature support";
}
feature match-flow-record-support {
    description "Match Flow record feature support";
}
feature match-wlan-user-priority-support {
    description "Match Wlan user priority feature support";
feature match-metadata-support {
    description "Match Metadata feature support";
}

feature match-application-support {
    description "Match Application feature support";
}

feature match-security-group-support {
    description "Match Security group feature support";
}

feature match-ip-rtp-support {
    description "Match IP RTP feature support";
}

feature match-vpls-support {
    description "Match VPLS feature support";
}

/* typedef definitions of filter configurations */
typedef pkt-len-type {
    type uint16 {
        range "1..9216";
        description "Layer 3 packet length from 1 to 9216";
    }
}

typedef dscp-type {
    type inet:dscp;
    description "Differentiated services codepoint."
}

typedef src-dst-ip-type {
    type inet:ip-prefix;
    description "Source/destination IP prefix."
}

typedef src-dst-port-type {
    type inet:port-number;
    description "Source/destination port value."
}

typedef protocol-type {
    type string;
    description "Name of the protocol."
}

typedef protocol-name {
    type string;
    description
typedef cos-type {
    type uint8 {
        range "0..7";
    }
    description "Class of service."
}

typedef ip-acl-name-type {
    type string {length "1..64";}
    description "IPv4/6 access group."
}

typedef ip-acl-type {
    type uint32;
    description "IPv4/6 access group number."
}

typedef prec-val-type {
    type uint8 {
        range "0..7";
    }
    description "IP precede value."
}

typedef prec-attr-type {
    type string;
    description "IP precede attribute."
}

typedef mpls-exp-type {
    type uint8 {
        range "0..7";
    }
    description "MPLS Experimental bits."
}

typedef discard-class-type {
    type uint8 {
        range "0..7";
    }
    description "Discard behavior identifier."
}
typedef dei-type {
    type boolean;
    description "Frame relay DEI."
}

typedef flow-record-type {
    type string { length "1..255";}
    description "Flow record."
}

typedef fr-de-type {
    type empty;
    description "Frame relay DE type definition."
}

typedef wlan-user-priority-type {
    type uint8 { range "0..7";}
    description "Wlan user priority value."
}

typedef class-map-type {
    type string { length "1..64";}
    description "Class-map name."
}

typedef application-type {
    type string;
    description "Application name."
}

typedef qos-group-type {
    type uint16 {
        range "0..99";
    }
    description "QoS Group value."
}

typedef vlan-type {
    type uint16 {
        range "1..4095";
    }
module ietf-routing {


    prefix "rt";

    import ietf-yang-types {
        prefix "yang";
    }

    import ietf-interfaces {
        prefix "if";
    }

    organization
    "IETF NETMOD (NETCONF Data Modeling Language) Working Group";

    contact
    "WG Web: <http://tools.ietf.org/wg/netmod/>
    WG List: <mailto:netmod@ietf.org>

    WG Chair: Thomas Nadeau
    <mailto:tnadeau@lucidvision.com>

    WG Chair: Juergen Schoenwaelder
    <mailto:j.schoenwaelder@jacobs-university.de>

    Editor: Ladislav Lhotka
    <mailto:lhotka@nic.cz>"

    description
    "This YANG module defines essential components for the management of a routing subsystem.

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The key words 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in the module text are to be interpreted as described in RFC 2119 (http://tools.ietf.org/html/rfc2119).

This version of this YANG module is part of RFC XXXX (http://tools.ietf.org/html/rfcXXXX); see the RFC itself for full legal notices.;

revision 2015-05-25 {
  description
    "Initial revision.";
  reference
    "RFC XXXX: A YANG Data Model for Routing Management";
}

/* Features */

feature multiple-ribs {
  description
    "This feature indicates that the server supports user-defined RIBs.

    Servers that do not advertise this feature SHOULD provide exactly one system-controlled RIB per routing-instance and supported address family and make them also the default RIBs. These RIBs then appear as entries of the list /routing-state/routing-instance/ribs/rib.";
}

feature router-id {
  description
    "This feature indicates that the server supports configuration of an explicit 32-bit router ID that is used by some routing protocols.

    Servers that do not advertise this feature set a router ID algorithmically, usually to one of configured IPv4 addresses. However, this algorithm is implementation-specific.";
}
/* Identities */

identity address-family {
    description "Base identity from which identities describing address families are derived.";
}

identity ipv4 {
    base address-family;
    description "This identity represents IPv4 address family.";
}

identity ipv6 {
    base address-family;
    description "This identity represents IPv6 address family.";
}

identity routing-instance {
    description "Base identity from which identities describing routing instance types are derived.";
}

identity default-routing-instance {
    base routing-instance;
    description "This identity represents either a default routing instance, or the only routing instance on systems that do not support multiple instances.";
}

identity vrf-routing-instance {
    base routing-instance;
    description "This identity represents a VRF routing instance. The type is distinct from the default-routing-instance. There may be multiple vrf-routing-interfaces.";
}

identity routing-protocol {
    description "Base identity from which routing protocol identities are derived.";
}
identity direct {
    base routing-protocol;
    description
    "Routing pseudo-protocol that provides routes to directly connected networks.";
}

identity static {
    base routing-protocol;
    description
    "Static routing pseudo-protocol.";
}

/* Type Definitions */

typedef routing-instance-ref {
    type leafref {
        path "/rt:routing/rt:routing-instance/rt:name";
    }
    description
    "This type is used for leafs that reference a routing instance configuration.";
}

typedef routing-instance-state-ref {
    type leafref {
        path "/rt:routing-state/rt:routing-instance/rt:name";
    }
    description
    "This type is used for leafs that reference state data of a routing instance.";
}

typedef route-preference {
    type uint32;
    description
    "This type is used for route preferences.";
}

/* Groupings */

grouping address-family {
    description
    "This grouping provides a leaf identifying an address family.";
    leaf address-family {
        type identityref {
            base address-family;
        }
    }
}
grouping router-id {
  description "This grouping provides router ID.";
  leaf router-id {
    type yang:dotted-quad;
    description "A 32-bit number in the form of a dotted quad that is used by some routing protocols identifying a router.";
    reference "RFC 2328: OSPF Version 2.";
  }
}

grouping special-next-hop {
  description "This grouping provides a leaf with an enumeration of special next-hops.";
  leaf special-next-hop {
    type enumeration {
      enum blackhole {
        description "Silently discard the packet.";
      }
      enum unreachable {
        description "Discard the packet and notify the sender with an error message indicating that the destination host is unreachable.";
      }
      enum prohibit {
        description "Discard the packet and notify the sender with an error message indicating that the communication is administratively prohibited.";
      }
      enum receive {
        description "The packet will be received by the local system.";
      }
    }
  }
}
"Special next-hop options."
}
}

grouping next-hop-content {
  description
  "Generic parameters of next-hops in static routes.";
  choice next-hop-options {
    mandatory "true";
    description
    "Options for next-hops in static routes.

    It is expected that other cases will be added through
    augments from other modules, e.g., for Equal-Cost Multipath
    routing (ECMP).";
    case simple-next-hop {
      description
      "Simple next-hop is specified as an outgoing interface,
      next-hop address or both.

      Address-family-specific modules are expected to provide
      'next-hop-address' leaf via augmentation.";
      leaf outgoing-interface {
        // type leafref {
        //   path "/rt:routing/rt:routing-instance/rt:interfaces/"
        //     + "rt:interface";
        // }
        type string;
        description
        "Name of the outgoing interface.";
      }
    }
    case special-next-hop {
      uses special-next-hop;
    }
  }
}

grouping next-hop-state-content {
  description
  "Generic parameters of next-hops in state data.";
  choice next-hop-options {
    mandatory "true";
    description
    "Options for next-hops in state data.

    It is expected that other cases will be added through
    augments from other modules, e.g., for ECMP or recursive
next-hops;"
}
case simple-next-hop {

description
"Simple next-hop is specified as an outgoing interface, next-hop address or both.

Address-family-specific modules are expected to provide 'next-hop-address' leaf via augmentation;"
leaf outgoing-interface {
  // type leafref {
  //   path "/rt:routing-state/rt:routing-instance/"
  //     + "rt:interfaces/rt:interface;"
  //   }
  type string;
  description
  "Name of the outgoing interface.";
}
leaf next-hop-address {
  description
  "IP address.";
  type string;
}
}
case special-next-hop {
  uses special-next-hop;
}
}
}

grouping route-metadata {

description
"Common route metadata.";
leaf source-protocol {
  type identityref {
    base routing-protocol;
  }
  mandatory "true";
  description
  "Type of the routing protocol from which the route originated.";
}
leaf active {
  type empty;
  description
  "Presence of this leaf indicates that the route is preferred among all routes in the same RIB that have the same destination prefix.";
leaf last-updated {
    type yang:date-and-time;
    description "Time stamp of the last modification of the route. If the route was never modified, it is the time when the route was inserted into the RIB."
}

/* State data */

augment "/if:interfaces-state/if:interface" {
    description "This augment adds a wrapped leaf-list to interface state data.";
    leaf routing-instance {
        // type routing-instance-state-ref;
        type string;
        must "/if:name=/rt:routing-state/rt:routing-instance[rt:name=current()]/rt:interfaces/
            + "rt:interface" {
            error-message "The interface is not assigned to the routing instance.";
            description "The reference must mirror a corresponding assignment under routing-instance."
        }
        description "The name of the routing instance to which the interface is assigned.";
    }
}

container routing-state {
    config "false";
    description "State data of the routing subsystem.";
    list routing-instance {
        key "name";
        min-elements "1";
        description "Each list entry is a container for state data of a routing instance.

        An implementation MUST support routing instance(s) of the type 'rt:default-routing-instance', and MAY support other types. An implementation MAY restrict the number of routing
instances of each supported type.

An implementation SHOULD create at least one
system-controlled instance, and MAY allow the clients to
create user-controlled routing instances in
configuration.”;
leaf name {
    type string;
description
    "The name of the routing instance.

    For system-controlled instances the name is persistent,
i.e., it SHOULD NOT change across reboots.”;
}
leaf type {
    type identityref {
        base routing-instance;
    }
description
    "The routing instance type.”;
}
uses router-id {
    description
    "Global router ID.

    It may be either configured or assigned algorithmically by
    the implementation.”;
}
container interfaces {
    description
    "Network layer interfaces belonging to the routing
    instance.”;
leaf-list interface {
    type if:interface-state-ref;
description
    "Each entry is a reference to the name of a configured
    network layer interface.”;
}
}
container routing-protocols {
    description
    "Container for the list of routing protocol instances.”;
list routing-protocol {
    key "type name”;
description
    "State data of a routing protocol instance.

    An implementation MUST provide exactly one
system-controlled instance of the type 'direct'. Other instances MAY be created by configuration.

leaf type {
  type identityref {
    base routing-protocol;
  }
  description
    "Type of the routing protocol.";
}

leaf name {
  type string:
  description
    "The name of the routing protocol instance.

For system-controlled instances this name is persistent, i.e., it SHOULD NOT change across reboots.";
}

container ribs {
  description
    "Container for RIBs.";
  list rib {
    key "name";
    min-elements "1";
    description
      "Each entry represents a RIB identified by the 'name' key. All routes in a RIB MUST belong to the same address family.

For each routing instance, an implementation SHOULD provide one system-controlled default RIB for each supported address family.";

leaf name {
  type string:
  description
    "The name of the RIB.";
}

uses address-family;
leaf default-rib {
  if-feature multiple-ribs;
  type boolean;
  default "true";
  description
    "This flag has the value of 'true' if and only if the RIB is the default RIB for the given address family.";}
A default RIB always receives direct routes. By default it also receives routes from all routing protocols.

```yaml
container routes {
    description
    "Current content of the RIB."

    list route {
        key "destination-prefix"
        description
        "A RIB route entry. This data node MUST be augmented with information specific for routes of each address family."

        leaf route-preference {
            type route-preference
            description
            "This route attribute, also known as administrative distance, allows for selecting the preferred route among routes with the same destination prefix. A smaller value means a more preferred route."
        }

        leaf destination-prefix {
            description
            "Destination IP address with prefix"
            type string
        }

        leaf metric {
            type uint32
            description "Route metric."
        }

        container next-hop {
            description
            "Route's next-hop attribute."
            uses next-hop-state-content
        }

        uses route-metadata;
        leaf update-source {
            type string
            description
            "Update source for the route."
        }
    }
}
```


/* Configuration Data */

container routing {
    description
    "Configuration parameters for the routing subsystem.";
    list routing-instance {
        key "name";
        description
        "Configuration of a routing instance.";
        leaf name {
            type string;
            description
            "The name of the routing instance.

            For system-controlled entries, the value of this leaf must
            be the same as the name of the corresponding entry in
            state data.

            For user-controlled entries, an arbitrary name can be
            used.";
            }
        leaf type {
            type identityref {
                base routing-instance;
            }
            default "rt:default-routing-instance";
            description
            "The type of the routing instance.";
            }
        leaf enabled {
            type boolean;
            default "true";
            description
            "Enable/disable the routing instance.

            If this parameter is false, the parent routing instance is
            disabled and does not appear in state data, despite any
            other configuration that might be present.";
            }
        uses router-id {
            if-feature router-id;
            description
            "Configuration of the global router ID. Routing protocols
            that use router ID can use this parameter or override it
            with another value.";
            }
        leaf description {
            type string;
            }
}
description
   "Textual description of the routing instance."
};
}
container interfaces {
    description
    "Assignment of the routing instance's interfaces."
    leaf-list interface {
        type if:interface-ref;
        description
        "The name of a configured network layer interface to be
         assigned to the routing-instance."
    }
}
}
container routing-protocols {
    description
    "Configuration of routing protocol instances."
    list routing-protocol {
        key "type name";
        description
        "Each entry contains configuration of a routing protocol
         instance."
        leaf type {
            type identityref {
                base routing-protocol;
            }
            description
            "Type of the routing protocol - an identity derived
             from the 'routing-protocol' base identity."
        }
        leaf name {
            type string;
            description
            "An arbitrary name of the routing protocol instance."
        }
        leaf description {
            type string;
            description
            "Textual description of the routing protocol
             instance."
        }
    }
    container static-routes {
        when ".@type='rt:static'" {
            description
            "This container is only valid for the 'static'
             routing protocol."
        }
        description
        "Configuration of the 'static' pseudo-protocol."
Address-family-specific modules augment this node with their lists of routes."
}]
}
}
container ribs {
  description
  "Configuration of RIBs."
}

list rib {
  key "name";
  description
  "Each entry contains configuration for a RIB identified by the 'name' key.

Entries having the same key as a system-controlled entry of the list /routing-state/routing-instance/ribs/rib are used for configuring parameters of that entry. Other entries define additional user-controlled RIBs.";
}

leaf name {
  type string;
  description
  "The name of the RIB.

For system-controlled entries, the value of this leaf must be the same as the name of the corresponding entry in state data.

For user-controlled entries, an arbitrary name can be used.";
}

uses address-family {
  description
  "Address family of the RIB.

It is mandatory for user-controlled RIBs. For system-controlled RIBs it can be omitted, otherwise it must match the address family of the corresponding state entry.";
}

leaf description {
  type string;
  description
  "Textual description of the RIB.";
}
rpc fib-route {
  description
  "Return the active FIB route that a routing-instance uses for
  sending packets to a destination address.";
  input {
    leaf routing-instance-name {
      // type routing-instance-state-ref;
      type string;
      mandatory "true";
      description
      "Name of the routing instance whose forwarding information
      base is being queried.

      If the routing instance with name equal to the value of
      this parameter doesn't exist, then this operation SHALL
      fail with error-tag 'data-missing' and error-app-tag
      'routing-instance-not-found'.";
    }
    container destination-address {
      description
      "Network layer destination address.

      Address family specific modules MUST augment this
      container with a leaf named 'address'.";
      uses address-family;
    }
  }
  output {
    container route {
      description
      "The active FIB route for the specified destination.

      If the routing instance has no active FIB route for the
      destination address, no output is returned - the server
      SHALL send an <rpc-reply> containing a single element
      <ok>.

      Address family specific modules MUST augment this list
      with appropriate route contents.";
      uses address-family;
    }
  }
}
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class EditOperationType(Enum):
    
    EditOperationType (Enum Class)
    
    NETCONF 'operation' attribute values
.. data:: merge = 0

The configuration data identified by the
element containing this attribute is merged
with the configuration at the corresponding
level in the configuration datastore identified
by the target parameter.

.. data:: replace = 1

The configuration data identified by the element
containing this attribute replaces any related
configuration in the configuration datastore
identified by the target parameter. If no such
configuration data exists in the configuration
datastore, it is created. Unlike a
<copy-config> operation, which replaces the
entire target configuration, only the configuration
actually present in the config parameter is affected.

.. data:: create = 2

The configuration data identified by the element
containing this attribute is added to the
configuration if and only if the configuration
data does not already exist in the configuration
datastore. If the configuration data exists, an
<rpc-error> element is returned with an
<error-tag> value of ‘data-exists’. 
.. data:: delete = 3

The configuration data identified by the element containing this attribute is deleted from the configuration if and only if the configuration data currently exists in the configuration datastore. If the configuration data does not exist, an <rpc-error> element is returned with an <error-tag> value of 'data-missing'.

.. data:: remove = 4

The configuration data identified by the element containing this attribute is deleted from the configuration if the configuration data currently exists in the configuration datastore. If the configuration data does not exist, the 'remove' operation is silently ignored by the server.

```python
merge = Enum.YLeaf(0, "merge")
replace = Enum.YLeaf(1, "replace")
create = Enum.YLeaf(2, "create")
delete = Enum.YLeaf(3, "delete")
remove = Enum.YLeaf(4, "remove")
```

class ErrorSeverityType(Enum):
```
ErrorSeverityType (Enum Class)

NETCONF Error Severity

.. data:: error = 0

Error severity

.. data:: warning = 1

Warning severity

```python
error = Enum.YLeaf(0, "error")

warning = Enum.YLeaf(1, "warning")
```

class ErrorTagType(Enum):

```python
    in_use = 0

    invalid_value = 1

    too_big = 2

    missing_attribute = 3

    bad_attribute = 4
```

The request requires a resource that already is in use.

.. data:: invalid_value = 1

The request specifies an unacceptable value for one or more parameters.

.. data:: too_big = 2

The request or response (that would be generated) is too large for the implementation to handle.

.. data:: missing_attribute = 3

An expected attribute is missing.

.. data:: bad_attribute = 4
An attribute value is not correct; e.g., wrong type, out of range, pattern mismatch.

.. data:: unknown_attribute = 5

An unexpected attribute is present.

.. data:: missing_element = 6

An expected element is missing.

.. data:: bad_element = 7

An element value is not correct; e.g., wrong type, out of range, pattern mismatch.

.. data:: unknown_element = 8

An unexpected element is present.

.. data:: unknown_namespace = 9

An unexpected namespace is present.

.. data:: access_denied = 10

Access to the requested protocol operation or data model is denied because authorization failed.

.. data:: lock_denied = 11

Access to the requested lock is denied because the lock is currently held by another entity.

.. data:: resource_denied = 12

Request could not be completed because of insufficient resources.

.. data:: rollback_failed = 13

Request to roll back some configuration change (via
rollback-on-error or <discard-changes> operations) was not completed for some reason.

.. data:: data_exists = 14

Request could not be completed because the relevant data model content already exists. For example, a 'create' operation was attempted on data that already exists.

.. data:: data_missing = 15

Request could not be completed because the relevant data model content does not exist. For example, a 'delete' operation was attempted on data that does not exist.

.. data:: operation_not_supported = 16

Request could not be completed because the requested operation is not supported by this implementation.

.. data:: operation_failed = 17

Request could not be completed because the requested operation failed for some reason not covered by any other error condition.

.. data:: partial_operation = 18

This error-tag is obsolete, and SHOULD NOT be sent by servers conforming to this document.

.. data:: malformed_message = 19

A message could not be handled because it failed to
be parsed correctly. For example, the message is not
well-formed XML or it uses an invalid character set.

```python
in_use = Enum.YLeaf(0, "in-use")
invalid_value = Enum.YLeaf(1, "invalid-value")
too_big = Enum.YLeaf(2, "too-big")
missing_attribute = Enum.YLeaf(3, "missing-attribute")
bad_attribute = Enum.YLeaf(4, "bad-attribute")
unknown_attribute = Enum.YLeaf(5, "unknown-attribute")
missing_element = Enum.YLeaf(6, "missing-element")
bad_element = Enum.YLeaf(7, "bad-element")
unknown_element = Enum.YLeaf(8, "unknown-element")
unknown_namespace = Enum.YLeaf(9, "unknown-namespace")
access_denied = Enum.YLeaf(10, "access-denied")
lock_denied = Enum.YLeaf(11, "lock-denied")
resource_denied = Enum.YLeaf(12, "resource-denied")
rollback_failed = Enum.YLeaf(13, "rollback-failed")
data_exists = Enum.YLeaf(14, "data-exists")
data_missing = Enum.YLeaf(15, "data-missing")
operation_not_supported = Enum.YLeaf(16, "operation-not-supported")
operation_failed = Enum.YLeaf(17, "operation-failed")
partial_operation = Enum.YLeaf(18, "partial-operation")
malformed_message = Enum.YLeaf(19, "malformed-message")
```
class GetConfig(Entity):
  
  Retrieve all or part of a specified configuration.

  .. attribute:: input

  **type**: `Input <ydk.models.ietf.ietf_netconf.GetConfig.Input>`

  .. attribute:: output

  **type**: `Output <ydk.models.ietf.ietf_netconf.GetConfig.Output>`

  

_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
  super(GetConfig, self).__init__()
  self._top_entity = None

  self.yang_name = "get-config"
  self.yang_parent_name = "ietf-netconf"
  self.is_top_level_class = True
  self.has_list_ancestor = False
  self.ylist_key_names = []
  self._child_classes = OrderedDict()
  self._leafs = OrderedDict()

  self.input = GetConfig.Input()
  self.input.parent = self
  self._children_name_map["input"] = "input"

  self.output = GetConfig.Output()
  self.output.parent = self
  self._children_name_map["output"] = "output"
  self._segment_path = lambda: "ietf-netconf:get-config"
  self._is_frozen = True

class Input(Entity):
  
  

---

Open Source Used In BGP TE Controller Version 4.3.0  1848
.. attribute:: source

Particular configuration to retrieve

.. attribute:: filter

Subtree or XPath filter to use
**type**: anyxml

.. attribute:: with_defaults

The explicit defaults processing mode requested
**type**: :py:class:`WithDefaultsMode <ydk.models.ietf.ietf_netconf_with_defaults.WithDefaultsMode>`

```python
_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(GetConfig.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "get-config"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self._child_classes = OrderedDict(
        [('source', ('source', GetConfig.Input.Source))])
    self._leafs = OrderedDict(
        [('filter', (YLeaf(YType.str, 'filter'), ['str']))],
        [('with_defaults', (YLeaf(YType.enumeration, 'ietf-netconf-with-defaults:with-defaults'),
            ('ydk.models.ietf.ietf_netconf_with_defaults', 'WithDefaultsMode', [])))])
    self.filter = None
    self.with_defaults = None

    self.source = GetConfig.Input.Source()
    self.source.parent = self
    self._children_name_map['source'] = "source"
    self._segment_path = lambda: "input"
    self._absolute_path = lambda: "ietf-netconf:get-config/%s" % self._segment_path()
    self._is_frozen = True

def __setattr__(self, name, value):
```
class Source(Entity):
    """
    Particular configuration to retrieve.
    """

    .. attribute:: candidate

    The candidate configuration is the config source
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: running

    The running configuration is the config source
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: startup

    The startup configuration is the config source. This is optional-to-implement on the server because not all servers will support filtering for this datastore
    **type**: :py:class:`Empty<ydk.types.Empty>`

    """

_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(GetConfig.Input.Source, self).__init__()

    self.yang_name = "source"
self.yang_parent_name = "input"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([(
    'candidate', (YLeaf(YType.empty, 'candidate'), ['Empty'])),
    ('running', (YLeaf(YType.empty, 'running'), ['Empty'])),
    ('startup', (YLeaf(YType.empty, 'startup'), ['Empty'])),
])
self.candidate = None
self.running = None
self.startup = None
self._segment_path = lambda: "source"
self._absolute_path = lambda: "ietf-netconf:get-config/input/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(GetConfig.Input.Source, ['candidate', 'running', 'startup'], name, value)

class Output(Entity):
    ""

    .. attribute:: data

    Copy of the source datastore subset that matched the filter criteria (if any). An empty data container indicates that the request did not produce any results
    **type**: anyxml

    ""

    _prefix = 'nc'
    _revision = '2011-06-01'

def __init__(self):
    super(GetConfig.Output, self).__init__()

    self.yang_name = "output"
    self.yang_parent_name = "get-config"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([('data', (YLeaf(YType.str, 'data'), ['str']))])
    self.data = None
    self._segment_path = lambda: "output"
    self._absolute_path = lambda: "ietf-netconf:get-config/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(GetConfig.Output, ['data'], name, value)

    def clone_ptr(self):
        self._top_entity = GetConfig()
        return self._top_entity
class EditConfig(Entity):

"""
The <edit-config> operation loads all or part of a specified configuration to the specified target configuration.
"""

.. attribute:: input

**type**:: py:class:`Input <ydk.models.ietf.ietf_netconf.EditConfig.Input>`

```
_prefix = 'nc'
_revision = '2011-06-01'
```

def __init__(self):
    super(EditConfig, self).__init__()
    self._top_entity = None

    self.yang_name = "edit-config"
    self.yang_parent_name = "ietf-netconf"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict()  # dict\[
    self._leafs = OrderedDict()  # dict\[

    self.input = EditConfig.Input()
    self.input.parent = self
    self._children_name_map["input"] = "input"

    self._segment_path = lambda: "ietf-netconf:edit-config"
    self._is_frozen = True

class Input(Entity):

"""
"""

.. attribute:: target

Particular configuration to edit
**type**:: py:class:`Target <ydk.models.ietf.ietf_netconf.EditConfig.Input.Target>`

.. attribute:: default_operation

The default operation to use
('Input.TestOption')
),
  ('error_option', (YLeaf(YType.enumeration, 'error-option'), [(YLeaf(YType.enumeration, 'error-option'), [('ydk.models.ietf.ietf_netconf', 'EditConfig', 'Input.ErrorOption')])]),
  ('config', (YLeaf(YType.str, 'config'), ['str']))),
  ('url', (YLeaf(YType.str, 'url'), ['str']))),
)
self.default_operation = None
self.test_option = None
self.error_option = None
self.config = None
self.url = None

self.target = EditConfig.Input.Target()
self.target.parent = self
self._children_name_map['target'] = "target"
self._segment_path = lambda: "input"
self._absolute_path = lambda: "ietf-netconf:edit-config/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(EditConfig.Input, ['default_operation', 'test_option', 'error_option', 'config', 'url'], name, value)

class DefaultOperation(Enum):
    """
    DefaultOperation (Enum Class)
    
    The default operation to use.
    
    .. data:: merge = 0
    
    The default operation is merge.
    
    .. data:: replace = 1
    
    The default operation is replace.
    
    .. data:: none = 2
    
    There is no default operation.
    
    """

    merge = Enum.YLeaf(0, "merge")
    replace = Enum.YLeaf(1, "replace")
    none = Enum.YLeaf(2, "none")
class ErrorOption(Enum):
    """
    ErrorOption (Enum Class)
    The error option to use.
    .. data:: stop_on_error = 0
    The server will stop on errors.
    .. data:: continue_on_error = 1
    The server may continue on errors.
    .. data:: rollback_on_error = 2
    The server will roll back on errors.
    This value can only be used if the 'rollback-on-error'
    feature is supported.
    """

    stop_on_error = Enum.YLeaf(0, "stop-on-error")
    continue_on_error = Enum.YLeaf(1, "continue-on-error")
    rollback_on_error = Enum.YLeaf(2, "rollback-on-error")

class TestOption(Enum):
    """
    TestOption (Enum Class)
    The test option to use.
    .. data:: test_then_set = 0
    The server will test and then set if no errors.
    .. data:: set = 1
    The server will set without a test first.
    .. data:: test_only = 2
    """
The server will only test and not set, even if there are no errors.

```python

test_then_set = Enum.YLeaf(0, "test-then-set")

set = Enum.YLeaf(1, "set")

test_only = Enum.YLeaf(2, "test-only")
```

class Target(Entity):
    
    Particular configuration to edit.

    .. attribute:: candidate

    The candidate configuration is the config target

    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: running

    The running configuration is the config source

    **type**: :py:class:`Empty<ydk.types.Empty>`

    ..

    _prefix = 'nc'
    _revision = '2011-06-01'

def __init__(self):
    super(EditConfig.Input.Target, self).__init__()

    self.yang_name = "target"
    self.yang_parent_name = "input"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'candidate': (YLeaf(YType.empty, 'candidate'), ['Empty<ydk.types.Empty>']),
        'running': (YLeaf(YType.empty, 'running'), ['Empty<ydk.types.Empty>']),
    })

```
`self.candidate = None
self.running = None
self._segment_path = lambda: "target"
self._absolute_path = lambda: "ietf-netconf:edit-config/input/%s" % self._segment_path()
self._is_frozen = True`

def __setattr__(self, name, value):
    self._perform_setattr(EditConfig.Input.Target, ['candidate', 'running'], name, value)

def clone_ptr(self):
    self._top_entity = EditConfig()
    return self._top_entity

class CopyConfig(Entity):
    """
    Create or replace an entire configuration datastore with the
    contents of another complete configuration datastore.
    """

    .. attribute:: input

    **type**: :py:class:`Input <ydk.models.ietf.ietf_netconf.CopyConfig.Input>`

    """

    _prefix = 'nc'
    _revision = '2011-06-01'

def __init__(self):
    super(CopyConfig, self).__init__()
    self._top_entity = None
    self.yang_name = "copy-config"
    self.yang_parent_name = "ietf-netconf"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict()
    self.input = CopyConfig.Input()
    self.input.parent = self
    self._children_name_map['input'] = "input"
    self._segment_path = lambda: "ietf-netconf:copy-config"
    self._is_frozen = True
class Input(Entity):
    """
    .. attribute:: target
    Particular configuration to copy to
    **type**: :py:class:`Target <ydk.models.ietf.ietf_netconf.CopyConfig.Input.Target>`
    .. attribute:: source
    Particular configuration to copy from
    .. attribute:: with_defaults
    The explicit defaults processing mode requested
    **type**: :py:class:`WithDefaultsMode <ydk.models.ietf.ietf_netconf_with_defaults.WithDefaultsMode>`
    """

    _prefix = 'nc'
    _revision = '2011-06-01'

def __init__(self):
    super(CopyConfig.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "copy-config"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict(
        [('with_defaults', (YLeaf(YType.enumeration, 'ietf-netconf-with-defaults:with-defaults'),
           ['ietf-netconf-with-defaults:with-defaults'])),
        ]
    )
    self.with_defaults = None

    self.target = CopyConfig.Input.Target()
    self.target.parent = self
    self._children_name_map['target'] = "target"
self.source = CopyConfig.Input.Source()
self.source.parent = self
self._children_name_map["source"] = "source"
self._segment_path = lambda: "input"
self._absolute_path = lambda: "ietf-netconf:copy-config/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(CopyConfig.Input, ['with_defaults'], name, value)

class Target(Entity):
    
    Particular configuration to copy to.

    .. attribute:: candidate

    The candidate configuration is the config target
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: running

    The running configuration is the config target. This is optional-to-\-implement on the server
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: startup

    The startup configuration is the config target
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: url

    The URL\-based configuration is the config target
    **type**: str

    ..

    _prefix = 'nc'
    _revision = '2011-06-01'

    def __init__(self):
        super(CopyConfig.Input.Target, self).__init__()
        self.yang_name = "target"
        self.yang_parent_name = "input"
        self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict(
    ('candidate', (YLeaf(YType.empty, 'candidate'), ['Empty'])),
    ('running', (YLeaf(YType.empty, 'running'), ['Empty'])),
    ('startup', (YLeaf(YType.empty, 'startup'), ['Empty'])),
    ('url', (YLeaf(YType.str, 'url'), ['str'])),
)
self.candidate = None
self.running = None
self.startup = None
self.url = None
self._segment_path = lambda: "target"
self._absolute_path = lambda: "ietf-netconf:copy-config/input/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(CopyConfig.Input.Target, ['candidate', 'running', 'startup', 'url'], name, value)

class Source(Entity):
    """
    Particular configuration to copy from.
    """
    .. attribute:: candidate

    The candidate configuration is the config source
    **type**: :py:obj:`Empty <ydk.types.Empty>`

    .. attribute:: running

    The running configuration is the config source
    **type**: :py:obj:`Empty <ydk.types.Empty>`

    .. attribute:: startup

    The startup configuration is the config source
    **type**: :py:obj:`Empty <ydk.types.Empty>`

    .. attribute:: url

    The URL-based configuration is the config source
    **type**: str

    .. attribute:: config

    Inline Config content: `<config>` element. Represents an entire configuration datastore, not a subset of the
running datastore
 **type**: anyxml

..."

_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(CopyConfig.Input.Source, self).__init__()

    self.yang_name = "source"
    self.yang_parent_name = "input"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yleaf_key_names = []
    self._child_classes = OrderedDict(
        [('candidate', (YLeaf(YType.empty, 'candidate'), ['Empty'])),
         ('running', (YLeaf(YType.empty, 'running'), ['Empty'])),
         ('startup', (YLeaf(YType.empty, 'startup'), ['Empty'])),
         ('url', (YLeaf(YType.str, 'url'), ['str'])),
         ('config', (YLeaf(YType.str, 'config'), ['str']))
        ]
    )
    self.candidate = None
    self.running = None
    self.startup = None
    self.url = None
    self.config = None
    self._segment_path = lambda: "source"
    self._absolute_path = lambda: "ietf-netconf:copy-config/input/%s" % self._segment_path()
    self._is_frozen = True

    def _setattr_(self, name, value):
        self._perform_setattr(CopyConfig.Input.Source, ['candidate', 'running', 'startup', 'url', 'config'], name, value)

def clone_ptr(self):
    self._top_entity = CopyConfig()
    return self._top_entity

class DeleteConfig(Entity):
    ""
    Delete a configuration datastore.
    
    .. attribute:: input

**type**

.. class:: Input(ydk.models.ietf.ietf_netconf.DeleteConfig.Input)

""

__prefix__ = 'nc'
__revision__ = '2011-06-01'

def __init__(self):
    super(DeleteConfig, self).__init__()
    self._top_entity = None

    self.yang_name = "delete-config"
    self.yang_parent_name = "ietf-netconf"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict()
    self.input = DeleteConfig.Input()
    self.input.parent = self
    self._children_name_map['input'] = "input"

    self._segment_path = lambda: "ietf-netconf:delete-config"
    self._is_frozen = True

class Input(Entity):
"""

.. attribute:: target

Particular configuration to delete

**type**

.. class:: Target(ydk.models.ietf.ietf_netconf.DeleteConfig.Input.Target)

""

__prefix__ = 'nc'
__revision__ = '2011-06-01'

def __init__(self):
    super(DeleteConfig.Input, self).__init__()
class Target(Entity):
    
    Particular configuration to delete.

    .. attribute:: startup

    The startup configuration is the config target
    
    .. type:: Empty

    .. attribute:: url

    The URL-based configuration is the config target
    
    .. type:: str

    

    _prefix = 'nc'
    _revision = '2011-06-01'

    def __init__(self):
        super(DeleteConfig.Input.Target, self).__init__()

        self.yang_name = "target"
        self.yang_parent_name = "delete-config"
        self.is_top_level_class = False
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._child_classes = None
        self._leafs = None

        self.target = DeleteConfig.Input.Target()
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([  
('startup', (YLeaf(YType.empty, 'startup'), ['Empty'])),  
('url', (YLeaf(YType.str, 'url'), ['str'])),  
])
self.startup = None
self.url = None
self._segment_path = lambda: "target"
self._absolute_path = lambda: "ietf-netconf:delete-config/input/%s" % self._segment_path()

self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(DeleteConfig.Input.Target, ['startup', 'url'], name, value)

def clone_ptr(self):
    self._top_entity = DeleteConfig()
    return self._top_entity

class Lock(Entity):

    The lock operation allows the client to lock the configuration
    system of a device.

    .. attribute:: input

    **type**: :py:class:`Input <ydk.models.ietf.ietf_netconf.Lock.Input>`

    ..

    ..

    _prefix = 'nc'
    _revision = '2011-06-01'

    def __init__(self):
        super(Lock, self).__init__()
        self._top_entity = None

        self.yang_name = "lock"
        self.yang_parent_name = "ietf-netconf"
        self.is_top_level_class = True
        self.has_list_ancestor = False
        self.is_key_name = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict()

        self.input = Lock.Input()
self.input.parent = self
self._children_name_map["input"] = "input"
self._segment_path = lambda: "ietf-netconf:lock"
self._is_frozen = True

class Input(Entity):
    """
    .. attribute:: target

    Particular configuration to lock
    **type**: :py:class:`Target <ydk.models.ietf.ietf_netconf.Lock.Input.Target>`
    """

    _prefix = 'nc'
    _revision = '2011-06-01'

def __init__(self):
    super(Lock.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "lock"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yang_key_names = []
    self._child_classes = OrderedDict(["target", ("target", Lock.Input.Target)])
    self._leafs = OrderedDict()

    self.target = Lock.Input.Target()
    self.target.parent = self
    self._children_name_map["target"] = "target"
    self._segment_path = lambda: "input"
    self._absolute_path = lambda: "ietf-netconf:lock/%s" % self._segment_path()
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Lock.Input, [], name, value)

class Target(Entity):
    """
    Particular configuration to lock.
    """
.. attribute:: candidate

The candidate configuration is the config target

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: running

The running configuration is the config target

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: startup

The startup configuration is the config target

**type**: :py:class:`Empty<ydk.types.Empty>`

```
_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(Lock.Input.Target, self).__init__()

    self.yang_name = "target"
    self.yang_parent_name = "input"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.leaf_names = []
    self._child_classes = OrderedDict([
        ('candidate', (YLeaf(YType.empty, 'candidate'), ['Empty'])),
        ('running', (YLeaf(YType.empty, 'running'), ['Empty'])),
        ('startup', (YLeaf(YType.empty, 'startup'), ['Empty'])),
    ])
    self.candidate = None
    self.running = None
    self.startup = None
    self._segment_path = lambda: "target"
    self._absolute_path = lambda: "ietf-netconf:lock/input/%s" % self._segment_path()
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Lock.Input.Target, ['candidate', 'running', 'startup'], name, value)

def clone_ptr(self):
    self._top_entity = Lock()
class Unlock(Entity):

    """
    The unlock operation is used to release a configuration lock,
    previously obtained with the 'lock' operation.
    """

    .. attribute:: input

    **type**: :py:class:`Input <ydk.models.ietf.ietf_netconf.Unlock.Input>`

    _prefix = 'nc'
    _revision = '2011-06-01'

    def __init__(self):
        super(Unlock, self).__init__()
        self._top_entity = None

        self.yang_name = "unlock"
        self.yang_parent_name = "ietf-netconf"
        self.is_top_level_class = True
        self.has_list_ancestor = False
        self.leaf_list_key_names = []
        self._child_classes = OrderedDict()
        self._leafs = OrderedDict()

        self.input = Unlock.Input()
        self.input.parent = self
        self._children_name_map["input"] = "input"
        self._segment_path = lambda: "ietf-netconf:unlock"
        self._is_frozen = True

class Input(Entity):

    """

    .. attribute:: target

    Particular configuration to unlock
    **type**: :py:class:`Target <ydk.models.ietf.ietf_netconf.Unlock.Input.Target>`
```python
_prefix = 'nu'
_revision = '2011-06-01'

def __init__(self):
    super(Unlock.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "unlock"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([("target", Unlock.Input.Target)])
    self._leafs = OrderedDict()

    self.target = Unlock.Input.Target()
    self.target.parent = self

    self._children_name_map["target"] = "target"
    self._segment_path = lambda: "input"
    self._absolute_path = lambda: "ietf-netconf:unlock/%s" % self._segment_path()
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Unlock.Input, [], name, value)

class Target(Entity):
    """
    Particular configuration to unlock.
    """

    .. attribute:: candidate

    The candidate configuration is the config target
    **type**: Empty

    .. attribute:: running

    The running configuration is the config target
    **type**: Empty

    .. attribute:: startup

    The startup configuration is the config target
    **type**: Empty
```
_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(Unlock.Input.Target, self).__init__()

    self.yang_name = "target"
    self.yang_parent_name = "input"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = ORDERED_DICT(
        ('candidate', (YLeaf(YType.empty, 'candidate'), ['Empty'])),
        ('running', (YLeaf(YType.empty, 'running'), ['Empty'])),
        ('startup', (YLeaf(YType.empty, 'startup'), ['Empty'])),
    )
    self.candidate = None
    self.running = None
    self.startup = None
    self._segment_path = lambda: "target"
    self._absolute_path = lambda: "ietf-netconf:unlock/input/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(Unlock.Input.Target, ['candidate', 'running', 'startup'], name, value)

    def clone_ptr(self):
        self._top_entity = Unlock()
        return self._top_entity

class Get(Entity):

Retrieve running configuration and device state information.

.. attribute:: input

**type**: :py:class:`Input <ydk.models.ietf.ietf_netconf.Get.Input>`

.. attribute:: output

**type**: :py:class:`Output <ydk.models.ietf.ietf_netconf.Get.Output>`
def __init__(self):
    super(Get, self).__init__()
    self._top_entity = None

    self.yang_name = "get"
    self.yang_parent_name = "ietf-netconf"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict()

    self.input = Get.Input()
    self.input.parent = self
    self._children_name_map["input"] = "input"

    self.output = Get.Output()
    self.output.parent = self
    self._children_name_map["output"] = "output"
    self._segment_path = lambda: "ietf-netconf:get"
    self._is_frozen = True

class Input(Entity):
    .. attribute:: filter

    This parameter specifies the portion of the system configuration and state data to retrieve
    **type**: anyxml

    .. attribute:: with_defaults

    The explicit defaults processing mode requested
    **type**: py:class:`WithDefaultsMode <ydk.models.ietf.ietf_netconf_with_defaults.WithDefaultsMode>`
_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(Get.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "get"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'filter': (YLeaf(YType.str, 'filter'), ['str']),
        'with_defaults': (YLeaf(YType.enumeration, 'ietf-netconf-with-defaults:with-defaults'),
                          (YLeaf(YType.enumeration, 'ietf-netconf-with-defaults:with-defaults'),
                          ('ydk.models.ietf.ietf_netconf_with_defaults', 'WithDefaultsMode', ''))),
    })

    self.filter = None
    self.with_defaults = None

    self._segment_path = lambda: "input"
    self._absolute_path = lambda: "ietf-netconf:get/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(Get.Input, ['filter', 'with_defaults'], name, value)

class Output(Entity):

    .. attribute:: data

    Copy of the running datastore subset and/or state data that matched the filter criteria (if any). An empty data
    container indicates that the request did not produce any results
    **type**: anyxml

    ..

    _prefix = 'nc'
    _revision = '2011-06-01'

    def __init__(self):
        super(Get.Output, self).__init__()

        self.yang_name = "output"

        def __setattr__(self, name, value):
            self._perform_setattr(Get.Output, ['filter', 'with_defaults'], name, value)
self.yang_parent_name = "get"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict("
    (data', (YLeaf(YType.str, 'data'), ['str']), ['str']))
"
self.data = None
self._segment_path = lambda: "output"
self._absolute_path = lambda: "ietf-netconf:get/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Get.Output, ['data'], name, value)

def clone_ptr(self):
    self._top_entity = Get()
    return self._top_entity

class CloseSession(Entity):
    """
    Request graceful termination of a NETCONF session.
    """

    __prefix = 'nc'
    _revision = '2011-06-01'

    def __init__(self):
        super(CloseSession, self).__init__()
        self._top_entity = None

        self.yang_name = "close-session"
        self.yang_parent_name = "ietf-netconf"
        self.is_top_level_class = True
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._child_classes = OrderedDict("
            (data', (YLeaf(YType.str, 'data'), ['str']), ['str']))
"
        self.data = None
        self._segment_path = lambda: "ietf-netconf:close-session"
        self._is_frozen = True

    def clone_ptr(self):
        self._top_entity = CloseSession()
        return self._top_entity
class KillSession(Entity):
    
    Force the termination of a NETCONF session.

    .. attribute:: input


    ..

    _prefix = 'nc'
    _revision = '2011-06-01'

def __init__(self):
    super(KillSession, self).__init__()
    self._top_entity = None

    self.yang_name = "kill-session"
    self.yang_parent_name = "ietf-netconf"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict("
    self._leafs = OrderedDict("

    self.input = KillSession.Input()
    self.input.parent = self
    self._children_name_map["input"] = "input"
    self._segment_path = lambda: "ietf-netconf:kill-session"
    self._is_frozen = True

class Input(Entity):

    ..

    .. attribute:: session_id

    Particular session to kill
    **type**: int

    **range**: 1..4294967295

    **mandatory**: True
```python
_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(KillSession.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "kill-session"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        (YLeaf(YType.uint32, 'session-id'), ['int']),
    )
    self.session_id = None

    self._segment_path = lambda: "input"
    self._absolute_path = lambda: "ietf-netconf:kill-session/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(KillSession.Input, ['session_id'], name, value)

    def clone_ptr(self):
        self._top_entity = KillSession()
        return self._top_entity

class Commit(Entity):

    def __init__(self):
        Commit = Entity()

        self.session_id = None

        self._segment_path = lambda: "input"
        self._absolute_path = lambda: "ietf-netconf:kill-session/%s" % self._segment_path()

        def __setattr__(self, name, value):
            self._perform_setattr(KillSession.Input, ['session_id'], name, value)

        def clone_ptr(self):
            self._top_entity = KillSession()
            return self._top_entity

class Commit(Entity):

    def __init__(self):
        Commit = Entity()

        self.session_id = None

        self._segment_path = lambda: "input"
        self._absolute_path = lambda: "ietf-netconf:kill-session/%s" % self._segment_path()

        def __setattr__(self, name, value):
            self._perform_setattr(KillSession.Input, ['session_id'], name, value)

        def clone_ptr(self):
            self._top_entity = KillSession()
            return self._top_entity
```
def __init__(self):
    super(Commit, self).__init__()
    self._top_entity = None

    self.yang_name = "commit"
    self.yang_parent_name = "ietf-netconf"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([ ]) 
    self._leafs = OrderedDict([ ]) 
    self.input = Commit.Input()
    self.input.parent = self
    self._children_name_map["input"] = "input"
    self._segment_path = lambda: "ietf-netconf:commit"
    self._is_frozen = True

class Input(Entity):
    """
    .. attribute:: confirmed

    Requests a confirmed commit
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: confirm_timeout

    The timeout interval for a confirmed commit
    **type**: int

    **range**: 1..4294967295

    **units**: seconds

    **default value**: 600

    .. attribute:: persist

    This parameter is used to make a confirmed commit persistent. A persistent confirmed commit is not aborted if
    the NETCONF session terminates. The only way to abort a persistent confirmed commit is to let the timer expire, or
    to use the <commit/> operation. The value of this parameter is a token that must be given in the 'persist-id' parameter
    of <commit/> or <cancel-commit/> operations in order to confirm or cancel the persistent confirmed commit. The token should be a random string
    **type**: str
This parameter is given in order to commit a persistent confirmed commit. The value must be equal to the value given in the 'persist' parameter to the <commit> operation. If it does not match, the operation fails with an 'invalid-value' error

**type**: str

---

```
_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(Commit.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "commit"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        ('confirmed', (YLeaf(YType.empty, 'confirmed'), ['Empty'])),
        ('confirm_timeout', (YLeaf(YType.uint32, 'confirm-timeout'), ['int'])),
        ('persist', (YLeaf(YType.str, 'persist'), ['str'])),
        ('persist_id', (YLeaf(YType.str, 'persist-id'), ['str'])),
    )
    self.confirmed = None
    self.confirm_timeout = None
    self.persist = None
    self.persist_id = None
    self._segment_path = lambda: "input"
    self._absolute_path = lambda: "ietf-netconf:commit/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(Commit.Input, ['confirmed', 'confirm_timeout', 'persist', 'persist_id'], name, value)

    def clone_ptr(self):
        self._top_entity = Commit()
        return self._top_entity

class DiscardChanges(Entity):
    
    Revert the candidate configuration to the current
running configuration.

... 

_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(DiscardChanges, self).__init__()
    self._top_entity = None

    self.yang_name = "discard-changes"
    self.yang_parent_name = "ietf-netconf"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ialist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict()
    self._segment_path = lambda: "ietf-netconf:discard-changes"
    self._is_frozen = True

def clone_ptr(self):
    self._top_entity = DiscardChanges()
    return self._top_entity

class CancelCommit(Entity):
    
    This operation is used to cancel an ongoing confirmed commit.
    If the confirmed commit is persistent, the parameter
    'persist-id' must be given, and it must match the value of the
    'persist' parameter.

    .. attribute:: input

    **type**: :py:class:`Input <ydk.models.ietf.ietf_netconf.CancelCommit.Input>`

... 

_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(CancelCommit, self).__init__()}
self._top_entity = None

self.yang_name = "cancel-commit"
self.yang_parent_name = "ietf-netconf"
self.is_top_level_class = True
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict()
self._leafs = OrderedDict()

self.input = CancelCommit.Input()
self.input.parent = self
self._children_name_map["input"] = "input"
self._segment_path = lambda: "ietf-netconf:cancel-commit"
self._is_frozen = True

class Input(Entity):
    """
    .. attribute:: persist_id

    This parameter is given in order to cancel a persistent confirmed commit. The value must be equal to the value
given in the 'persist' parameter to the <commit> operation. If it does not match, the operation fails with an 'invalid-
value' error
    
    **type**: str

    """

    _prefix = 'nc'
    _revision = '2011-06-01'

def __init__(self):
    super(CancelCommit.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "cancel-commit"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('persist_id', (YLeaf(YType.str, 'persist-id'), ['str']))
    )
    self.persist_id = None
self._segment_path = lambda: "input"
self._absolute_path = lambda: "ietf-netconf:cancel-commit/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(CancelCommit.Input, ['persist_id'], name, value)

def clone_ptr(self):
    self._top_entity = CancelCommit()
    return self._top_entity

class Validate(Entity):
    
    Validates the contents of the specified configuration.

    .. attribute:: input

    **type**: :py:class:`Input <ydk.models.ietf.ietf_netconf.Validate.Input>`

    ..


    ..

    _prefix = 'nc'
    _revision = '2011-06-01'

def __init__(self):
    super(Validate, self).__init__()
    self._top_entity = None

    self.yang_name = "validate"
    self.yang_parent_name = "ietf-netconf"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    )
    self._leafs = OrderedDict(
    self.input = Validate.Input()
    self.input.parent = self
    self._children_name_map["input"] = "input"
    self._segment_path = lambda: "ietf-netconf:validate"
    self._is_frozen = True

    class Input(Entity):
        
        ..

        ..

        **

        ..

        ..
.. attribute:: source

Particular configuration to validate


```

_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(Validate.Input, self).__init__()

    self.yang_name = "input"
    self.yang_parent_name = "validate"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        ("source", (Validate.Input.Source,))
    )
    self._leafs = OrderedDict()
    self.source = Validate.Input.Source()
    self.source.parent = self
    self._children_name_map["source"] = "source"
    self._segment_path = lambda: "source"
    self._absolute_path = lambda: "ietf-netconf:validate/source" % self._segment_path()
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Validate.Input, [], name, value)

class Source(Entity):
    ""
    Particular configuration to validate.
    ""

    .. attribute:: candidate

    The candidate configuration is the config source

    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: running

    The running configuration is the config source
.. attribute:: startup

The startup configuration is the config source

.. attribute:: url

The URL-based configuration is the config source

.. attribute:: config

Inline Config content: <config> element. Represents an entire configuration datastore, not a subset of the running datastore

```
_prefix = 'nc'
_revision = '2011-06-01'

def __init__(self):
    super(Validate.Input.Source, self).__init__()

    self.yang_name = "source"
    self.yang_parent_name = "input"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yleafkey_names = []
    self._child_classes = OrderedDict([(
        'candidate', (YLeaf(YType.empty, 'candidate'), ['Empty'])),
        ('running', (YLeaf(YType.empty, 'running'), ['Empty'])),
        ('startup', (YLeaf(YType.empty, 'startup'), ['Empty'])),
        ('url', (YLeaf(YType.str, 'url'), ['str'])),
        ('config', (YLeaf(YType.str, 'config'), ['str']))])
    self.candidate = None
    self.running = None
    self.startup = None
    self.url = None
    self.config = None

    self._segment_path = lambda: "source"
    self._absolute_path = lambda: "ietf-netconf:validate/input/%s" % self._segment_path()
```
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Validate.Input.Source, ['candidate', 'running', 'startup', 'url', 'config'], name, value)

def clone_ptr(self):
    self._top_entity = Validate()
    return self._top_entity

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-
  0.1.5.post2/ydk/models/ietf/ietf_netconf.py
No license file was found, but licenses were detected in source scan.

module ietf-interfaces {
    namespace "urn:ietf:params:xml:ns:yang:ietf-interfaces";
    prefix if;

    import ietf-yang-types {
        prefix yang;
    }

    organization
        "IETF NETMOD (NETCONF Data Modeling Language) Working Group";
    contact
        "WG Web:  <http://tools.ietf.org/wg/netmod/>
          WG List:  <mailto:netmod@ietf.org>
          WG Chair: Thomas Nadeau
                        <mailto:tnadeau@lucidvision.com>
          WG Chair: Juergen Schoenwaelder
                        <mailto:j.schoenwaelder@jacobs-university.de>
          Editor: Martin Bjorklund
                        <mailto:mbj@tail-f.com>"
    description
        "This module contains a collection of YANG definitions for
        managing network interfaces.

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    Relating to IETF Documents
This version of this YANG module is part of RFC 7223; see the RFC itself for full legal notices.

revision 2014-05-08 {
  description
    "Initial revision.";
  reference "RFC 7223: A YANG Data Model for Interface Management";
}

feature arbitrary-names {
  description
    "This feature indicates that the device allows user-controlled interfaces to be named arbitrarily.";
}

feature pre-provisioning {
  description
    "This feature indicates that the device supports pre-provisioning of interface configuration, i.e., it is possible to configure an interface whose physical interface hardware is not present on the device.";
}

feature if-mib {
  description
    "This feature indicates that the device implements the IF-MIB.";
  reference "RFC 2863: The Interfaces Group MIB";
}

identity interface-type {
  description
    "Base identity from which specific interface types are derived.";
}

typedef interface-ref {
  type leafref {
    path "/if:interfaces/if:interface/if:name";
  }
  description
    "This type is used by data models that need to reference configured interfaces.";
}

typedef interface-state-ref {
type leafref {
    path "if:interfaces-state/if:interface/if:name";
}
description
    "This type is used by data models that need to reference the operationally present interfaces.";
}

container interfaces {
    description
        "Interface configuration parameters.";
    list interface {
        key "name";
        description
            "The list of configured interfaces on the device.

            The operational state of an interface is available in the /interfaces-state/interface list. If the configuration of a system-controlled interface cannot be used by the system (e.g., the interface hardware present does not match the interface type), then the configuration is not applied to the system-controlled interface shown in the /interfaces-state/interface list. If the configuration of a user-controlled interface cannot be used by the system, the configured interface is not instantiated in the /interfaces-state/interface list.";
        leaf name {
            type string;
            description
                "The name of the interface.

                A device MAY restrict the allowed values for this leaf, possibly depending on the type of the interface.

                For system-controlled interfaces, this leaf is the device-specific name of the interface. The 'config false' list /interfaces-state/interface contains the currently existing interfaces on the device.

                If a client tries to create configuration for a system-controlled interface that is not present in the /interfaces-state/interface list, the server MAY reject the request if the implementation does not support pre-provisioning of interfaces or if the name refers to an interface that can never exist in the system. A NETCONF server MUST reply with an rpc-error with the error-tag 'invalid-value' in this case.

                If the device supports pre-provisioning of interface
configuration, the 'pre-provisioning' feature is advertised.

If the device allows arbitrarily named user-controlled interfaces, the 'arbitrary-names' feature is advertised.

When a configured user-controlled interface is created by the system, it is instantiated with the same name in the /interface-state/interface list.

leaf description {
  type string;
  description
  "A textual description of the interface.

  A server implementation MAY map this leaf to the ifAlias MIB object. Such an implementation needs to use some mechanism to handle the differences in size and characters allowed between this leaf and ifAlias. The definition of such a mechanism is outside the scope of this document.

  Since ifAlias is defined to be stored in non-volatile storage, the MIB implementation MUST map ifAlias to the value of 'description' in the persistently stored datastore.

  Specifically, if the device supports ':startup', when ifAlias is read the device MUST return the value of 'description' in the 'startup' datastore, and when it is written, it MUST be written to the 'running' and 'startup' datastores. Note that it is up to the implementation to decide whether to modify this single leaf in 'startup' or perform an implicit copy-config from 'running' to 'startup'.

  If the device does not support ':startup', ifAlias MUST be mapped to the 'description' leaf in the 'running' datastore."
}

reference "RFC 2863: The Interfaces Group MIB - ifAlias";

leaf type {
  type identityref {
    base interface-type;
  }
  mandatory true;
  description
  "The type of the interface."
When an interface entry is created, a server MAY initialize the type leaf with a valid value, e.g., if it is possible to derive the type from the name of the interface.

If a client tries to set the type of an interface to a value that can never be used by the system, e.g., if the type is not supported or if the type does not match the name of the interface, the server MUST reject the request. A NETCONF server MUST reply with an rpc-error with the error-tag 'invalid-value' in this case."
reference "RFC 2863: The Interfaces Group MIB - ifType";

leaf enabled {
  type boolean;
default "true";
description
  "This leaf contains the configured, desired state of the interface.

  Systems that implement the IF-MIB use the value of this leaf in the 'running' datastore to set IF-MIB.ifAdminStatus to 'up' or 'down' after an ifEntry has been initialized, as described in RFC 2863.

  Changes in this leaf in the 'running' datastore are reflected in ifAdminStatus, but if ifAdminStatus is changed over SNMP, this leaf is not affected.";
reference "RFC 2863: The Interfaces Group MIB - ifAdminStatus";
}

leaf link-up-down-trap-enable {
  if-feature "if-mib";
type enumeration {
    enum "enabled" {
      value 1;
    }
    enum "disabled" {
      value 2;
    }
  }
description
  "Controls whether linkUp/linkDown SNMP notifications should be generated for this interface.

  If this node is not configured, the value 'enabled' is operationally used by the server for interfaces that do not operate on top of any other interface (i.e., there are
no 'lower-layer-if' entries), and 'disabled' otherwise.

"RFC 2863: The Interfaces Group MIB - ifLinkUpDownTrapEnable";

} }

} }

container interfaces-state {
  config false;
  description "Data nodes for the operational state of interfaces."
}

list interface {
  key "name";
  description "The list of interfaces on the device.

  System-controlled interfaces created by the system are always present in this list, whether they are configured or not.";

  leaf name {
    type string;
    description "The name of the interface.

    A server implementation MAY map this leaf to the ifName MIB object. Such an implementation needs to use some mechanism to handle the differences in size and characters allowed between this leaf and ifName. The definition of such a mechanism is outside the scope of this document."
  }

  leaf type {
    type identityref {
      base interface-type;
    }
    mandatory true;
    description "The type of the interface."
  }

  leaf admin-status {
    if-feature "if-mib";
    type enumeration {
      enum "up" {
        value 1;
        description "Ready to pass packets."
      }
    }
  }

"RFC 2863: The Interfaces Group MIB - ifName";

reference "RFC 2863: The Interfaces Group MIB - ifName";

"RFC 2863: The Interfaces Group MIB - ifType";

reference "RFC 2863: The Interfaces Group MIB - ifType";

leaf admin-status {
  if-feature "if-mib";
  type enumeration {
    enum "up" {
      value 1;
      description "Ready to pass packets."
    }
  }

"RFC 2863: The Interfaces Group MIB - ifLinkUpDownTrapEnable";

""
enum "down" {
  value 2;
  description
  "Not ready to pass packets and not in some test mode.";
}
enum "testing" {
  value 3;
  description
  "In some test mode.";
}
mandatory true;
description
"The desired state of the interface.

  This leaf has the same read semantics as ifAdminStatus.";
reference "RFC 2863: The Interfaces Group MIB - ifAdminStatus";
}
leaf oper-status {
  type enumeration {
    enum "up" {
      value 1;
      description
      "Ready to pass packets.";
    }
    enum "down" {
      value 2;
      description
      "The interface does not pass any packets.";
    }
    enum "testing" {
      value 3;
      description
      "In some test mode. No operational packets can be passed.";
    }
    enum "unknown" {
      value 4;
      description
      "Status cannot be determined for some reason.";
    }
    enum "dormant" {
      value 5;
      description
      "Waiting for some external event.";
    }
    enum "not-present" {
      value 6;
description
"Some component (typically hardware) is missing.";
}
enum "lower-layer-down" {
  value 7;
  description
  "Down due to state of lower-layer interface(s).";
}
}
mandatory true;
description
"The current operational state of the interface.
This leaf has the same semantics as ifOperStatus.";
reference "RFC 2863: The Interfaces Group MIB - ifOperStatus";
}
leaf last-change {
  type yang:date-and-time;
description
  "The time the interface entered its current operational
  state.  If the current state was entered prior to the
  last re-initialization of the local network management
  subsystem, then this node is not present.";
  reference "RFC 2863: The Interfaces Group MIB - ifLastChange";
}
leaf if-index {
  if-feature "if-mib";
  type int32 {
    range "1..2147483647";
  }
  mandatory true;
description
  "The ifIndex value for the ifEntry represented by this
  interface.";
  reference "RFC 2863: The Interfaces Group MIB - ifIndex";
}
leaf phys-address {
  type yang:phys-address;
description
  "The interface's address at its protocol sub-layer. For
  example, for an 802.x interface, this object normally
  contains a Media Access Control (MAC) address. The
  interface's media-specific modules must define the bit
  and byte ordering and the format of the value of this
  object. For interfaces that do not have such an address
  (e.g., a serial line), this node is not present.";
  reference "RFC 2863: The Interfaces Group MIB - ifPhysAddress";
}
leaf-list higher-layer-if {
type interface-state-ref;
description
"A list of references to interfaces layered on top of this interface."
reference "RFC 2863: The Interfaces Group MIB - ifStackTable";
}
leaf-list lower-layer-if {
type interface-state-ref;
description
"A list of references to interfaces layered underneath this interface."
reference "RFC 2863: The Interfaces Group MIB - ifStackTable";
}
leaf speed {
type yang:gauge64;
units "bits/second";
description
"An estimate of the interface's current bandwidth in bits per second. For interfaces that do not vary in bandwidth or for those where no accurate estimation can be made, this node should contain the nominal bandwidth. For interfaces that have no concept of bandwidth, this node is not present."
reference "RFC 2863: The Interfaces Group MIB - ifSpeed, ifHighSpeed"
}
container statistics {
description
"A collection of interface-related statistics objects."
leaf discontinuity-time {
type yang:date-and-time;
mandatory true;
description
"The time on the most recent occasion at which any one or more of this interface's counters suffered a discontinuity. If no such discontinuities have occurred since the last re-initialization of the local management subsystem, then this node contains the time the local management subsystem re-initialized itself."
}
leaf in-octets {
type yang:counter64;
description
"The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur
leaf in-unicast-pkts {
    type yang:counter64;
    description
        "The number of packets, delivered by this sub-layer to a
        higher (sub-)layer, that were not addressed to a
        multicast or broadcast address at this sub-layer.

        Discontinuities in the value of this counter can occur
        at re-initialization of the management system, and at
        other times as indicated by the value of
        'discontinuity-time'.";
    reference "RFC 2863: The Interfaces Group MIB - ifHCInOctets";
}

leaf in-broadcast-pkts {
    type yang:counter64;
    description
        "The number of packets, delivered by this sub-layer to a
        higher (sub-)layer, that were addressed to a broadcast
        address at this sub-layer.

        Discontinuities in the value of this counter can occur
        at re-initialization of the management system, and at
        other times as indicated by the value of
        'discontinuity-time'.";
    reference "RFC 2863: The Interfaces Group MIB - ifHCInUcastPkts";
}

leaf in-multicast-pkts {
    type yang:counter64;
    description
        "The number of packets, delivered by this sub-layer to a
        higher (sub-)layer, that were addressed to a multicast
        address at this sub-layer. For a MAC-layer protocol,
        this includes both Group and Functional addresses.

        Discontinuities in the value of this counter can occur
        at re-initialization of the management system, and at
        other times as indicated by the value of
        'discontinuity-time'.";
    reference "RFC 2863: The Interfaces Group MIB -
              ifHCInBroadcastPkts";
}
leaf in-discards {
    type yang:counter32;
    description
    "The number of inbound packets that were chosen to be
discarded even though no errors had been detected to
prevent their being deliverable to a higher-layer
protocol. One possible reason for discarding such a
packet could be to free up buffer space.

    Discontinuities in the value of this counter can occur
at re-initialization of the management system, and at
other times as indicated by the value of
'discontinuity-time'.";
    reference "RFC 2863: The Interfaces Group MIB - ifInDiscards";
}

leaf in-errors {
    type yang:counter32;
    description
    "For packet-oriented interfaces, the number of inbound
packets that contained errors preventing them from being
deliverable to a higher-layer protocol. For character-
oriented or fixed-length interfaces, the number of
inbound transmission units that contained errors
preventing them from being deliverable to a higher-layer
protocol.

    Discontinuities in the value of this counter can occur
at re-initialization of the management system, and at
other times as indicated by the value of
'discontinuity-time'.";
    reference "RFC 2863: The Interfaces Group MIB - ifInErrors";
}

leaf in-unknown-protos {
    type yang:counter32;
    description
    "For packet-oriented interfaces, the number of packets
received via the interface that were discarded because
of an unknown or unsupported protocol. For
character-oriented or fixed-length interfaces that
support protocol multiplexing, the number of
transmission units received via the interface that were
discarded because of an unknown or unsupported protocol.
For any interface that does not support protocol
multiplexing, this counter is not present.

    Discontinuities in the value of this counter can occur
at re-initialization of the management system, and at
other times as indicated by the value of 'discontinuity-time'.
reference "RFC 2863: The Interfaces Group MIB - ifInUnknownProtos";
}
leaf out-octets {
  type yang:counter64;
  description
    "The total number of octets transmitted out of the interface, including framing characters.

    Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'.
reference "RFC 2863: The Interfaces Group MIB - ifHCOutOctets";
}
leaf out-unicast-pkts {
  type yang:counter64;
  description
    "The total number of packets that higher-level protocols requested be transmitted, and that were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent.

    Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'.
reference "RFC 2863: The Interfaces Group MIB - ifHCOutUcastPkts";
}
leaf out-broadcast-pkts {
  type yang:counter64;
  description
    "The total number of packets that higher-level protocols requested be transmitted, and that were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent.

    Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'.
reference
    "RFC 2863: The Interfaces Group MIB - ifHCOutBroadcastPkts";
}
leaf out-multicast-pkts {
  type yang:counter64;
description
"The total number of packets that higher-level protocols requested be transmitted, and that were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC-layer protocol, this includes both Group and Functional addresses.

Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'."

reference
"RFC 2863: The Interfaces Group MIB - ifHCOutMulticastPkts";
}
leaf out-discards {
  type yang:counter32;
  description
  "The number of outbound packets that were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space.

  Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'."
  reference "RFC 2863: The Interfaces Group MIB - ifOutDiscards";
}
leaf out-errors {
  type yang:counter32;
  description
  "For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors.

  Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'."
  reference "RFC 2863: The Interfaces Group MIB - ifOutErrors";
}
This YANG module defines essential components for the management of a routing subsystem.

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The key words 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in the module text are to be interpreted as described in RFC 2119 (http://tools.ietf.org/html/rfc2119).

This version of this YANG module is part of RFC XXXX (http://tools.ietf.org/html/rfcXXXX); see the RFC itself for full legal notices.

from collections import OrderedDict

from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class RoutingProtocol(Identity):
    
    Base identity from which routing protocol identities are derived.
class RoutingProtocol(Identity):
    
        super(RoutingProtocol, self).__init__(ns, pref, tag)

class RoutingInstance(Identity):
    
    Base identity from which identities describing routing instance types are derived.

class AddressFamily(Identity):
    
    Base identity from which identities describing address families are derived.

class RoutingState(Entity):
    

State data of the routing subsystem.

.. attribute:: routing_instance

Each list entry is a container for state data of a routing instance. An implementation MUST support routing instance(s) of the type `rt:default-routing-instance`, and MAY support other types. An implementation MAY restrict the number of routing instances of each supported type. An implementation SHOULD create at least one system-controlled instance, and MAY allow the clients to create user-controlled routing instances in configuration.


```python
_prefix = 'rt'
_revision = '2015-05-25'

def __init__(self):
    super(RoutingState, self).__init__()
    self._top_entity = None

    self.yang_name = "routing-state"
    self.yang_parent_name = "ietf-routing"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self._child_classes = OrderedDict(
        [('routing-instance', ('routing_instance', RoutingState.RoutingInstance))])
    self._leafs = OrderedDict()

    self.routing_instance = YList(self)
    self._segment_path = lambda: "routing-state"
    self._is_frozen = True

    def _setattr__(self, name, value):
        self._perform_setattr(RoutingState, [ ], name, value)

class RoutingInstance(Entity):
    ""
    Each list entry is a container for state data of a routing instance.

    An implementation MUST support routing instance(s) of the type `rt:default-routing-instance`, and MAY support other types. An implementation MAY restrict the number of routing instances of each supported type.

```
An implementation SHOULD create at least one system-controlled instance, and MAY allow the clients to create user-controlled routing instances in configuration.

.. attribute:: name (key)

The name of the routing instance. For system-controlled instances the name is persistent, i.e., it SHOULD NOT change across reboots

**type**:: str

.. attribute:: type

The routing instance type

**type**:: :py:class:`RoutingInstance <ydk.models.ietf.ietf_routing.RoutingInstance>`

.. attribute:: router_id

A 32-bit number in the form of a dotted quad that is used by some routing protocols identifying a router

**type**:: str

**pattern:** (([0-9][1-9][0-9][1-9][0-9][0-9-9][2[0-4][0-9][25[0-5]])\.|([0-9][1-9][0-9][0-9][0-9][0-9][0-9][2[0-4][0-9][25[0-5]])

.. attribute:: interfaces

Network layer interfaces belonging to the routing instance


.. attribute:: routing_protocols

Container for the list of routing protocol instances


.. attribute:: ribs

Container for RIBs


```python
__init__(self):
```
super(RoutingState.RoutingInstance, self).__init__()

self.yang_name = "routing-instance"
self.yang_parent_name = "routing-state"
self.is_top_level_class = False
self.has_list_ancestor = False
self.yang_type_class = [name]
self._child_classes = OrderedDict([('interfaces', ('interfaces', RoutingState.RoutingInstance.Interfaces)),

self._leafs = OrderedDict([
    ('name', (YLeaf(YType.str, 'name'), ['str'])),
    ('type', (YLeaf(YType.identityref, 'type'), [(YLeaf(YType.ietf.ietf_routing), 'RoutingInstance')]))
])

self.name = None
self.type = None
self.router_id = None

self.interfaces = RoutingState.RoutingInstance.Interfaces()
self.interfaces.parent = self
self._children_name_map["interfaces"] = "interfaces"

self.routing_protocols.parent = self
self._children_name_map["routing_protocols"] = "routing-protocols"

self.ribs = RoutingState.RoutingInstance.Ribs()
self.ribs.parent = self
self._children_name_map["ribs"] = "ribs"

self._segment_path = lambda: "routing-instance" + [name=""] + str(self.name) + "]"
self._absolute_path = lambda: "/ietf-routing:routing-state/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(RoutingState.RoutingInstance, ["name", "type", "router_id"], name, value)

class Interfaces(Entity):
    """
    Network layer interfaces belonging to the routing instance.
    """

    .. attribute:: interface

    Each entry is a reference to the name of a configured network layer interface

    **type**: list of str
**refers to**: `py:class:` name `<ydk.models.ietf.ietf_interfaces.InterfacesState.Interface>`

```python
_def__init__(self):
    super(RoutingState.RoutingInstance.Interfaces, self)._init__()
```

```python
def __setattr__(self, name, value):
    self._perform_setattr(RoutingState.RoutingInstance.Interfaces, [u'interface'], name, value)
```

```python
class RoutingProtocols(Entity):
    
    Container for the list of routing protocol instances.

    .. attribute:: routing_protocol

        State data of a routing protocol instance. An implementation MUST provide exactly one system-controlled
        instance of the type 'direct'. Other instances MAY be created by configuration

        **type**
        list of `py:class:` RoutingProtocol

```

```python
_def__init__(self):
```
super(RoutingState.RoutingInstance.RoutingProtocols, self).__init__()

self.yang_name = "routing-protocols"
self.yang_parent_name = "routing-instance"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict(["routing-protocol",])
    self._leafs = OrderedDict()

self.routing_protocol = YList(self)
self._segment_path = lambda: "routing-protocols"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(RoutingState.RoutingInstance.RoutingProtocols, [], name, value)

class RoutingProtocol(Entity):
    ""
    State data of a routing protocol instance.
    An implementation MUST provide exactly one
    system-controlled instance of the type 'direct'. Other
    instances MAY be created by configuration.
    .. attribute:: type  (key)
    Type of the routing protocol
    **type**:: RoutingProtocol
    .. attribute:: name  (key)
    The name of the routing protocol instance. For system-controlled instances this name is persistent, i.e., it
    SHOULD NOT change across reboots
    **type**:: str
    .. attribute:: ospf
    OSPF
    **type**:: Ospf
    """
_prefix = 'rt'
_revision = '2015-05-25'

def __init__(self):

    self.yang_name = "routing-protocol"
    self.yang_parent_name = "routing-protocols"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yslist_key_names = ['type', 'name']
    self.child_classes = OrderedDict([("ietf-ospf:ospf", ('ospf',

    self.leafs = OrderedDict(
        ('type', (YLeaf(YType.identityref, 'type'), ['str'])),
        ('name', (YLeaf(YType.str, 'name'), ['str'])),
    )

    self.type = None
    self.name = None

    self.ospf.parent = self
    self._children_name_map["ospf"] = "ietf-ospf:ospf"

    self.segment_path = lambda: "routing-protocol" + "" + str(self.type) + "" + str(self.name) + ""
    self.is_frozen = True

    def __setattr__(self, name, value):
        super().__setattr__(name, value)

    def __getattr__(self, name):
        return None

    def _perform_setattr(self, clazz, type, value):
        if not hasattr(type, 'unset') or (hasattr(type, 'default') and type.default not in value):
            return
        for child in child_of(clazz):
            if child.name in value:
                child.value = value[child.name]

    class Ospf(Entity):
        
        .. attribute:: operation_mode

        OSPF operation mode

        .. attribute:: instance

        An OSPF routing protocol instance
```python

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "ospf"
    self.yang_parent_name = "routing-protocol"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        [('instance', ('instance',
    self._leafs = OrderedDict(
        [('operation_mode', (YLeaf(YType.identityref, 'operation-mode'),
            ['ydk.models.ietf.ietf_ospf', 'OperationMode']))],
    )
    self.operation_mode = None

    self.instance = YList(self)
    self._segment_path = lambda: "ietf-ospf:ospf"
    self._is_frozen = True

def __setattr__(self, name, value):
        ['operation_mode'], name, value)

class Instance(Entity):
    
    An OSPF routing protocol instance.

    
    .. attribute:: af (key)

    Address-family of the instance

    **type**:: :py:class:`AddressFamily <ydk.models.ietf.ietf_routing.AddressFamily>`

    
    .. attribute:: router_id

    Defined in RFC 2328. A 32\-bit number that uniquely identifies the router

    **type**:: str

```
.  .. attribute:: area

List of OSPF areas
**type**: list of :py:class:`Area`
`

.  .. attribute:: as_scope_lsas

List OSPF AS scope LSA databases
**type**: list of :py:class:`AsScopeLsas`
`

.  .. attribute:: topology

OSPF topology
**type**: list of :py:class:`Topology`

```python
_ prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "instance"
    self.yang_parent_name = "ospf"
    self.is_top_level_class = False
    self.ylist_key_names = ['af']
    self._child_classes = OrderedDict(
    )
    self._leaves = OrderedDict(
        ('af', (YLeaf(YType.identityref, 'af'), [('ydk.models.ietf.ietf_routing', 'AddressFamily')])),
        ('router_id', (YLeaf(YType.str, 'router-id'), ['str']))
    )

    self.af = None
    self.router_id = None
```
self.area = YList(self)
self.as_scope_lsas = YList(self)
self.topology = YList(self)
self._segment_path = lambda: "instance" + ":[af=" + str(self.af) + "]"
self._is_frozen = True

def __setattr__(self, name, value):

class Area(Entity):
    '''
    List of OSPF areas
    
    .. attribute:: area_id  (key)

    Area ID
    **type**: union of the below types:
    
    **type**: int  
    **range**: 0..4294967295
    
    **type**: str
    
    **pattern**: (([0-9])\[1-9][0-9]\|1\[0-9][0-9]\|2\[0-9]+\|25\[0-5]\)

    .. attribute:: interfaces

    List of OSPF interfaces
    **type**: list of  

    .. attribute:: area_scope_lsas

    List OSPF area scope LSA databases
    **type**: list of  

    '''

    ...
def __init__(self):

    self.yang_name = "area"
    self.yang_parent_name = "instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict(
        [('area_id', (YLeaf(YType.str, 'area-id'), ['int', 'str']))]
    )

    self.area_id = None
    self.interfaces = YList(self)
    self.area_scope_lsas = YList(self)
    self._segment_path = lambda: "area" + "[area-id='" + str(self.area_id) + "']"
    self._is_frozen = True

    def __setattr__(self, name, value):


class Interfaces(Entity):
    """
    List of OSPF interfaces.
    """

    .. attribute:: interface (key)

        Interface
        **type**: str

    .. attribute:: network_type

        Network type
        **type**: `py:class:` NetworkType

    .. attribute:: passive
Enable/Disable passive
**type**: bool

.. attribute:: demand_circuit

Enable/Disable demand circuit
**type**: bool

.. attribute:: multi_area

Configure ospf multi-area
**type**: :py:class:`MultiArea

.. attribute:: static_neighbors

Static configured neighbors
**type**: :py:class:`StaticNeighbors

.. attribute:: node_flag

Set prefix as a node representative prefix
**type**: bool

**default value**: false

.. attribute:: fast_reroute

Fast-reroute configuration
**type**: :py:class:`FastReroute

.. attribute:: cost

Interface cost
**type**: int

**range**: 1..65535

.. attribute:: hello_interval

Time between hello packets
**type**: int
**range:** 1..65535

**units**: seconds

.. attribute:: dead_interval

Interval after which a neighbor is declared dead

**type**: int

**range:** 1..65535

**units**: seconds

.. attribute:: retransmit_interval

Time between retransmitting unacknowledged Link State Advertisements (LSAs)

**type**: int

**range:** 1..65535

**units**: seconds

.. attribute:: transmit_delay

Estimated time needed to send link-state update

**type**: int

**range:** 1..65535

**units**: seconds

.. attribute:: mtu_ignore

Enable/Disable ignoring of MTU in DBD packets

**type**: bool

.. attribute:: lls

Enable/Disable link-local signaling (LLS) support

**type**: bool

.. attribute:: prefix_suppression

Suppress advertisement of the prefixes

**type**: bool

.. attribute:: bfd
Enable/disable bfd
**type**: bool

.. attribute:: ttl_security

TTL security check

.. attribute:: enable

Enable/disable protocol on the interface
**type**: bool

**default value**: true

.. attribute:: authentication

Authentication configuration

.. attribute:: state

Interface state
**type**: str

.. attribute:: hello_timer

Hello timer
**type**: int

**range**: 0..4294967295

**units**: milliseconds

.. attribute:: wait_timer

Wait timer
**type**: int

**range**: 0..4294967295

**units**: milliseconds
.. attribute:: dr

   **type**: str

   **pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])(\%\p{N}\p{L}+)?

.. attribute:: bdr

   **type**: str

   **pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])(\%\p{N}\p{L}+)?

.. attribute:: neighbor

   List of OSPF neighbors

   **type**: list of :py:class:`Neighbor`


   .. attribute:: link_scope_lsas

   List OSPF link scope LSA databases

   **type**: list of :py:class:`LinkScopeLsas`


   .. attribute:: topology

   OSPF interface topology

   **type**: list of :py:class:`Topology`


   ""

   _prefix = 'ospf'
   _revision = '2015-03-09'

   def __init__(self):
self.yang_name = "interfaces"
self.yang_parent_name = "area"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['interface']
self._leafs = OrderedDict([('interface', ('YLeaf', 'YType.string', 'interface'), ['str'])), ('network_type', ('YLeaf', 'YType.enumeration', 'network-type'), ['network-type']), ('passive', ('YLeaf', 'YType.boolean', 'passive'), ['bool']), ('demand_circuit', ('YLeaf', 'YType.boolean', 'demand-circuit'), ['bool']), ('node_flag', ('YLeaf', 'YType.boolean', 'node-flag'), ['bool']), ('cost', ('YLeaf', 'YType.uint16', 'cost'), ['int']), ('hello_interval', ('YLeaf', 'YType.uint16', 'hello-interval'), ['int']), ('dead_interval', ('YLeaf', 'YType.uint16', 'dead-interval'), ['int']), ('retransmit_interval', ('YLeaf', 'YType.uint16', 'retransmit-interval'), ['int']), ('transmit_delay', ('YLeaf', 'YType.uint16', 'transmit-delay'), ['int']), ('mtu_ignore', ('YLeaf', 'YType.boolean', 'mtu-ignore'), ['bool']), ('lls', ('YLeaf', 'YType.boolean', 'lls'), ['bool']), ('prefix_suppression', ('YLeaf', 'YType.boolean', 'prefix-suppression'), ['bool']), ('bfd', ('YLeaf', 'YType.boolean', 'bfd'), ['bool']), ('enable', ('YLeaf', 'YType.boolean', 'enable'), ['bool']), ('state', ('YLeaf', 'YType.str', 'state'), ['str']), ('hello_timer', ('YLeaf', 'YType.uint32', 'hello-timer'), ['int']), ('wait_timer', ('YLeaf', 'YType.uint32', 'wait-timer'), ['int']), ('dr', ('YLeaf', 'YType.str', 'dr'), ['str']), ('bdr', ('YLeaf', 'YType.str', 'bdr'), ['str'])])
sself.interface = None
self.network_type = None
self.passive = None
self.demand_circuit = None
self.node_flag = None
self.cost = None
self.hello_interval = None
self.dead_interval = None
self.retransmit_interval = None
self.transmit_delay = None
self.mtu_ignore = None
self.lls = None
self.prefix_suppression = None
self.bfd = None
self.enable = None
self.state = None
self.hello_timer = None
self.wait_timer = None
self.dr = None
self.bdr = None

self.multi_area =
    self.multi_area.parent = self
    self._children_name_map["multi_area"] = "multi-area"

self.static_neighbors =
    self.static_neighbors.parent = self
    self._children_name_map["static_neighbors"] = "static-neighbors"

self.fast_reroute =
    self.fast_reroute.parent = self
    self._children_name_map["fast_reroute"] = "fast-reroute"

self.ttl_security =
    self.ttl_security.parent = self
    self._children_name_map["ttl_security"] = "ttl-security"

self.authentication =
    self.authentication.parent = self
    self._children_name_map["authentication"] = "authentication"

self.neighbor = YList(self)
self.link_scope_lsas = YList(self)
self.topology = YList(self)
self._segment_path = lambda: "interfaces" + "[interface='" + str(self.interface) + "]"
self._is_frozen = True
def __setattr__(self, name, value):
s, ['interface', 'network_type', 'passive', 'demand_circuit', 'node_flag', 'cost', 'hello_interval', 'dead_interval',
    'retransmit_interval', 'transmit_delay', 'mtu_ignore', 'lls', 'prefix_suppression', 'bfd', 'enable', 'state', 'hello_timer',
    'wait_timer', 'dr', 'bdr'], name, value)

class NetworkType(Enum):
    """
    NetworkType (Enum Class)
    
    Network type.
    
    .. data:: broadcast = 0
    
    Specify OSPF broadcast multi-access network.
    
    .. data:: non_broadcast = 1
    
    Specify OSPF Non-Broadcast Multi-Access (NBMA) network.
    
    .. data:: point_to_multipoint = 2
    
    Specify OSPF point-to-multipoint network.
    
    .. data:: point_to_point = 3
    
    Specify OSPF point-to-point network.
    """

    broadcast = Enum.YLeaf(0, "broadcast")
    non_broadcast = Enum.YLeaf(1, "non-broadcast")
    point_to_multipoint = Enum.YLeaf(2, "point-to-multipoint")
    point_to_point = Enum.YLeaf(3, "point-to-point")

class MultiArea(Entity):
    """
    Configure ospf multi-area.
    """

    .. attribute:: multi_area_id
Multi-area ID
**type**: union of the below types:

**type**: int

**range**: 0..4294967295

**type**: str

**pattern**: (([0-9][1-9][0-9][1-9][0-9][1-9][1-9][0-9][1-9][2][0-4][0-9][1-9][25][0-5])\w\{3\}(\{0-9][1-9][0-9][1-9][1-9][0-9][0-9][1-9][0-9][2][0-4][0-9][1-9][25][0-5])

.. attribute:: cost

Interface cost for multi-area
**type**: int

**range**: 0..65535

""

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "multi-area"
    self.yang_parent_name = "interfaces"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict((
        ('multi-area-id', (YLeaf(YType.str, 'multi-area-id'), ['int','str']),
         ('cost', (YLeaf(YType.uint16, 'cost'), ['int']))),
    )
    self.multi_area_id = None
    self.cost = None
    self._segment_path = lambda: "multi-area"
    self._is_frozen = True

    def __setattr__(self, name, value):

    def __str__(self):
        return self._yang_representation()

    def _yang_representation(self):
        output += self._yang_data_representation()
        return output

    def _yang_data_representation(self):
        output += self._yang_value_representation()
        return output

    def _yang_value_representation(self):
        output += self._yang_type_representation()
        return output

    def _yang_type_representation(self):
        output += self._yang_attribute_representation()
        return output

    def _yang_attribute_representation(self):
        output += self._yang_leaf_representation()
        return output

    def _yang_leaf_representation(self):
        output += self._yang_key_representation()
        return output

    def _yang_key_representation(self):
        output += 'multi-area-id' + 'cost' + 'multi-area-id' + 'cost' + 'multi-area-id' + 'cost' + 'multi-area-id' + 'cost'
        return output

    def _yang_leaf_value_representation(self):
        output += self._yang_leaf_value_type_representation()
        return output

    def _yang_leaf_value_type_representation(self):
        output += self._yang_leaf_value_attribute_representation()
        return output

    def _yang_leaf_value_attribute_representation(self):
        output += self._yang_leaf_value_type_representation()
        return output

    def _yang_leaf_value_type_representation(self):
        output += self._yang_leaf_value_leaf_representation()
        return output

    def _yang_leaf_value_leaf_representation(self):
        output += self._yang_leaf_value_leaf_value_representation()
        return output

    def _yang_leaf_value_leaf_value_representation(self):
        output += self._yang_leaf_value_leaf_value_value_representation()
        return output

    def _yang_leaf_value_leaf_value_value_representation(self):
        output += self._yang_leaf_value_leaf_value_leaf_value_representation()
        return output

    def _yang_leaf_value_leaf_value_leaf_value_representation(self):
        output += self._yang_leaf_value_leaf_value_leaf_value_value_representation()
        return output

    def _yang_leaf_value_leaf_value_leaf_value_value_representation(self):
        output += self._yang_leaf_value_leaf_value_leaf_value_leaf_value_representation()
        return output

    def _yang_leaf_value_leaf_value_leaf_value_leaf_value_representation(self):
        output += self._yang_leaf_value_leaf_value_leaf_value_leaf_value_value_representation()
        return output

    def _yang_leaf_value_leaf_value_leaf_value_leaf_value_value_representation(self):
        output += self._yang_leaf_value_leaf_value_leaf_value_leaf_value_leaf_value_representation()
        return output

    def _yang_leaf_value_leaf_value_leaf_value_leaf_value_leaf_value_representation(self):
s. MultiArea, ['multi_area_id', 'cost'], name, value)

class StaticNeighbors(Entity):
    
    Static configured neighbors.

    .. attribute:: neighbor

    Specify a neighbor router

    **type**: list of :py:class:`Neighbor

    nterfaces.StaticNeighbors.Neighbor>`

    

    _prefix = 'ospf'

    _revision = '2015-03-09'

    def __init__(self):
        rs, self).__init__()

        self.yang_name = "static-neighbors"

        self.yang_parent_name = "interfaces"

        self.is_top_level_class = False

        self.has_list_ancestor = True

        self.yang_list_key_names = []

        self._child_classes = OrderedDict(["neighbor")

        self._leafs = OrderedDict()

        self.neighbor = YList(self)

        self._segment_path = lambda: "static-neighbors"

        self._is_frozen = True

        def __setattr__(self, name, value):
            Interfaces.StaticNeighbors, ["neighbor", self], __init__())

        self.yang_name = "static-neighbors"

        self.yang_parent_name = "interfaces"

        self.is_top_level_class = False

        self.has_list_ancestor = True

        self.yang_list_key_names = []

        self._child_classes = OrderedDict(["neighbor")

        self._leafs = OrderedDict()

        self.neighbor = YList(self)

        self._segment_path = lambda: "static-neighbors"

        self._is_frozen = True

        def __setattr__(self, name, value):
            Interfaces.StaticNeighbors, ["neighbor", self], __init__())

    class Neighbor(Entity):
        
        Specify a neighbor router.
.. attribute:: address (key)

Neighbor IP address

**type**: union of the below types:

**type**: str

**pattern**: (([0-9]([0-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))\.){3}([0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\(\%\p{N}\p{L}\)+?

**type**: str

**pattern**: ((\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\)(0|5)(([0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\)(0|5)\([0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\)(0|5)\([0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\)(0|5)\([0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\)(0|5)\([0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\|\[0-9a-fA-f]{0,4}\:\\)(0|5)\(\%\p{N}\p{L}\)+?)

.. attribute:: cost

Neighbor cost

**type**: int

**range**: 1..65535

.. attribute:: poll_interval

Neighbor poll interval

**type**: int

**range**: 1..65535

**units**: seconds

.. attribute:: priority

Neighbor priority for DR election

**type**: int

**range**: 1..255

""

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
rs.Neighbor, self).__init__()

    self.yang_name = "neighbor"
    self.yang_parent_name = "static-neighbors"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['address']
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'address': (YLeaf(YType.str, 'address'), ['str', 'str']),
        'cost': (YLeaf(YType.uint16, 'cost'), ['int']),
        'poll_interval': (YLeaf(YType.uint16, 'poll-interval'), ['int']),
        'priority': (YLeaf(YType.uint8, 'priority'), ['int']),
    })
    self.address = None
    self.cost = None
    self.poll_interval = None
    self.priority = None
    self._segment_path = lambda: "neighbor" + "[address='" + str(self.address) + "']"
    self._is_frozen = True

    def __setattr__(self, name, value):

class FastReroute(Entity):
    """
    Fast-reroute configuration.
    .. attribute:: lfa

    LFA configuration
    **type**:: :py:class:`Lfa`

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):
class Lfa(Entity):
    """LFA configuration.

    .. attribute:: candidate_disabled

    Prevent the interface to be used as backup
    **type**: bool

    .. attribute:: enabled

    Activates LFA. This model assumes activation of per-prefix LFA
    **type**: bool

    .. attribute:: remote_lfa

    Remote LFA configuration
    **type**: :py:class:`RemoteLfa`

"""
def __init__(self):

    self.yang_name = "lfa"
    self.yang_parent_name = "fast-reroute"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([
        ("remote-lfa", (YLeaf(YType.boolean, 'candidate-disabled'), ['bool'])),
        ("enabled", (YLeaf(YType.boolean, 'enabled'), ['bool'])),
        ])
    self.candidate_disabled = None
    self.enabled = None


    self.remote_lfa.parent = self
    self._children_name_map["remote_lfa"] = "remote-lfa"
    self._segment_path = lambda: "lfa"
    self._is_frozen = True

    def __setattr__(self, name, value):

class RemoteLfa(Entity):

    """
    Remote LFA configuration.
    .. attribute:: enabled

    Activates remote LFA
    **type**: bool

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'
---

def __init__(self):

    self.yang_name = "remote-lfa"
    self.yang_parent_name = "lfa"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    )
    self._leafs = OrderedDict(
        ('enabled', (YLeaf(YType.boolean, 'enabled'), ['bool'])),
    )
    self.enabled = None
    self._segment_path = lambda: "remote-lfa"
    self._is_frozen = True

    def __setattr__(self, name, value):

class TtlSecurity(Entity):
    """
    TTL security check.
    
    .. attribute:: enable

    Enable/Disable TTL security check
    **type**: bool

    .. attribute:: hops

    Maximum number of hops that a OSPF packet may have traveled
    **type**: int
    **range**: 1..254

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self._prefix = 'ospf'
        self._revision = '2015-03-09'

        def __init__(self):

---
elf).__init__()

def __setattr__(self, name, value):

class Authentication(Entity):
    """Authentication configuration."

    .. attribute:: sa

        SA name
        **type**: str

    .. attribute:: key_chain

        key-chain name
        **type**: str

        **refers to**: :py:class:`name <ydk.models.ietf.ietf_key_chain.KeyChains>`

    .. attribute:: key

        Key string in ASCII format
        **type**: str

    .. attribute:: crypto_algorithm

        Cryptographic algorithm associated with key
        **type**: :py:class:`CryptoAlgorithm`

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    CryptoAlgorithm, self).__init__()
    self.yang_name = "authentication"
    self.yang_parent_name = "interfaces"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([("crypto-algorithm", CryptoAlgorithm)])
    self._leafs = OrderedDict([
        ('sa', (YLeaf(YType.str, 'sa'), ['str'])),
        ('key_chain', (YLeaf(YType.str, 'key-chain'), ['str'])),
        ('key', (YLeaf(YType.str, 'key'), ['str'])),
    ])
    self.sa = None
    self.key_chain = None
    self.key = None

    self.crypto_algorithm = CryptoAlgorithm()
    self.crypto_algorithm.parent = self
    self._children_name_map["crypto_algorithm"] = "crypto_algorithm"
    self._segment_path = lambda: "authentication"
    self._is_frozen = True

    def __setattr__(self, name, value):
        Interfaces.Authentication.CryptoAlgorithm, ['sa', 'key_chain', 'key'], name, value)

class CryptoAlgorithm(Entity):
    ""
    Cryptographic algorithm associated with key.
    ""
    .. attribute:: hmac_sha1_12
```

The HMAC-SHA1-12 algorithm
**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha1_20

The HMAC-SHA1-20 algorithm
**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: md5

The MD5 algorithm
**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: sha_1

The SHA-1 algorithm
**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha_1

HMAC-SHA-1 authentication algorithm
**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha_256

HMAC-SHA-256 authentication algorithm
**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha_384

HMAC-SHA-384 authentication algorithm
**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha_512

HMAC-SHA-512 authentication algorithm
**type**: :py:class:`Empty<ydk.types.Empty>`

"""
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
n.CryptoAlgorithm, self).__init__()
self.yang_name = "crypto-algorithm"
self.yang_parent_name = "authentication"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([
('hmac_sha1_12', (YLeaf(YType.empty, 'hmac-sha1-12'), ['Empty'])),
('hmac_sha1_20', (YLeaf(YType.empty, 'hmac-sha1-20'), ['Empty'])),
('md5', (YLeaf(YType.empty, 'md5'), ['Empty'])),
('sha_1', (YLeaf(YType.empty, 'sha-1'), ['Empty'])),
('hmac_sha_1', (YLeaf(YType.empty, 'hmac-sha-1'), ['Empty'])),
('hmac_sha_256', (YLeaf(YType.empty, 'hmac-sha-256'), ['Empty'])),
('hmac_sha_384', (YLeaf(YType.empty, 'hmac-sha-384'), ['Empty'])),
('hmac_sha_512', (YLeaf(YType.empty, 'hmac-sha-512'), ['Empty'])),
])
self.hmac_sha1_12 = None
self.hmac_sha1_20 = None
self.md5 = None
self.sha_1 = None
self.hmac_sha_1 = None
self.hmac_sha_256 = None
self.hmac_sha_384 = None
self.hmac_sha_512 = None
self._segment_path = lambda: "crypto-algorithm"
self._is_frozen = True
def __setattr__(self, name, value):
s.Authentication.CryptoAlgorithm, ['hmac_sha1_12', 'hmac_sha1_20', 'md5', 'sha_1', 'hmac_sha_1', 'hmac_sha_256',
'hmac_sha_384', 'hmac_sha_512'], name, value)

class Neighbor(Entity):
"""
List of OSPF neighbors.
.. attribute:: neighbor_id (key)
Neighbor ID
**type**\: str
**pattern:** (([0\-9]\|[1\-9][0\-9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])\\.){3}([0\-9]\|[1\-9][0\9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])(%[\\p{N}\\p{L}]+)?
.. attribute:: address

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Neighbor address
**type**\: union of the below types:
**type**\: str
**pattern:** (([0\-9]\|[1\-9][0\-9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])\\.){3}([0\-9]\|[1\-9][0\9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])(%[\\p{N}\\p{L}]+)?
**type**\: str
**pattern:** ((\:\|[0\-9a\-fA\-F]{0,4})\:)([0\-9a\-fA\-F]{0,4}\:){0,5}((([0\-9a\-fA\F]{0,4}\:)?(\:\|[0\-9a\-fA\-F]{0,4}))\|(((25[0\-5]\|2[0\-4][0\-9]\|[01]?[0\-9]?[0\-9])\\.){3}(25[0\-5]\|2[0\-4][0\9]\|[01]?[0\-9]?[0\-9])))(%[\\p{N}\\p{L}]+)?
.. attribute:: dr
Designated Router
**type**\: str
**pattern:** (([0\-9]\|[1\-9][0\-9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])\\.){3}([0\-9]\|[1\-9][0\9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])(%[\\p{N}\\p{L}]+)?
.. attribute:: bdr
Backup Designated Router
**type**\: str
**pattern:** (([0\-9]\|[1\-9][0\-9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])\\.){3}([0\-9]\|[1\-9][0\9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])(%[\\p{N}\\p{L}]+)?
.. attribute:: state
OSPF neighbor state
**type**\: :py:class:`NbrStateType <ydk.models.ietf.ietf_ospf.NbrStateType>`

"""
_prefix = 'ospf'
_revision = '2015-03-09'
def __init__(self):
).__init__()
self.yang_name = "neighbor"

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self.yang_parent_name = "interfaces"
self.is_top_level_class = False
self.has_list_ancestor = True
self.yslist_key_names = ['neighbor_id']
self._child_classes = OrderedDict([])
self._leafs = OrderedDict(
    (YLeaf(YType.str, 'neighbor-id'), ['str']),
    ('address', (YLeaf(YType.str, 'address'), ['str','str'])),
    ('dr', (YLeaf(YType.str, 'dr'), ['str'])),
    ('bdr', (YLeaf(YType.str, 'bdr'), ['str'])),
    ('state', (YLeaf(YType.enumeration, 'state'), [(YLeaf(ydk.models.ietf.ietf_ospf, 'NbrStateType', '')])])),

    }
self.neighbor_id = None
self.address = None
self.dr = None
self.bdr = None
self.state = None
self._segment_path = lambda: "neighbor" + 
    "[neighbor-id='" + str(self.neighbor_id) + "]"
self._is_frozen = True

def __setattr__(self, name, value):
    s.Neighbor, ['neighbor_id', 'address', 'dr', 'bdr', 'state'], name, value)

class LinkScopeLsas(Entity):
    """
    List OSPF link scope LSA databases
    """
    .. attribute:: lsa_type  (key)

    OSPF link scope LSA type
    **type**: int
    **range:** 0..255

    .. attribute:: link_scope_lsa

    List of OSPF link scope LSAs
    **type**: list of :py:class:`LinkScopeLsa`

    """
class LinkScopeLsa(Entity):
    """
    List of OSPF link scope LSAs
    
    .. attribute:: lsa_id (key)

    LSA ID
    **type**: union of the below types:

    **type**: str

    **pattern**: (([0-9][\-9][0-9][0-9][0-9][0-9][0-9][0-9][2][0-4][0-9][0-9][25][0-5])\(\))\[3\]()\([0-9][\-9][0-9][0-9][0-9][0-9][0-9][0-9][2][0-4][0-9][0-9][25][0-5])\(\)%\(\p{N}\)\(\p{L}\))+

    **type**: int

    **range**: 0..4294967295

    .. attribute:: adv_router (key)
Advertising router

**type**: str

**pattern**: (([0-9]|1\.[0-9]|\[0-9|1[0-9]|0\-4|0\-9|25|0\-5])\.)\{3\}(\([0-9]|1\-9|1\[0-9]|0\-9|2\[0-4]|0\-9|25|0\-5)\)(%\p{N}\p{L}+)?

.. attribute:: decoded_completed

The OSPF LSA body is fully decoded

**type**: bool

.. attribute:: raw_data

The complete LSA in network byte order as received/sent over the wire

**type**: str

**pattern**: ([0-9a-fA-F][2]|([0-9a-fA-F][2]))*

.. attribute:: ospfv2

OSPFv2 LSA


.. attribute:: ospfv3

OSPFv3 LSA


....

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "link-scope-lsa"
    self.yang_parent_name = "link-scope-lsas"
    self.is_top_level_class = False
    self.has_list_ancestor = True
self.ylist_key_names = ['lsa_id', 'adv_router']
self._child_classes = OrderedDict([("ospfv2", "ospfv2"),
("ospfv3", "ospfv3"),
self._leaves = OrderedDict(
    ('lsa_id', (YLeaf(YType.str, 'lsa-id'), ['str', 'int'])),
    ('adv_router', (YLeaf(YType.str, 'adv-router'), ['str'])),
    ('decoded_completed', (YLeaf(YType.boolean, 'decoded-completed'), ['bool'])),
    ('raw_data', (YLeaf(YType.str, 'raw-data'), ['str'])),
)
self.lsa_id = None
self.adv_router = None
self.decoded_completed = None
self.raw_data = None

self.ospfv2.parent = self
self._children_name_map["ospfv2"] = "ospfv2"

self.ospfv3.parent = self
self._children_name_map["ospfv3"] = "ospfv3"
self._segment_path = lambda: "link-scope-lsa" + "][lsa-id='" + str(self.lsa_id) + '"']" + "][adv-router='" + str(self.adv_router) + '"']"
self._is_frozen = True

def __setattr__(self, name, value):

class Ospfv2(Entity):
    
    OSPFv2 LSA

    .. attribute:: header

    Decoded OSPFv2 LSA header data
    **type**:: :py:class:`Header`
<

---

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.. attribute:: body

Decoded OSPFv2 LSA body data

class Header(Entity):

    """
    Decoded OSPFv2 LSA header data.
    """

    .. attribute:: options

        LSA option

        **mandatory** : True

    .. attribute:: lsa_id

        LSA ID
        **type** : str

        **pattern** : ([0-9][0-9-]+)\((\[0-9]+)\)

        **mandatory** : True

    .. attribute:: opaque_type

        Opaque type
        **type** : int

        **range** : 0..255

        **mandatory** : True

    .. attribute:: opaque_id

        Opaque id
        **type** : int

        **range** : 0..16777215

        **mandatory** : True

    .. attribute:: age

        LSA age
        **type** : int

        **range** : 0..65535
**mandatory**: True

.. attribute:: type

LSA type
**type**: int

**range**: 0..65535

**mandatory**: True

.. attribute:: adv_router

LSA advertising router
**type**: str

**pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)\3\(([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\)

**mandatory**: True

.. attribute:: seq_num

LSA sequence number
**type**: str

**mandatory**: True

.. attribute:: checksum

LSA checksum
**type**: str

**mandatory**: True

.. attribute:: length

LSA length
**type**: int

**range**: 0..65535

**mandatory**: True
def __init__(self):

    self.yang_name = "header"
    self.yang_parent_name = "ospfv2"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([  ('options', (YLeaf(YType.bits, 'options'), ['Bits'])),  ('lsa_id', (YLeaf(YType.str, 'lsa-id'), ['str'])),  ('opaque_type', (YLeaf(YType.uint8, 'opaque-type'), ['int'])),  ('opaque_id', (YLeaf(YType.uint32, 'opaque-id'), ['int'])),  ('age', (YLeaf(YType.uint16, 'age'), ['int'])),  ('type', (YLeaf(YType.uint16, 'type'), ['int'])),  ('adv_router', (YLeaf(YType.str, 'adv-router'), ['str'])),  ('seq_num', (YLeaf(YType.str, 'seq-num'), ['str'])),  ('checksum', (YLeaf(YType.str, 'checksum'), ['str'])),  ('length', (YLeaf(YType.uint16, 'length'), ['int']))])
    self.options = Bits()
    self.lsa_id = None
    self.opaque_type = None
    self.opaque_id = None
    self.age = None
    self.type = None
    self.adv_router = None
    self.seq_num = None
    self.checksum = None
    self.length = None
    self._segment_path = lambda: "header"
    self._is_frozen = True

    def __setattr__(self, name, value):

class Body(Entity):
    ""
    Decoded OSPFv2 LSA body data.
    """
.. attribute:: router

   Router LSA
   **type**: class:`Router`
   
   .. attribute:: network

   Network LSA
   **type**: class:`Network`
   
   .. attribute:: summary

   Summary LSA
   **type**: class:`Summary`
   
   .. attribute:: external

   External LSA
   **type**: class:`External`
   
   .. attribute:: opaque

   Opaque LSA
   **type**: class:`Opaque`

```python
__prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "body"
```
self.yang_parent_name = "ospfv2"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([("router", ("router",

self._leafs = OrderedDict()

self.router =
self.router.parent = self
self._children_name_map["router"] = "router"

self.network =
self.network.parent = self
self._children_name_map["network"] = "network"

self.summary =
self.summary.parent = self
self._children_name_map["summary"] = "summary"

self.external =
self.external.parent = self
self._children_name_map["external"] = "external"

self.opaque =
self.opaque.parent = self
self._children_name_map["opaque"] = "opaque"
self._segment_path = lambda: "body"
self.is_frozen = True
def __setattr__(self, name, value):

class Router(Entity):
    
    Router LSA.

    .. attribute:: flags

    Flags

    .. attribute:: num_of_links

    Number of links
    **type**: int
    **range**: 0..65535

    .. attribute:: link

    Router LSA link

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):

    self.yang_name = "router"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict(["link", "link",]

self._leafs = OrderedDict(
    ('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
    ('num_of_links', (YLeaf(YType.uint16, 'num-of-links'), ['int'])),
)
self.flags = Bits()
self.num_of_links = None

self.link = YList(self)
self._segment_path = lambda: "router"
self._is_frozen = True

def __setattr__(self, name, value):

class Link(Entity):
    """Router LSA link."
    .. attribute:: link_id  (key)

    Link ID
    **type**: union of the below types:

    **type**: str

    **pattern**: (([0-9][1-9][0-9][1-9][0-9][0-9][0-9][0-9][0-9][2[0-4][0-9][0-9][0-5]]\[\3\])([0-9][1-9][0-9][0-9][1][0-9][0-9][0-9][0-9][2[0-4][0-9][0-9][0-5]]\[25[0-5]](\%\[N\]p(L))\+)?

    **type**: str

    **pattern**: (([0-9][1-9][0-9][1][0-9][0-9][0-9][0-9][2[0-4][0-9][0-9][0-5]]\[25[0-5]]))(\%\[N\]p(L))\+)?

    .. attribute:: link_data  (key)

    Link data
    **type**: union of the below types:

    **type**: str

    **pattern**: (([0-9][1-9][0-9][1][0-9][0-9][0-9][0-9][2[0-4][0-9][0-9][0-5]]\[25[0-5]](\%\[N\]p(L))\+)?

    **type**: int
**range:** 0..4294967295

.. attribute:: type

Link type

**type:** int

**range:** 0..255

.. attribute:: topology

Topology specific information

**type:** list of :py:class:`Topology


**prefix = 'ospf'**

**revision = '2015-03-09'**

def __init__(self):

    self.yang_name = "link"
    self.yang_parent_name = "router"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['link_id','link_data']
    self._child_classes = OrderedDict(
        ('topology', ('topology',
        ).
    self._leafs = OrderedDict(
        ('link_id', (YLeaf(YType.str, 'link-id'), ['str','str'])),
        ('link_data', (YLeaf(YType.str, 'link-data'), ['str','int'])),
        ('type', (YLeaf(YType.uint8, 'type'), ['int'])),
    )
    self.link_id = None
    self.link_data = None
    self.type = None

    self.topology = YList(self)
    self._segment_path = lambda: "link" + "[link-id='" + str(self.link_id) + "']" + 
    "[link-data='" + str(self.link_data) + "]"
self._is_frozen = True

def __setattr__(self, name, value):

class Topology(Entity):
    """
    Topology specific information.
    
    .. attribute:: mt_id  (key)

    The MT-ID for topology enabled on the link
    **type**:\ int

    **range**:\ 0..255

    .. attribute:: metric

    Metric for the topology
    **type**:\ int

    **range**:\ 0..65535

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "topology"
        self.yang_parent_name = "link"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = ['mt_id']
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict(
            ('mt_id', (YLeaf(YType.uint8, 'mt-id'), ['int'])),
            ('metric', (YLeaf(YType.uint16, 'metric'), ['int'])),
        )

        self.mt_id = None
        self.metric = None

    def _prepare(self): super()._prepare()

    def _validate(self): super()._validate()

    def _build(self): super()._build()
class Network(Entity):

    Network LSA.

    .. attribute:: network_mask

        The IP address mask for the network
        **type**: str


    .. attribute:: attached_router

        List of the routers attached to the network
        **type**: list of str

class Summary(Entity):
    """
    Summary LSA.
    """
    for attribute in ["network_mask", "attached_router"]

    .. attribute:: network_mask
        The IP address mask for the network
        **type**: str
        **pattern**: (([0-9]\.){3}([0-9]\.\[\p{N}\p{L}\]+)?

    .. attribute:: topology
        Topology specific information
        **type**: list of :py:class:`Topology`

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "summary"
        self.yang_parent_name = "body"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.yang_key_names = []
        self._child_classes = OrderedDict(["topology", "topology"])

        self._child_classes = OrderedDict(["network", "attached_router", "topology", "topology"])

    def __setattr__(self, name, value):
class Topology(Entity):
    ***
    Topology specific information.

    .. attribute:: mt_id (key)
        The MT-ID for topology enabled on the link
        **type**: int
        **range**: 0..255

    .. attribute:: metric
        Metric for the topology
        **type**: int
        **range**: 0..16777215

    ***

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):
        self.yang_name = "topology"
        self.yang_parent_name = "summary"
        self.is_top_level_class = False
        self.has_list_ancestor = True

        self.mt_id = None
        self.metric = None

        self.network_mask = None

        self.topology = YList(self)

        def __setattr__(self, name, value):
self.ylist_key_names = ['mt_id']
self._child_classes = OrderedDict(
    ()
)
self.leafs = OrderedDict((
    ('mt_id', (YLeaf(YType.uint8, 'mt-id'), ['int'])),
    ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
))
self.mt_id = None
self.metric = None
self._segment_path = lambda: "topology" + "[mt-id='" + str(self.mt_id) + "]"
self._is_frozen = True

def __setattr__(self, name, value):

class External(Entity):
    
    External LSA.
    .. attribute:: network_mask

    The IP address mask for the network
    
    **type**: str

    **pattern**: (([0-9]\|[1-9]\|1[0-9]\|2[0-4]\|25[0-5])\.){3}(([0-9]\|[1-9]\|1[0-9]\|2[0-4]\|25[0-5])\|([0-9]\|1[0-9]\|1[0-9]\|2[0-4]\|25[0-5]))?\%(\p{N}\p{L}+)?

    .. attribute:: topology

    Topology specific information
    

    

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "external"
        self.yang_parent_name = "body"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict(["topology", "topology",

self._leafs = OrderedDict([
    ('network_mask', (YLeaf(YType.str, 'network-mask'), ['str'])),
])
self.network_mask = None

self.topology = YList(self)
self._segment_path = lambda: "external"
self._is_frozen = True

def __setattr__(self, name, value):

class Topology(Entity):
    ***
    Topology specific information.

    .. attribute:: mt_id (key)

    The MTID for topology enabled on the link
    **type****: int

    **range:** 0..255

    .. attribute:: flags

    Flags
    **type****: :py:enum:`Flags`


    .. attribute:: metric

    Metric for the topology
    **type****: int

    **range:** 0..16777215

    .. attribute:: forwarding_address

    Forwarding address
.. attribute:: external_route_tag

Route tag

**type**: int

**range**: 0..4294967295

---

_keyword_ = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "topology"
    self.yang_parent_name = "external"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['mt_id']
    self._child_classes = OrderedDict(
        )
    self._leafs = OrderedDict(
        ('mt_id', (YLeaf(YType.uint8, 'mt-id'), [YLeaf(YType.uint8, 'int')])),
        ('flags', (YLeaf(YType.bits, 'flags'), [YLeaf(YType.bits, 'int')])),
        ('metric', (YLeaf(YType.uint32, 'metric'), [YLeaf(YType.uint32, 'int')])),
        ('forwarding_address', (YLeaf(YType.str, 'forwarding-address'), [YLeaf(YType.str, 'str')])),
        ('external_route_tag', (YLeaf(YType.uint32, 'external-route-tag'), [YLeaf(YType.uint32, 'int')])),
    )
    self.mt_id = None
    self.flags = Bits()
    self.metric = None
    self.forwarding_address = None
    self.external_route_tag = None

    def __setattr__(self, name, value):
class Opaque(Entity):
    
    Opaque LSA.

    .. attribute:: unknown_tlv

    Unknown TLV

    .. attribute:: router_address_tlv

    Router address TLV

    .. attribute:: link_tlv

    Link TLV

    __init__(self):


    self.yang_name = "opaque"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        ("unknown-tlv",
        ("router-address-tlv",
        ("link-tlv",
    )

    _prefix = 'ospf'

    _revision = '2015-03-09'

    def __init__(self):
self._leafs = OrderedDict()

self.router_address_tlv =
self.router_address_tlv.parent = self  
self._children_name_map["router_address_tlv"] = "router-address-tlv"

self.link_tlv =
self.link_tlv.parent = self  
self._children_name_map["link_tlv"] = "link-tlv"

self.unknown_tlv = YList(self)  
self._segment_path = lambda: "opaque"  
self._is_frozen = True

def __setattr__(self, name, value):

class UnknownTlv(Entity):
    ***
    Unknown TLV.

    .. attribute:: type  (key)

    TLV type
    **type**: int

    **range**: 0..65535

    .. attribute:: length

    TLV length
    **type**: int

    **range**: 0..65535

    .. attribute:: value

    TLV value
    **type**: str
**pattern:** ([0-9a-fA-F][2]|\[0-9a-fA-F][2])*?

===

_pREFIX_ = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "unknown-tlv"
    self.yang_parent_name = "opaque"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['type']
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([ ('type', (YLeaf(YType.uint16, 'type'), ['int'])),
                                ('length', (YLeaf(YType.uint16, 'length'), ['int'])),
                                ('value', (YLeaf(YType.str, 'value'), ['str'])),
                              ])
    self.type = None
    self.length = None
    self.value = None
    self._segment_path = lambda: "unknown-tlv" + "[type='" + str(self.type) + '"']"
    self._is_frozen = True

    def __setattr__(self, name, value):

    class RouterAddressTlv(Entity):
        ===
        Router address TLV.

        .. attribute:: router_address

        Router address

        **type**: str

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self.yang_name = "router-address-tlv"
    self.yang_parent_name = "opaque"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'router_address': (YLeaf(YType.str, 'router-address'), ['str'])
    })
    self.router_address = None
    self._segment_path = lambda: "router-address-tlv"
    self._is_frozen = True

def __setattr__(self, name, value):

class LinkTlv(Entity):
    
    Link TLV.

    .. attribute:: link_type

    Link type
    **type**: int

    **range**: 0..255

    **mandatory**: True

    .. attribute:: link_id

    Link ID
    **type**: union of the below types:

    **type**: str
.. attribute:: local_if_ipv4_addr
   List of local interface IPv4 addresses
   .. attribute:: list of str

.. attribute:: local_remote_ipv4_addr
   List of remote interface IPv4 addresses
   .. attribute:: list of str

.. attribute:: te_metric
   TE metric
   .. attribute:: int

.. attribute:: max_bandwidth
   Maximum bandwidth
   .. attribute:: :py:class:`Decimal64<ydk.types.Decimal64>`

.. attribute:: max_reservable_bandwidth
   Maximum reservable bandwidth
   .. attribute:: :py:class:`Decimal64<ydk.types.Decimal64>`

.. attribute:: unreserved_bandwidth
Unreserved bandwidth
**type**: :py:class:`Decimal64<ydk.types.Decimal64>`

**range**: \-92233720368547758.08..92233720368547758.07

.. attribute:: admin_group

Administrative group/Resource class/Color
**type**: int

**range**: 0..4294967295

.. attribute:: unknown_subtlv

Unknown sub-TLV
**type**: list of :py:class:`UnknownSubtlv`


```

==

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "link-tlv"
    self.yang_parent_name = "opaque"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = []

    self._leafs = OrderedDict(
        ('link_type', (YLeaf(YType.uint8, 'link-type'), ['int'])),
        ('link_id', (YLeaf(YType.str, 'link-id'), ['str'])),
        ('local_if_ipv4_addr', (YLeafList(YType.str, 'local-if-ipv4-addr'), ['str'])),
        ('local_remote_ipv4_addr', (YLeafList(YType.str, 'local-remote-ipv4-addr'), ['str'])),
        ('te_metric', (YLeaf(YType.uint32, 'te-metric'), ['int'])),
        ('max_bandwidth', (YLeaf(YType.str, 'max-bandwidth'), ['Decimal64'])),
        ('max_reservable_bandwidth', (YLeaf(YType.str, 'max-reservable-
bandwidth'), ['Decimal64'])),
('unreserved_bandwidth', (YLeaf(YType.str, 'unreserved-bandwidth'),
['Decimal64'])),
('admin_group', (YLeaf(YType.uint32, 'admin-group'), ['int'])),
])
self.link_type = None
self.link_id = None
self.local_if_ipv4_addr = []
self.local_remote_ipv4_addr = []
self.te_metric = None
self.max_bandwidth = None
self.max_reservable_bandwidth = None
self.unreserved_bandwidth = None
self.admin_group = None

self.unknown_subtlv = YList(self)
self._segment_path = lambda: "link-tlv"
self._is_frozen = True

def __setattr__(self, name, value):
'local_remote_ipv4_addr', 'te_metric', 'max_bandwidth', 'max_reservable_bandwidth', 'unreserved_bandwidth',
'admin_group'], name, value)

class UnknownSubtlv(Entity):
    ***
    Unknown sub-TLV.

    .. attribute:: type  (key)

    TLV type
    **type**: int

    **range:** 0..65535

    .. attribute:: length

    TLV length
    **type**: int

    **range:** 0..65535

    .. attribute:: value

    TLV value
    **type**: str
class Ospf3(Entity):
    
    OSPFv3 LSA

    .. attribute:: header

    Decoded OSPFv3 LSA header data

    **type**: `Header`

.. attribute:: body

Decoded OSPF LSA body data

**type**: :py:class:`Body


```

```

_prefix = 'ospf'
_revision = '2015-03-09'

```

```

def __init__(self):

    self.yang_name = "ospfv3"
    self.yang_parent_name = "link-scope-lsa"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict(
        [('header', ('header',
         ('body', ('body',

    self._leafs = OrderedDict()

    self.header =

    self.header.parent = self
    self._children_name_map["header"] = "header"

    self.body =

    self.body.parent = self
    self._children_name_map["body"] = "body"

    self._segment_path = lambda: "ospfv3"
    self._is_frozen = True

    def __setattr__(self, name, value):
```
class Header(Entity):

    Decoded OSPFv3 LSA header data.

    .. attribute:: lsa_id

        LSA ID
        **type**: int
        **range**: 0..4294967295
        **mandatory**: True

    .. attribute:: age

        LSA age
        **type**: int
        **range**: 0..65535
        **mandatory**: True

    .. attribute:: type

        LSA type
        **type**: int
        **range**: 0..65535
        **mandatory**: True

    .. attribute:: adv_router

        LSA advertising router
        **type**: str

        **mandatory**: True

    .. attribute:: seq_num

        LSA sequence number
        **type**: str
**mandatory**: True

.. attribute:: checksum

LSA checksum
**type**: str

**mandatory**: True

.. attribute:: length

LSA length
**type**: int

**range**: 0..65535

**mandatory**: True

.. attribute:: options

OSPFv3 LSA options

**mandatory**: True

===

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "header"
    self.yang_parent_name = "ospfv3"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylabel_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(
        ('lsa_id', (YLeaf(YType.uint32, 'lsa-id'), ['int'])),
        ('age', (YLeaf(YType.uint16, 'age'), ['int'])),
        ('type', (YLeaf(YType.uint16, 'type'), ['int'])),
    )
('adv_router', (YLeaf(YType.str, 'adv-router'), ['str'])),
('seq_num', (YLeaf(YType.str, 'seq-num'), ['str'])),
('checksum', (YLeaf(YType.str, 'checksum'), ['str'])),
('length', (YLeaf(YType.uint16, 'length'), ['int'])),
('options', (YLeaf(YType.bits, 'options'), ['Bits']))),
)
self.lsa_id = None
self.age = None
self.type = None
self.adv_router = None
self.seq_num = None
self.checksum = None
self.length = None
self.options = Bits()
self._segment_path = lambda: "header"
self._is_frozen = True

def __setattr__(self, name, value):

class Body(Entity):
    
    Decoded OSPF LSA body data.
    .. attribute:: router

    Router LSA


    .. attribute:: network

    Network LSA


    .. attribute:: inter_area_prefix

    Inter-Area-Prefix LSA


.. attribute:: inter_area_router

Inter-Area-Router LSA
*type*:: :py:class:`InterAreaRouter

.. attribute:: as_external

AS-External LSA
*type*:: :py:class:`AsExternal

.. attribute:: nssa

NSSA LSA
*type*:: :py:class:`Nssa

.. attribute:: link

Link LSA
*type*:: :py:class:`Link

.. attribute:: intra_area_prefix

Intra-Area-Prefix LSA
*type*:: :py:class:`IntraAreaPrefix

===

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "body"
    self.yang_parent_name = "ospfv3"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedList(["router", "network", "inter-area-prefix", "inter-area-router", "as-external", "nssa", "link", "intra-area-prefix"])
self._leafs = OrderedList()
    self.as_external.parent = self
    self._children_name_map["as_external"] = "as-external"

    self.nssa =
    self.nssa.parent = self
    self._children_name_map["nssa"] = "nssa"

    self.link =
    self.link.parent = self
    self._children_name_map["link"] = "link"

    self.intra_area_prefix =
    self.intra_area_prefix.parent = self
    self._children_name_map["intra_area_prefix"] = "intra-area-prefix"
    self._segment_path = lambda: "body"
    self._is_frozen = True

def __setattr__(self, name, value):

class Router(Entity):
    
    Router LSA.

    .. attribute:: flags

    LSA option

    **mandatory**:: True

    .. attribute:: options

    OSPFv3 LSA options
**mandatory**: True

.. attribute:: link

Router LSA link


```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "router"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._leafs = OrderedDict([('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])), ('options', (YLeaf(YType.bits, 'options'), ['Bits']))])
    self.flags = Bits()
    self.options = Bits()

    self.link = YList(self)
    self._segment_path = lambda: "router"
    self._is_frozen = True

    def _setattr___(self, name, value):

class Link(Entity):

    Router LSA link.
```
.. attribute:: interface_id (key)

Interface ID
**type**: int

**range**: 0..4294967295

.. attribute:: neighbor_interface_id (key)

Neighbor Interface ID
**type**: int

**range**: 0..4294967295

.. attribute:: neighbor_router_id (key)

Neighbor Router ID
**type**: str


.. attribute:: type

Link type
**type**: int

**range**: 0..255

.. attribute:: metric

Metric
**type**: int

**range**: 0..65535

---

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
self.yang_name = "link"
self.yang_parent_name = "router"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['interface_id', 'neighbor_interface_id', 'neighbor_router_id']

self._child_classes = OrderedDict()
self._leafs = OrderedDict(
    ('interface_id', (YLeaf(YType.uint32, 'interface-id'), ['int'])),
    ('neighbor_interface_id', (YLeaf(YType.uint32, 'neighbor-interface-id'), ['int'])),
    ('neighbor_router_id', (YLeaf(YType.str, 'neighbor-router-id'), ['str'])),
    ('type', (YLeaf(YType.uint8, 'type'), ['int'])),
    ('metric', (YLeaf(YType.uint16, 'metric'), ['int'])),
)

self.interface_id = None
self.neighbor_interface_id = None
self.neighbor_router_id = None
self.type = None
self.metric = None

self._segment_path = lambda: "link" + "[interface-id='" + str(self.interface_id) + "']" + "[neighbor-interface-id='" + str(self.neighbor_interface_id) + "]" + "[neighbor-router-id='" + str(self.neighbor_router_id) + "]"

self._is_frozen = True

def __setattr__(self, name, value):

class Network(Entity):
    
    Network LSA.

    .. attribute:: options

        OSPFv3 LSA options


        **mandatory**: True

    .. attribute:: attached_router

        List of the routers attached to the network

        **type**: list of str

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "network"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(["options", "attached_router"])
    self.options = Bits()
    self.attached_router = []
    self._segment_path = lambda: "network"
    self._is_frozen = True

    def _setattr__\(self, name, value):

class InterAreaPrefix(Entity):
    "Inter-Area-Prefix LSA."

    .. attribute:: metric

        Metric
    **type**: int

    **range**: 0..16777215

    .. attribute:: prefix
```
Prefix
**type**: str

.. attribute:: prefix_options

Prefix options
**type**: str

**mandatory**: True

---

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "inter-area-prefix"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        )
    self._leafs = OrderedDict(
        ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
        ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
        ('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str'])),
    )
    self.metric = None
    self.prefix = None
    self.prefix_options = None
    self._segment_path = lambda: "inter-area-prefix"
    self._is_frozen = True

def __setattr__(self, name, value):

class InterAreaRouter(Entity):
    ---
    Inter-Area-Router LSA.

    .. attribute:: options

---
OSPFv3 LSA options

**type**:: :py:class:`Options

.. attribute:: metric

Metric

**type**:: int

**range:** 0..16777215

.. attribute:: destination_router_id

The Router ID of the router being described by the LSA

**type**:: str


_.._  

__init__(self):

    self.yang_name = "inter-area-router"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'options': (YLeaf(YType.bits, 'options'), ['Bits']),
        'metric': (YLeaf(YType.uint32, 'metric'), ['int']),
        'destination_router_id': (YLeaf(YType.str, 'destination-router-id'), ['str'])
    })
    self.options = Bits()
    self.metric = None
    self.destination_router_id = None
class AsExternal(Entity):
    
    AS-External LSA.

    .. attribute:: metric

    Metric
    **type**: int

    **range**: 0..16777215

    .. attribute:: flags

    Flags

    .. attribute:: referenced_ls_type

    Referenced Link State type
    **type**: int

    **range**: 0..65535

    .. attribute:: prefix

    Prefix
    **type**: str

    .. attribute:: prefix_options

    Prefix options
    **type**: str

    **mandatory**: True

    .. attribute:: forwarding_address
Forwards address

**type**: str

**pattern**: ((\[0-9\-a-fA-f]{0,4}\])\(|([0-9\-a-fA-f]{0,4}\]0,4]\}0,4}\])0,5}((\[0-9\-a-fA-f]{0,4}\])\(|([0-9\-a-fA-f]{0,4}\]0,4]\}0,4]\}0,5)\%[\p{N}\p{L}]+)?

.. attribute:: external_route_tag

Route tag

**type**: int

**range**: 0..4294967295

.. attribute:: referenced_link_state_id

Referenced Link State ID

**type**: int

**range**: 0..4294967295

```python
_def__init__=(self):
    self.yang_name = "as-external"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'metric': (YLeaf(YType.uint32, 'metric'), ['int']),
        'flags': (YLeaf(YType.bits, 'flags'), ['Bits']),
        'referenced_ls_type': (YLeaf(YType.uint16, 'referenced-ls-type'), ['int']),
        'prefix': (YLeaf(YType.str, 'prefix'), ['str']),
        'prefix_options': (YLeaf(YType.str, 'prefix-options'), ['str']),
        'forwarding_address': (YLeaf(YType.str, 'forwarding-address'), ['str']),
        'external_route_tag': (YLeaf(YType.uint32, 'external-route-tag'), ['int']),
        'referenced_link_state_id': (YLeaf(YType.uint32, 'referenced-link-state-id'), ['int']),
    })
```
class Nssa(Entity):
    
    """NSSA LSA. """

    .. attribute:: metric

        Metric

        **type**: int

        **range**: 0..16777215

    .. attribute:: flags

        Flags


    .. attribute:: referenced_ls_type

        Referenced Link State type

        **type**: int

        **range**: 0..65535

    .. attribute:: prefix

        Prefix

        **type**: str
.. attribute:: prefix_options

Prefix options
**type**: str

**mandatory**: True

.. attribute:: forwarding_address

Forwarding address
**type**: str

**pattern**: ((\::\[0-9a-fA-F]{0,4}\])\:\([0-9a-fA-F]{0,4}\])\:\([0,5]\(((((0-9a-fA-F)\:\[0-9a-fA-F]\[0,4]\))\:\(\[0-9a-fA-F]\)[0,4]\))\:\(\(\(25[0-5]\|2[0-4][0-9]\|1[0-9]{1}[0-9]\|0[0-9]{2}[0-9]\|0[0-9]\]\(0-9]\|0-9]\)?[0-9]\(0-9]\))%[\p{N}\p{L}]+)?

.. attribute:: external_route_tag

Route tag
**type**: int

**range**: 0..4294967295

.. attribute:: referenced_link_state_id

Referenced Link State ID
**type**: int

**range**: 0..4294967295

---

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "nssa"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict([}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]}]
('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
('referenced_ls_type', (YLeaf(YType.uint16, 'referenced-ls-type'), ['int'])),
('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str'])),
('forwarding_address', (YLeaf(YType.str, 'forwarding-address'), ['str'])),
('external_route_tag', (YLeaf(YType.uint32, 'external-route-tag'), ['int'])),
('referenced_link_state_id', (YLeaf(YType.uint32, 'referenced-link-state-id'),
['int']))),

}
self.metric = None
self.flags = Bits()
self.referenced_ls_type = None
self.prefix = None
self.prefix_options = None
self.forwarding_address = None
self.external_route_tag = None
self.referenced_link_state_id = None
self._segment_path = lambda: "nssa"
self._is_frozen = True

def __setattr__(self, name, value):

class Link(Entity):
    
    Link LSA.

    .. attribute:: rtr_priority

    Router Priority of the interface
    **type**: int
    **range**: 0..255

    .. attribute:: options

    OSPFv3 LSA options
    **type**: :py:class:`Options`
    **mandatory**: True

    .. attribute:: link_local_interface_address
The originating router's link-local interface address on the link

**type**: union of the below types:

**type**: str

**pattern**: ((\[0-9\]|\[1-9]\?[0-9]\?|1|[0-9]\?[0-9]\?|2\?[0-4]\?[0-9]\?|25[0-5]\?)\.|\.)\[[0-9-9]\?[0-9]\?|1|[0-9]\?[0-9]\?|2\?[0-4]\?[0-9]\?|25[0-5]\?)(%\(N\)\p\(L\))+?

**type**: str

**pattern**: (((\[0-9a-fA-F]\?[0-4]\?)(\[0-9a-fA-F]\?[0-4]\?)(0,5)(([0-9a-fA-F]\?[0-4]\?)|((\[0-9a-fA-F]\?[0-4]\?)|((25[0-5]\?|2\?[0-4]\?[0-9]\?|1\?[0-9]\?[0-9]\?|0\?([0-9]\?|0\?))(\[0-9-9]\?[0-9]\?|1|[0-9]\?[0-9]\?|2\?[0-4]\?[0-9]\?|25[0-5]\?)\.)\[[0-9-9]\?[0-9]\?|1|[0-9]\?[0-9]\?|2\?[0-4]\?[0-9]\?|25[0-5]\?)(%\(N\)\p\(L\))+?

.. attribute:: num_of_prefixes

Number of prefixes

**type**: int

**range**: 0..4294967295

.. attribute:: prefix_list

List of prefixes associated with the link

**type**: list of :py:class:`PrefixList`

<...>
def __setattr__(self, name, value):

class PrefixList(Entity):
    
    List of prefixes associated with the link.

    .. attribute:: prefix  (key)
        Prefix
        .. attribute:: prefix_options
            Prefix options

    Prefix
    **type**: str

    .. attribute:: prefix_options

    Prefix options
    **type**: str

    **mandatory**: True

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):
self.yang_name = "prefix-list"
self.yang_parent_name = "link"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['prefix']
self._child_classes = OrderedDict({})
self._leafs = OrderedDict({
    'prefix': (YLeaf(YType.str, 'prefix'), ['str']),
    'prefix_options': (YLeaf(YType.str, 'prefix-options'), ['str'])
})
self.prefix = None
self.prefix_options = None
self._segment_path = lambda: "prefix-list" + ":[prefix='" + str(self.prefix) + "']"
self._is_frozen = True

def __setattr__(self, name, value):

class IntraAreaPrefix(Entity):
    ---
    Intra-Area-Prefix LSA.

    .. attribute:: referenced_ls_type

    Referenced Link State type
    **type**
    : int

    **range:** 0..65535

    .. attribute:: referenced_link_state_id

    Referenced Link State ID
    **type**
    : int

    **range:** 0..4294967295

    .. attribute:: referenced_adv_router

    Referenced Advertising Router
    **type**
    : str

    **pattern:** (\d|\d\d|\d\d\d|\d\d\d\d) [[0-9]|\d\d][0-9]|2[0-4]l[0-9]|25[0-5]\.
(3)[0-9][0-9|\d\d][0-9]|2[0-4]l[0-9]|25[0-5]\%([pN][pL]+)?

    .. attribute:: num_of_prefixes
Number of prefixes
**type**:: int

**range**: 0..65535

.. attribute:: prefix_list

List of prefixes associated with the link

```python
__prefix = 'ospf'
__revision = '2015-03-09'

def __init__(self):

    self.yang_name = "intra-area-prefix"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(["prefix-list")
    self._leafs = OrderedDict(["referenced_ls_type", (YLeaf(YType.uint16, 'referenced-ls-type'), ['int'])),
        ('referenced_link_state_id', (YLeaf(YType.uint32, 'referenced-link-state-id'), ['int'])),
        ('referenced_adv_router', (YLeaf(YType.str, 'referenced-adv-router'), ['str'])),
        ('num_of_prefixes', (YLeaf(YType.uint16, 'num-of-prefixes'), ['int'])),
    ])
    self.referenced_ls_type = None
    self.referenced_link_state_id = None
    self.referenced_adv_router = None
    self.num_of_prefixes = None

    self.prefix_list = YList(self)
    self._segment_path = lambda: "intra-area-prefix"
    self._is_frozen = True
```
def __setattr__(self, name, value):

class PrefixList(Entity):
    ""
    List of prefixes associated with the link.
    ""
    .. attribute:: prefix (key)

    Prefix
    
    .. attribute:: prefix_options

    Prefix options
    
    .. attribute:: metric

    Metric
    
    def __init__(self):
        self.yang_name = "prefix-list"
        self.yang_parent_name = "intra-area-prefix"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = ['prefix']
        self._child_classes = OrderedDict(
        )
        self._leafs = OrderedDict(
            ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
            ('prefix_options', (YLeaf(YType.str, 'prefix_options'), [])),
            ('metric', (YLeaf(YType.int, 'metric'), [])),
            ('_prefix', (YLeaf(YType.str, '_prefix'), [])),
            ('_revision', (YLeaf(YType.str, '_revision'), [])),
        )
        self._parent_keyword = 'prefix-list'
        self._parent_path_helper = PrefixList
        self._parent_key = 'prefix'

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "prefix-list"
        self.yang_parent_name = "intra-area-prefix"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = ['prefix']
        self._child_classes = OrderedDict()
        self._leafs = OrderedDict(
            ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
            ('_prefix', (YLeaf(YType.str, '_prefix'), [])),
            ('_revision', (YLeaf(YType.str, '_revision'), [])),
        )


            self.yang_name = "prefix-list"
            self.yang_parent_name = "intra-area-prefix"
            self.is_top_level_class = False
            self.has_list_ancestor = True
            self.ylist_key_names = ['prefix']
            self._child_classes = OrderedDict()
            self._leafs = OrderedDict(
                ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
                ('_prefix', (YLeaf(YType.str, '_prefix'), [])),
                ('_revision', (YLeaf(YType.str, '_revision'), [])),
            )
('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str'])),
('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
]
}
self.prefix = None
self.prefix_options = None
self.metric = None
self._segment_path = lambda: "prefix-list" + "+[prefix=" + str(self.prefix) + "]"
self._is_frozen = True

def __setattr__(self, name, value):

class Topology(Entity):
    """
    OSPF interface topology.
    .. attribute:: name  (key)

    One of the topology enabled on this interface
    *type*:
    str

    *refers to*:
    :py:class:`name`  :py:obj:`name`
    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "topology"
        self.yang_parent_name = "interfaces"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.yang_list_key_names = ['name']
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict([('name', (YLeaf(YType.str, 'name'), ['str']))])
        self.name = None

        self._is_frozen = True

    def __setattr__(self, name, value):

    def _setattr__(self, _t, _y, _v):
self._segment_path = lambda: "topology" + "[name='" + str(self.name) + "]"
self._is_frozen = True

def __setattr__(self, name, value):
                          Topology, ['name'], name, value)

class AreaScopeLsas(Entity):
    """
    List OSPF area scope LSA databases
    .. attribute:: lsa_type (key)

    OSPF area scope LSA type
    **type**: int

    **range**: 0..255

    .. attribute:: area_scope_lsa

    List of OSPF area scope LSAs
    **type**: list of :py:class:`AreaScopeLsa`

<

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):
init__()

    self.yang_name = "area-scope-lsas"
    self.yang_parent_name = "area"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = ['lsa_type']
    self._child_classes = OrderedDict(
    ("area-scope-lsa", (YLeaf(YType.uint8, 'lsa-type'), ['int']))
    )

    self._leafs = OrderedDict(
        ("lsa_type", (YLeaf(YType.uint8, 'lsa-type'), ['int']))
    )
self.lsa_type = None

self.area_scope_lsa = YList(self)
self._segment_path = lambda: "area-scope-lsas" + "[lsa-type='" + str(self.lsa_type) + '""
self._is_frozen = True

def __setattr__(self, name, value):

class AreaScopeLsa(Entity):
    ""
    List of OSPF area scope LSAs

    .. attribute:: lsa_id  (key)

    LSA ID
    **type**: union of the below types:

    **type**: str

    **pattern**: ((\[0-9\]\[1-9\][0-9]\[0-9\]|1[0-9][0-9]+|2[0-4][0-9]|25[0-5])\.){3}(\[0-9\]\[1-9\]|0-9)\[1-9\]|1\[0-9\]|0-9)\[1-9\]|1[0-9]+|2\[0-4\]|25|0-5)(%\p{N}\p{L}+)?

    **type**: int

    **range**: 0..4294967295

    .. attribute:: adv_router  (key)

    Advertising router
    **type**: str

    **pattern**: ((\[0-9\]\[1-9\][0-9]\[0-9\]|1[0-9][0-9]+|2[0-4][0-9]|25[0-5])\.){3}(\[0-9\]\[1-9\]|0-9)\[1-9\]|1\[0-9\]|0-9)\[1-9\]|1[0-9]+|2\[0-4\]|25|0-5)(%\p{N}\p{L}+)?

    .. attribute:: decoded_completed

    The OSPF LSA body is fully decoded
    **type**: bool

    .. attribute:: raw_data

    The complete LSA in network byte order as received/sent over the wire
    **type**: str

    **pattern**: ((\[0-9\]|fa-F)[2](\[0-9\]|fa-F)[2])\*?
Ospfv2 LSA

.. attribute:: ospfv3

OSPFv3 LSA

.. _prefix = 'ospf'
.. _revision = '2015-03-09'

def __init__(self):
self.ospfv2.parent = self
self._children_name_map["ospfv2"] = "ospfv2"


self.ospfv3.parent = self
self._children_name_map["ospfv3"] = "ospfv3"
self._segment_path = lambda: "area-scope-lsa" + "[lsa-id='" + str(self.lsa_id) + "]" + "[adv-router='" + str(self.adv_router) + "]"
self._is_frozen = True

def __setattr__(self, name, value):

class Ospfv2(Entity):
    """
    OSPFv2 LSA
    .. attribute:: header
    Decoded OSPFv2 LSA header data
    **type**:: :py:class:`Header
    .. attribute:: body
    Decoded OSPFv2 LSA body data
    **type**:: :py:class:`Body
    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):
self.yang_name = "ospfv2"
self.yang_parent_name = "area-scope-lsa"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict(["header", "body")

self._leafs = OrderedDict()

self.header =
.Ospfv2.Header()

self.header.parent = self
self._children_name_map["header"] = "header"

self.body =
.Ospfv2.Body()

self.body.parent = self
self._children_name_map["body"] = "body"
self._segment_path = lambda: "ospfv2"
self._is_frozen = True

def _setattr_(self, name, value):
.Ospfv2.Header.Options, [], name, value)

class Header(Entity):
    """
    Decoded OSPFv2 LSA header data.
    """
    .. attribute:: options

    LSA option
    **type**: `Options`

    **mandatory**: True

    .. attribute:: lsa_id

    LSA ID
    **type**: str
**pattern:** ((\[0-9\].\[0-9\].\[0-9\].\[0-9\])([1-3]([0-9\.\d]+\.)?))

**mandatory**: True

.. attribute:: opaque_type

Opaque type

**type**: int

**range**: 0..255

**mandatory**: True

.. attribute:: opaque_id

Opaque id

**type**: int

**range**: 0..16777215

**mandatory**: True

.. attribute:: age

LSA age

**type**: int

**range**: 0..65535

**mandatory**: True

.. attribute:: type

LSA type

**type**: int

**range**: 0..65535

**mandatory**: True

.. attribute:: adv_router

LSA advertising router

**type**: str

**pattern**: ((\[0-9\].\[0-9\].\[0-9\].\[0-9\])([1-3]([0-9\.\d]+\.)?))
**mandatory**: True

.. attribute:: seq_num

LSA sequence number

**type**: str

**mandatory**: True

.. attribute:: checksum

LSA checksum

**type**: str

**mandatory**: True

.. attribute:: length

LSA length

**type**: int

**range**: ** 0..65535

**mandatory**: True

```python
def __init__(self):

    self.yang_name = "header"
    self.yang_parent_name = "ospfv2"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([      ('options', (YLeaf(YType.bits, 'options'), ['Bits'])),
      ('lsa_id', (YLeaf(YType.str, 'lsa-id'), ['str'])),
      ('opaque_type', (YLeaf(YType.uint8, 'opaque-type'), ['int']))]
```
('opaque_id', (YLeaf(YType.uint32, 'opaque-id'), ['int'])),
('age', (YLeaf(YType.uint16, 'age'), ['int'])),
('type', (YLeaf(YType.uint16, 'type'), ['int'])),
('adv_router', (YLeaf(YType.str, 'adv-router'), ['str'])),
('seq_num', (YLeaf(YType.str, 'seq-num'), ['str'])),
('checksum', (YLeaf(YType.str, 'checksum'), ['str'])),
('length', (YLeaf(YType.uint16, 'length'), ['int'])),
]
self.options = Bits()
self.lsa_id = None
self.opaque_type = None
self.opaque_id = None
self.age = None
self.type = None
self.adv_router = None
self.seq_num = None
self.checksum = None
self.length = None
self._segment_path = lambda: "header"
self._is_frozen = True

def __setattr__(self, name, value):

class Body(Entity):
    
    Decoded OSPFv2 LSA body data.
    .. attribute:: router

    Router LSA
    **type**: :py:class:`Router`

    .. attribute:: network

    Network LSA
    **type**: :py:class:`Network`

    .. attribute:: summary

    Summary LSA
    self.router.parent = self
    self._children_name_map["router"] = "router"

    self.network =
    self.network.parent = self
    self._children_name_map["network"] = "network"

    self.summary =
    self.summary.parent = self
    self._children_name_map["summary"] = "summary"

    self.external =
    self.external.parent = self
    self._children_name_map["external"] = "external"

    self.opaque =
    self.opaque.parent = self
    self._children_name_map["opaque"] = "opaque"
    self._segment_path = lambda: "body"
    self._is_frozen = True

    def __setattr__(self, name, value):

class Router(Entity):
    
    Router LSA.

    .. attribute:: flags

    Flags

    .. attribute:: num_of_links
Number of links
**type**: int

**range**: 0..65535

.. attribute:: link

Router LSA link
**type**: list of :py:class:`Link`

```python

```
class Link(Entity):
    
    Router LSA link.

    .. attribute:: link_id  (key)

    Link ID
    **type**: union of the below types:

    **type**: str

    **pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])(%[\p{N}\p{L}]+)?

    **type**: str

    **pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])

    .. attribute:: link_data  (key)

    Link data
    **type**: union of the below types:

    **type**: str

    **pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])(%[\p{N}\p{L}]+)?

    **type**: int

    **range**: 0..4294967295

    .. attribute:: type

    Link type
    **type**: int

    **range**: 0..255

    .. attribute:: topology

    Topology specific information
    **type**: list of :py:class:`Topology`

class Topology(Entity):
    
    Topology specific information.
    
    .. attribute:: mt_id (key)

    The MT-VID for topology enabled on the link

    **type**: int

    **range**: 0..255
.. attribute:: metric

   Metric for the topology
   **type**: int
   **range**: 0..65535

   

   ..

   _prefix = 'ospf'
   _revision = '2015-03-09'

   def __init__(self):

       self.yang_name = "topology"
       self.yang_parent_name = "link"
       self.is_top_level_class = False
       self.has_list_ancestor = True
       self.ylist_key_names = ['mt_id']
       self._child_classes = OrderedDict({})
       self._leafs = OrderedDict({
           'mt_id': (YLeaf(YType.uint8, 'mt-id'), ['int']),
           'metric': (YLeaf(YType.uint16, 'metric'), ['int'])
       })
       self.mt_id = None
       self.metric = None
       self._segment_path = lambda: "topology" + "[mt-id='" + str(self.mt_id) + "']"
       self._is_frozen = True

       def __setattr__(self, name, value):

   class Network(Entity):
       
       Network LSA.
       
       .. attribute:: network_mask

       The IP address mask for the network
       **type**: str

.. attribute:: attached_router

List of the routers attached to the network

**type**: list of str

**pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))

---

_prefix = 'ospf'
_revision = '2015-03-09'


def __init__(self):

    self.yang_name = "network"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(["network_mask", "attached_router"])
    self.network_mask = None
    self.attached_router = []
    self._segment_path = lambda: "network"
    self._is_frozen = True

    def __setattr__(self, name, value):

    class Summary(Entity):
        ---

        .. attribute:: network_mask

        The IP address mask for the network
**type**: str

**pattern**: \((\[0-9\]|\[1-9]|0-9)\|[0-9]\[0-9]\[0-9\]|1[0-9]|0-9\]|2[0-4]\[0-9]|0-9\]|25[0-5]\\\.)\(3\)((0-9)|(1-9)|0-9\]|1[0-9]0-9\]|2[0-4]\[0-9]|0-9|25[0-5])%\(\p{N}\p{L}\)+\)

.. attribute:: topology

Topology specific information

**type**: list of :py:class:`Topology`

```

...__init__(self):

    self.yang_name = "summary"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []

    self._leaves = OrderedDict([('network_mask', (YLeaf(YType.str, 'network-mask'), ['str'])),

    self.network_mask = None

    self.topology = YList(self)
    self._segment_path = lambda: "summary"
    self._is_frozen = True

    def _setattr_(self, name, value):

class Topology(Entity):

    ...Topology specific information.
.. attribute:: mt_id (key)

The MT-ID for topology enabled on the link
**type**: int

**range**: 0..255

.. attribute:: metric

Metric for the topology
**type**: int

**range**: 0..16777215

====

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "topology"
    self.yang_parent_name = "summary"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = ['mt_id']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('mt_id', (YLeaf(YType.uint8, 'mt-id'), ['int'])),
        ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
    )
    self.mt_id = None
    self.metric = None
    self._segment_path = lambda: "topology" + ":[mt-id='" + str(self.mt_id) + '""
    self._is_frozen = True

    def __setattr__(self, name, value):

    class External(Entity):
        
    ===
External LSA.

.. attribute:: network_mask

The IP address mask for the network

**type** str


.. attribute:: topology

Topology specific information

**type**: list of ```Topology``

class Topology(Entity):
    ""
    Topology specific information.
    ""
    .. attribute:: mt_id  (key)
        The MT-ID for topology enabled on the link
        **type**: int
        **range**: 0..255
    .. attribute:: flags
        Flags
        **type**: :py:class:`Flags`
    .. attribute:: metric
        Metric for the topology
        **type**: int
        **range**: 0..16777215
    .. attribute:: forwarding_address
        Forwarding address
        **type**: str
        **pattern**: (([0-9]\|[1-9]\|1[0-9]\|[1][0-9]\|1[0-9]\|0-4]\|0-9]\|2[0-4]\|2[0-5]\|25\|0-5]),\)(3)\([0-9]\|1[0-9]\|0-9]\|2[0-4]\|0-9]\|25\|0-5\)\)(%\p{N}\p{L})?\n    .. attribute:: external_route_tag
        Route tag
        **type**: int
        **range**: 0..4294967295

    ""
    _prefix = 'ospf'
    _revision = '2015-03-09'
def __init__(self):

    self.yang_name = "topology"
    self.yang_parent_name = "external"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['mt_id']
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(
        ('mt_id', (YLeaf(YType.uint8, 'mt-id'), ['int'])),
        ('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
        ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
        ('forwarding_address', (YLeaf(YType.str, 'forwarding-address'), ['str'])),
        ('external_route_tag', (YLeaf(YType.uint32, 'external-route-tag'), ['int'])),
    )
    self.mt_id = None
    self.flags = Bits()
    self.metric = None
    self.forwarding_address = None
    self.external_route_tag = None
    self._segment_path = lambda: "topology" + "[mt-id='" + str(self.mt_id) + "']"
    self._is_frozen = True

    def __setattr__(self, name, value):

    def __getattr__(self, name):
        self._raise_attribute_error(name)

class Opaque(Entity):
    
    Opaque LSA.

    .. attribute:: unknown_tlv

        Unknown TLV
        **type**: list of :py:class:`UnknownTlv`

    .. attribute:: router_address_tlv

        Router address TLV
        **type**: :py:class:`RouterAddressTlv`

.. attribute:: link_tlv

Link TLV
**type**:: :py:class:`LinkTlv`<
<

===

```python
_prefix = 'ospf'
__revision = '2015-03-09'

def __init__(self):
    self.yang_name = "opaque"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([
            ("unknown-tlv", "unknown_tlv"),
            ("router-address-tlv", "router_address_tlv"),
            ("link-tlv", "link_tlv")
        ])
    self._leafs = OrderedDict()

    self.router_address_tlv =
    self.router_address_tlv.parent = self
    self._children_name_map["router_address_tlv"] = "router-address-tlv"

    self.link_tlv =
    self.link_tlv.parent = self
    self._children_name_map["link_tlv"] = "link-tlv"

    self.unknown_tlv = YList(self)
    self._segment_path = lambda: "opaque"
```
self._is_frozen = True

def __setattr__(self, name, value):

class UnknownTlv(Entity):
    
    Unknown TLV.

    .. attribute:: type  (key)

    TLV type
    **type**: int

    **range**: 0..65535

    .. attribute:: length

    TLV length
    **type**: int

    **range**: 0..65535

    .. attribute:: value

    TLV value
    **type**: str

    **pattern**: ([0-9a-fA-F][2]|([0-9a-fA-F][2]))

    ***

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):

    self.yang_name = "unknown-tlv"
    self.yang_parent_name = "opaque"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['type']
def __setattr__(self, name, value):

class RouterAddressTlv(Entity):
    """
    Router address TLV.
    """
    _prefix = 'ospf'
    _revision = '2015-03-09'
    def __init__(self):
        self.yang_name = "router-address-tlv"
        self.yang_parent_name = "opaque"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict([ ('router_address', (YLeaf(YType.str, 'router-address'), ['str']))])

    def _setattr___(self, prefix, parent, val):
        if val is not None:
            parent._children.append(val)
        self._child_classes[prefix].append(val)

    def __setattr__(self, name, value):

    def __str__(self):
        return self._prefix + "\n\n" + self._setattr___(prefix, parent, val)

    def _prefix__(self):
        return self._prefix

    def _revision__(self):
        return self._revision

    def _init__(self):

        self.yang_name = "router-address-tlv"
        self.yang_parent_name = "opaque"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict([ ('router_address', (YLeaf(YType.str, 'router-address'), ['str']))])

    def __str__(self):
        return self._prefix + "\n\n" + self._setattr___(prefix, parent, val)

    def _prefix__(self):
        return self._prefix

    def _revision__(self):
        return self._revision
null
.. attribute:: local_remote_ipv4_addr

List of remote interface IPv4 addresses
**type**: list of str

**pattern**: ((\[0-9]\|1\-9]\|0\-9]\|1\[0-9\]|0\-9]\|2[0-4]\|0\-9]\|25[0-5])\(\.)\{3\}((\[0-9]\|1\-9]\|0\-9]\|1\[0-9\]|0\-9]\|2[0-4]\|0\-9]\|25[0-5])\(\%\)\(\[N][p\{L\]}\)+?

.. attribute:: te_metric

TE metric
**type**: int

**range**: 0..4294967295

.. attribute:: max_bandwidth

Maximum bandwidth
**type**: :py:class:`Decimal64<ydk.types.Decimal64>`

**range**: \-92233720368547758.08..92233720368547758.07

.. attribute:: max_reservable_bandwidth

Maximum reservable bandwidth
**type**: :py:class:`Decimal64<ydk.types.Decimal64>`

**range**: \-92233720368547758.08..92233720368547758.07

.. attribute:: unreserved_bandwidth

Unreserved bandwidth
**type**: :py:class:`Decimal64<ydk.types.Decimal64>`

**range**: \-92233720368547758.08..92233720368547758.07

.. attribute:: admin_group

Administrative group/Resource class/Color
**type**: int

**range**: 0..4294967295

.. attribute:: unknown_subtlv

Unknown sub-TLV
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "link-tlv"
    self.yang_parent_name = "opaque"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict({"unknown-subtlv", "unknown_subtlv",

    self._leafs = OrderedDict({
        "link-type", (YLeaf(YType.uint8, 'link-type'), ['int']),
        "link-id", (YLeaf(YType.str, 'link-id'), ['str', 'str']),
        "local-if-ipv4-addr", (YLeafList(YType.str, 'local-if-ipv4-addr'), ['str']),
        "local-remote-ipv4-addr", (YLeafList(YType.str, 'local-remote-ipv4-addr'), ['str']),
        "te_metric", (YLeaf(YType.uint32, 'te-metric'), ['int']),
        "max_bandwidth", (YLeaf(YType.str, 'max-bandwidth'), ['Decimal64']),
        "max-reservable-bandwidth", (YLeaf(YType.str, 'max-reservable-bandwidth'), ['Decimal64']),
        "unreserved_bandwidth", (YLeaf(YType.str, 'unreserved-bandwidth'), ['Decimal64']),
        "admin_group", (YLeaf(YType.uint32, 'admin-group'), ['int'])
    })

    self.link_type = None
    self.link_id = None
    self.local_if_ipv4_addr = []
    self.local_remote_ipv4_addr = []
    self.te_metric = None
    self.max_bandwidth = None
    self.max_reservable_bandwidth = None
    self.unreserved_bandwidth = None
    self.admin_group = None

    self.unknown_subtlv = YList(self)
    self._segment_path = lambda: "link-tlv"
    self._is_frozen = True
def __setattr__(self, name, value):

class UnknownSubtlv(Entity):
    ```
    Unknown sub-TLV.
    ```
    .. attribute:: type  (key)
        TLV type
    **type**: int
    **range**: 0..65535
    .. attribute:: length
        TLV length
    **type**: int
    **range**: 0..65535
    .. attribute:: value
        TLV value
    **type**: str
    **pattern**: ([0-9a-fA-F][2](\[0-9a-fA-F][2])*?)

    ```
    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):
    self.yang_name = "unknown-subtlv"
    self.yang_parent_name = "link-tlv"
    self.is_top_level_class = False
    self.has_list_ancestor = True
self.ylist_key_names = ['type']
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([  
    ('type', (YLeaf(YType.uint16, 'type'), ['int'])),  
    ('length', (YLeaf(YType.uint16, 'length'), ['int'])),  
    ('value', (YLeaf(YType.str, 'value'), ['str']))  
])
self.type = None
self.length = None
self.value = None
self._segment_path = lambda: "unknown-subtlv" + "[type='" + str(self.type) + "]"
self._is_frozen = True

def __setattr__(self, name, value):

class Ospfv3(Entity):
    '''
    OSPFv3 LSA
    .. attribute:: header

    Decoded OSPFv3 LSA header data
    **type**:: :py:class:`Header`

    .. attribute:: body

    Decoded OSPF LSA body data
    **type**:: :py:class:`Body`
    '''

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):
self.yang_name = "ospfv3"
self.yang_parent_name = "area-scope-lsa"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict(["header", "body")
self._leafs = OrderedDict()
self.header.parent = self
self._children_name_map["header"] = "header"
self.body.parent = self
self._children_name_map["body"] = "body"
self._segment_path = lambda: "ospfv3"
self._is_frozen = True
def __setattr__(self, name, value):

class Header(Entity):
    ""
    Decoded OSPFv3 LSA header data.
    """
    .. attribute:: lsa_id

    LSA ID
    **type**\: int
    **range**: 0..4294967295
    **mandatory**: True
    
    .. attribute:: age

    LSA age
    **type**\: int
.. attribute:: type

LSA type

.. attribute:: adv_router

LSA advertising router

.. attribute:: seq_num

LSA sequence number

.. attribute:: checksum

LSA checksum

.. attribute:: length

LSA length

.. attribute:: options
OSPFv3 LSA options


**mandatory**: True

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

self.yang_name = "header"
self.yang_parent_name = "ospfv3"
self.is_top_level_class = False
self.has_list_ancestor = True
self.yslist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([  ('lsa_id', (YLeaf(YType.uint32, 'lsa-id'), ['int']))),  ('age', (YLeaf(YType.uint16, 'age'), ['int']))),  ('type', (YLeaf(YType.uint16, 'type'), ['int']))),  ('adv_router', (YLeaf(YType.str, 'adv-router'), ['str']))),  ('seq_num', (YLeaf(YType.str, 'seq-num'), ['str']))),  ('checksum', (YLeaf(YType.str, 'checksum'), ['str']))),  ('length', (YLeaf(YType.uint16, 'length'), ['int']))),  ('options', (YLeaf(YType.bits, 'options'), ['Bits']))),
])
self.lsa_id = None
self.age = None
self.type = None
self.adv_router = None
self.seq_num = None
self.checksum = None
self.length = None
self.options = Bits()
self._segment_path = lambda: "header"
self._is_frozen = True

def __setattr__(self, name, value):
```
class Body(Entity):
    ""
    Decoded OSPF LSA body data.
    .. attribute:: router

    Router LSA
    **type**:: py:class:`Router`


    .. attribute:: network

    Network LSA
    **type**:: py:class:`Network`


    .. attribute:: inter_area_prefix

    Inter-Area-Prefix LSA
    **type**:: py:class:`InterAreaPrefix`


    .. attribute:: inter_area_router

    Inter-Area-Router LSA
    **type**:: py:class:`InterAreaRouter`


    .. attribute:: as_external

    AS-External LSA
    **type**:: py:class:`AsExternal`


    .. attribute:: nssa

    NSSA LSA
    **type**:: py:class:`Nssa`


.. attribute:: link

    Link LSA
    **type**: :py:class:`Link`

.. attribute:: intra_area_prefix

    Intra-Area-Prefix LSA
    **type**: :py:class:`IntraAreaPrefix`

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):

    self.yang_name = "body"
    self.yang_parent_name = "ospfv3"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes =OrderedDict([("router", "router"),
("network", "network"),
("inter-area-prefix", "inter_area_prefix"),
("inter-area-router", "inter_area_router"),
("as-external", "as_external"),
("nssa", "nssa"),
("link", "link"),
("intra-area-prefix", "intra_area_prefix"),
self._leafs = OrderedDict()

self.router =

self.router.parent = self
self._children_name_map["router"] = "router"

self.network =

self.network.parent = self
self._children_name_map["network"] = "network"

self.inter_area_prefix =

self.inter_area_prefix.parent = self
self._children_name_map["inter_area_prefix"] = "inter-area-prefix"

self.inter_area_router =

self.inter_area_router.parent = self
self._children_name_map["inter-area-router"] = "inter-area-router"

self.as_external =

self.as_external.parent = self
self._children_name_map["as_external"] = "as-external"

self.nssa =

self.nssa.parent = self
self._children_name_map["nssa"] = "nssa"

self.link =

self.link.parent = self
self._children_name_map["link"] = "link"

self.intra_area_prefix =
def __setattr__(self, name, value):

class Router(Entity):
    
    Router LSA.

    .. attribute:: flags

        LSA option
        **type**: :py:class:`Flags`

        **mandatory**: True

    .. attribute:: options

        OSPFv3 LSA options
        **type**: :py:class:`Options`

        **mandatory**: True

    .. attribute:: link

        Router LSA link
        **type**: list of :py:class:`Link`

    

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "router"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([
        ("link", (YLeaf(YType.bits, 'flags'), ['Bits'])),
        ("options", (YLeaf(YType.bits, 'options'), ['Bits']))
    ])
    self.flags = Bits()
    self.options = Bits()

    self.link = YList(self)
    self._segment_path = lambda: "router"
    self._is_frozen = True

def __setattr__(self, name, value):

class Link(Entity):
    ===
    Router LSA link.

    .. attribute:: interface_id  (key)

    Interface ID
    **type**:: int

    **range**: 0..4294967295

    .. attribute:: neighbor_interface_id  (key)

    Neighbor Interface ID
    **type**:: int

    **range**: 0..4294967295

    .. attribute:: neighbor_router_id  (key)

    Neighbor Router ID
    **type**:: str
.. attribute:: type

Link type

**type**: int

**range**: 0..255

.. attribute:: metric

Metric

**type**: int

**range**: 0..65535

===

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "link"
    self.yang_parent_name = "router"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = ['interface_id', 'neighbor_interface_id', 'neighbor_router_id']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('interface_id', YLeaf(YType.uint32, 'interface-id'), ['int'])),
        ('neighbor_interface_id', YLeaf(YType.uint32, 'neighbor-interface-id'), ['int'])),
        ('neighbor_router_id', YLeaf(YType.str, 'neighbor-router-id'), ['str'])),
        ('type', YLeaf(YType.uint8, 'type'), ['int'])),
        ('metric', YLeaf(YType.uint16, 'metric'), ['int'])),
    )
    self.interface_id = None
    self.neighbor_interface_id = None
    self.neighbor_router_id = None
    self.type = None
    self.metric = None
self._segment_path = lambda: "link" + "[interface-id="" + str(self.interface_id) + ""]" + "[neighbor-interface-id="" + str(self.neighbor_interface_id) + ""]" + "[neighbor-router-id="" + str(self.neighbor_router_id) + "]"

    self._is_frozen = True

    def __setattr__(self, name, value):

class Network(Entity):

    Network LSA.

    .. attribute:: options

        OSPFv3 LSA options

        **type**: \py:class:`Options`


        **mandatory**: True

        .. attribute:: attached_router

            List of the routers attached to the network

            **type**: list of str


    ....

    _prefix = 'ospf'

    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "network"

        self.yang_parent_name = "body"

        self.is_top_level_class = False

        self.has_list_ancestor = True

        self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict(
    ('options', (YLeaf(YType.bits, 'options'), ['Bits'])),
    ('attached_router', (YLeafList(YType.str, 'attached-router'), ['str'])),
)
self.options = Bits()
self.attached_router = []
self._segment_path = lambda: "network"
self._is_frozen = True

def __setattr__(self, name, value):

class InterAreaPrefix(Entity):
    ---
    Inter\-Area\-Prefix LSA.

    .. attribute:: metric

    Metric
    **type**: int
    **range**: 0..16777215

    .. attribute:: prefix

    Prefix
    **type**: str

    .. attribute:: prefix_options

    Prefix options
    **type**: str
    **mandatory**: True

    ---

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):
self.yang_name = "inter-area-prefix"
self.yang_parent_name = "body"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict(
)
self._leafs = OrderedDict(
    ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
    ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
    ('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str'])),
)
self.metric = None
self.prefix = None
self.prefix_options = None
self._segment_path = lambda: "inter-area-prefix"
self._is_frozen = True

def __setattr__(self, name, value):

class InterAreaRouter(Entity):
    ***
    Inter\-Area\-Router LSA.
    ***

    .. attribute:: options

    OSPFv3 LSA options
    **type**: :py:class:`Options`

    **mandatory**: True

    .. attribute:: metric

    Metric
    **type**: int

    **range:** 0..16777215

    .. attribute:: destination_router_id

    The Router ID of the router being described by the LSA
    **type**: str
def __init__(self):
    self.yang_name = "inter-area-router"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([ ])
    self._leafs = OrderedDict([ ('options', (YLeaf(YType.bits, 'options'), ['Bits'])), ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])), ('destination_router_id', (YLeaf(YType.str, 'destination-router-id'), ['str'])), ])
    self.options = Bits()
    self.metric = None
    self.destination_router_id = None
    self._segment_path = lambda: "inter-area-router"
    self._is_frozen = True

def _setattr__(self, name, value):

class AsExternal(Entity):
    def __init__(self):
        ASv-External LSA.

        .. attribute:: metric

            Metric

            **type**:: int

            **range:** 0..16777215

            .. attribute:: flags

            **type**:: int

            .. attribute:: metric
Flags

.. attribute:: referenced_ls_type

Referenced Link State type

.. attribute:: prefix

Prefix

.. attribute:: prefix_options

Prefix options

.. attribute:: forwarding_address

Forwarding address

.. attribute:: external_route_tag

Route tag

.. attribute:: referenced_link_state_id

Referenced Link State ID
```python
 def __init__(self):

        self.yang_name = "as-external"
        self.yang_parent_name = "body"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict([  
            ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
            ('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
            ('referenced_ls_type', (YLeaf(YType.uint16, 'referenced-ls-type'), ['int'])),
            ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
            ('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str'])),
            ('forwarding_address', (YLeaf(YType.str, 'forwarding-address'), ['str'])),
            ('external_route_tag', (YLeaf(YType.uint32, 'external-route-tag'), ['int'])),
            ('referenced_link_state_id', (YLeaf(YType.uint32, 'referenced-link-state-id'), ['int'])),
        ])

        self.metric = None
        self.flags = Bits()
        self.referenced_ls_type = None
        self.prefix = None
        self.prefix_options = None
        self.forwarding_address = None
        self.external_route_tag = None
        self.referenced_link_state_id = None
        self._segment_path = lambda: "as-external"
        self._is_frozen = True

        def __setattr__(self, name, value):
                'metric', 'flags', 'referenced_ls_type', 'prefix', 'prefix_options',
                'forwarding_address', 'external_route_tag', 'referenced_link_state_id'
            ], name, value)

        def __setattr__(self, name, value):
                'metric', 'flags', 'referenced_ls_type', 'prefix', 'prefix_options',
                'forwarding_address', 'external_route_tag', 'referenced_link_state_id'
            ], name, value)

        class Nssa(Entity):
            _prefix = 'ospf'
            _revision = '2015-03-09'

            def __init__(self):

                self.yang_name = "as-external"
                self.yang_parent_name = "body"
                self.is_top_level_class = False
                self.has_list_ancestor = True
                self.ylist_key_names = []
                self._child_classes = OrderedDict([])
                self._leafs = OrderedDict([  
                    ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
                    ('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
                    ('referenced_ls_type', (YLeaf(YType.uint16, 'referenced-ls-type'), ['int'])),
                    ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
                    ('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str'])),
                    ('forwarding_address', (YLeaf(YType.str, 'forwarding-address'), ['str'])),
                    ('external_route_tag', (YLeaf(YType.uint32, 'external-route-tag'), ['int'])),
                    ('referenced_link_state_id', (YLeaf(YType.uint32, 'referenced-link-state-id'), ['int'])),
                ])

                self.metric = None
                self.flags = Bits()
                self.referenced_ls_type = None
                self.prefix = None
                self.prefix_options = None
                self.forwarding_address = None
                self.external_route_tag = None
                self.referenced_link_state_id = None
                self._segment_path = lambda: "as-external"
                self._is_frozen = True

                def __setattr__(self, name, value):
                        'metric', 'flags', 'referenced_ls_type', 'prefix', 'prefix_options',
                        'forwarding_address', 'external_route_tag', 'referenced_link_state_id'
                    ], name, value)

            class Nssa(Entity):
                _prefix = 'ospf'
                _revision = '2015-03-09'

                def __init__(self):

                    self.yang_name = "as-external"
                    self.yang_parent_name = "body"
                    self.is_top_level_class = False
                    self.has_list_ancestor = True
                    self.ylist_key_names = []
                    self._child_classes = OrderedDict([])
                    self._leafs = OrderedDict([  
                        ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
                        ('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
                        ('referenced_ls_type', (YLeaf(YType.uint16, 'referenced-ls-type'), ['int'])),
                        ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
                        ('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str'])),
                        ('forwarding_address', (YLeaf(YType.str, 'forwarding-address'), ['str'])),
                        ('external_route_tag', (YLeaf(YType.uint32, 'external-route-tag'), ['int'])),
                        ('referenced_link_state_id', (YLeaf(YType.uint32, 'referenced-link-state-id'), ['int'])),
                    ])

                    self.metric = None
                    self.flags = Bits()
                    self.referenced_ls_type = None
                    self.prefix = None
                    self.prefix_options = None
                    self.forwarding_address = None
                    self.external_route_tag = None
                    self.referenced_link_state_id = None
                    self._segment_path = lambda: "as-external"
                    self._is_frozen = True

                    def __setattr__(self, name, value):
                                'metric', 'flags', 'referenced_ls_type', 'prefix', 'prefix_options',
                                'forwarding_address', 'external_route_tag', 'referenced_link_state_id'
                            ], name, value)

                def __setattr__(self, name, value):
                                'metric', 'flags', 'referenced_ls_type', 'prefix', 'prefix_options',
                                'forwarding_address', 'external_route_tag', 'referenced_link_state_id'
                            ], name, value)

            class Nssa(Entity):
                _prefix = 'ospf'
                _revision = '2015-03-09'

                def __init__(self):

                    self.yang_name = "as-external"
                    self.yang_parent_name = "body"
                    self.is_top_level_class = False
                    self.has_list_ancestor = True
                    self.ylist_key_names = []
                    self._child_classes = OrderedDict([])
                    self._leafs = OrderedDict([  
                        ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
                        ('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
                        ('referenced_ls_type', (YLeaf(YType.uint16, 'referenced-ls-type'), ['int'])),
                        ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
                        ('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str'])),
                        ('forwarding_address', (YLeaf(YType.str, 'forwarding-address'), ['str'])),
                        ('external_route_tag', (YLeaf(YType.uint32, 'external-route-tag'), ['int'])),
                        ('referenced_link_state_id', (YLeaf(YType.uint32, 'referenced-link-state-id'), ['int'])),
                    ])

                    self.metric = None
                    self.flags = Bits()
                    self.referenced_ls_type = None
                    self.prefix = None
                    self.prefix_options = None
                    self.forwarding_address = None
                    self.external_route_tag = None
                    self.referenced_link_state_id = None
                    self._segment_path = lambda: "as-external"
                    self._is_frozen = True

                    def __setattr__(self, name, value):
                                'metric', 'flags', 'referenced_ls_type', 'prefix', 'prefix_options',
                                'forwarding_address', 'external_route_tag', 'referenced_link_state_id'
                            ], name, value)
```
.. attribute:: metric

Metric
**type**:: int

**range**: 0..16777215

.. attribute:: flags

Flags

.. attribute:: referenced_ls_type

Referenced Link State type
**type**:: int

**range**: 0..65535

.. attribute:: prefix

Prefix
**type**:: str

.. attribute:: prefix_options

Prefix options
**type**:: str

**mandatory**:: True

.. attribute:: forwarding_address

Forwarding address
**type**:: str

**pattern**:: ((\:\|\[0-9a-fA-F]{0,4}\])|([0-9a-fA-F]{0,4}\])|{0,5}(((\[0-9a-fA-F]{0,4}\)|[0,4,5,6,7,8,9,0-9,\]),((25[0-5]|2\[0-4]\[0-9]|0\[0-9]|0-9]\[/0-9]?[0-9-9])[0-9-9]))(%[\p{N}\p{L}]+)?

.. attribute:: external_route_tag

Route tag
**type**:: int
.. attribute:: referenced_link_state_id

Referenced Link State ID

**type**: int

**range**: 0..4294967295

```python
_**prefix** = 'ospf'
_**revision** = '2015-03-09'

def __init__(self):

    self.yang_name = "nssa"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'metric': (YLeaf(YType.uint32, 'metric'), ['int']),
        'flags': (YLeaf(YType.bits, 'flags'), ['Bits']),
        'referenced_ls_type': (YLeaf(YType.uint16, 'referenced-ls-type'), ['int']),
        'prefix': (YLeaf(YType.str, 'prefix'), ['str']),
        'prefix_options': (YLeaf(YType.str, 'prefix-options'), ['str']),
        'forwarding_address': (YLeaf(YType.str, 'forwarding-address'), ['str']),
        'external_route_tag': (YLeaf(YType.uint32, 'external-route-tag'), ['int']),
        'referenced_link_state_id': (YLeaf(YType.uint32, 'referenced-link-state-id'), ['int'])
    })

    self.metric = None
    self.flags = Bits()
    self.referenced_ls_type = None
    self.prefix = None
    self.prefix_options = None
    self.forwarding_address = None
    self.external_route_tag = None
    self.referenced_link_state_id = None
    self._segment_path = lambda: "nssa"
    self._is_frozen = True
```
def __setattr__(self, name, value):

class Link(Entity):
    
    Link LSA.

    .. attribute:: rtr_priority

    Router Priority of the interface
    **type**: int

    **range**: 0..255

    .. attribute:: options

    OSPFv3 LSA options
    **type**: py:class:`Options`

    .. attribute:: link_local_interface_address

    The originating router's link-local interface address on the link
    **type**: union of the below types:

    **type**: str

    **pattern**: (([0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F]|%[\p{N}\p{L}]+)?

    **type**: str

    **pattern**: (([0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F][0-9a-fA-F]|%[\p{N}\p{L}]+)?

    .. attribute:: num_of_prefixes

    Number of prefixes
    **type**: int

    **range**: 0..4294967295
.. attribute:: prefix_list

List of prefixes associated with the link

**type**:
list of `py:class: PrefixList`

```python
```

```python
...

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "link"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        ("prefix-list", (YLeaf(YType.list, 'prefix-list'), 
    )
    self._leafs = OrderedDict(
        ("rtr_priority", (YLeaf(YType.uint8, 'rtr-priority'), 
            ['int'])),
        ("options", (YLeaf(YType.bits, 'options'), ['Bits'])),
        ("link_local_interface_address", (YLeaf(YType.str, 'link-local-interface-address'), 
            ['str','str'])),
        ("num_of_prefixes", (YLeaf(YType.uint32, 'num-of-prefixes'), 
            ['int'])),
    )
    self.rtr_priority = None
    self.options = Bits()
    self.link_local_interface_address = None
    self.num_of_prefixes = None

    self.prefix_list = YList(self)
    self._segment_path = lambda: "link"
    self._is_frozen = True

    def __setattr__(self, name, value):
            (self, name, value))

    def _perform_setattr(self, parent, type_name, name, value):
        parent._pybind_generated_by = True
        parent._yang_name += """ + name + ""
        parent._pybind_generated_by += """ + type_name + ""
        parent._setnextkey = """ + name + ""
        parent._setnextkey = lambda x: x
        parent._setnextkey = lambda x: x
```

---

<Open Source Used in BGP TE Controller Version 4.3.0 2024>
class PrefixList(Entity):
    
    List of prefixes associated with the link.
    
    .. attribute:: prefix (key)

    Prefix
    **type**: str

    .. attribute:: prefix_options

    Prefix options
    **type**: str

    **mandatory**: True

    

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "prefix-list"
        self.yang_parent_name = "link"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = ['prefix']
        self._child_classes = OrderedDict()
        self._leafs = OrderedDict(
            (YLeaf(YType.str, 'prefix'), ['str'])),
            (YLeaf(YType.str, 'prefix-options'), ['str'])),
        )

        self.prefix = None
        self.prefix_options = None

        self._segment_path = lambda: "prefix-list" + 
            '[prefix=' + str(self.prefix) + ']'

        self._is_frozen = True

        def __setattr__(self, name, value):

        self.yang_name = "prefix-list"
        self.yang_parent_name = "link"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = ['prefix']
        self._child_classes = OrderedDict()
        self._leafs = OrderedDict(
            (YLeaf(YType.str, 'prefix'), ['str'])),
            (YLeaf(YType.str, 'prefix-options'), ['str'])),
        )

        self.prefix = None
        self.prefix_options = None

        self._segment_path = lambda: "prefix-list" + 
            '[prefix=' + str(self.prefix) + ']' + 
            '[prefix-options=' + str(self.prefix_options) + ']' + 
            ']'

        self._is_frozen = True

        def __setattr__(self, name, value):
class IntraAreaPrefix(Entity):
    
    Intra-Area-Prefix LSA.

    .. attribute:: referenced_ls_type

    Referenced Link State type
    **type**: int
    **range**: 0..65535

    .. attribute:: referenced_link_state_id

    Referenced Link State ID
    **type**: int
    **range**: 0..4294967295

    .. attribute:: referenced_adv_router

    Referenced Advertising Router
    **type**: str
    **pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)\3\5\(\3\(\3\5\)\(\3\[\p{N}\p{L}\]+)?

    .. attribute:: num_of_prefixes

    Number of prefixes
    **type**: int
    **range**: 0..65535

    .. attribute:: prefix_list

    List of prefixes associated with the link
    **type**: list of :py:class:`PrefixList`

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):

    self.yang_name = "intra-area-prefix"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._leafs = OrderedDict([  
        ('referenced_ls_type', (YLeaf(YType.uint16, 'referenced-ls-type'), ['int'])),
        ('referenced_link_state_id', (YLeaf(YType.uint32, 'referenced-link-state-id'), ['int'])),
        ('referenced_adv_router', (YLeaf(YType.str, 'referenced-adv-router'), ['str'])),
        ('num_of_prefixes', (YLeaf(YType.uint16, 'num-of-prefixes'), ['int'])),
    ])
    self.referenced_ls_type = None
    self.referenced_link_state_id = None
    self.referenced_adv_router = None
    self.num_of_prefixes = None

    self.prefix_list = YList(self)
    self._segment_path = lambda: "intra-area-prefix"
    self._is_frozen = True

    def __setattr__(self, name, value):

class PrefixList(Entity):

    prefix  (key)

    .. attribute:: prefix_options

    Prefix options

    **mandatory**: True
.. attribute:: metric

  Metric
  **type**\: int

  **range**: 0..16777215

===

_prefix = 'ospf'
_revision = '2015-03-09'

def _init__(self):

  self.yang_name = "prefix-list"
  self.yang_parent_name = "intra-area-prefix"
  self.is_top_level_class = False
  self.has_list_ancestor = True
  self.ylist_key_names = ['prefix']
  self._child_classes = OrderedDict({})
  self._leafs = OrderedDict({
    'prefix': (YLeaf(YType.str, 'prefix'), ['str']),
    'prefix_options': (YLeaf(YType.str, 'prefix-options'), ['str']),
    'metric': (YLeaf(YType.uint32, 'metric'), ['int'])
  })
  self.prefix = None
  self.prefix_options = None
  self.metric = None
  self._segment_path = lambda: "prefix-list" + "[prefix='" + str(self.prefix) + '"']"
  self._is_frozen = True

def _setattr_(self, name, value):

class AsScopeLsas(Entity):
  
  List OSPF AS scope LSA databases

  .. attribute:: lsa_type (key)

  OSPF AS scope LSA type
**type**

int

**range:** 0..255

.. attribute:: as_scope_lsa

List of OSPF AS scope LSAs

**type**


```python

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self.yang_name = "as-scope-lsas"
    self.yang_parent_name = "instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['lsa_type']
    self._leafs = OrderedDict([('lsa_type', (YLeaf(YType.uint8, 'lsa-type'), ['int']))])
    self.lsa_type = None
    self.as_scope_lsa = YList(self)

    self._segment_path = lambda: "as-scope-lsas" + "[lsa-type='" + str(self.lsa_type) + "']"
    self._is_frozen = True

    def __setattr__(self, name, value):

class AsScopeLsa(Entity):
    
    .. attribute:: lsa_id  (key)

    LSA ID
```
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "as-scope-lsa"
    self.yang_parent_name = "as-scope-lsas"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['lsa_id','adv_router']
    self._child_classes = OrderedDict(
    )

    self._leaves = OrderedDict(
        (['lsa_id', (YLeaf(YType.str, 'lsa-id'), ['str','int'])]),
        (['adv_router', (YLeaf(YType.str, 'adv-router'), ['str'])]),
        (['decoded_completed', (YLeaf(YType.boolean, 'decoded-completed'), ['bool'])]),
        (['raw_data', (YLeaf(YType.str, 'raw-data'), ['str'])]),
    )

    self.lsa_id = None
    self.adv_router = None
    self.decoded_completed = None
    self.raw_data = None

    self.ospfv2.parent = self
    self._children_name_map["ospfv2"] = "ospfv2"

    self.ospfv3.parent = self
    self._children_name_map["ospfv3"] = "ospfv3"

    def __setattr__(self, name, value):

class Ospfv2(Entity):
OSPFv2 LSA

.. attribute:: header

Decoded OSPFv2 LSA header data

.. attribute:: body

Decoded OSPFv2 LSA body data

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "ospfv2"
    self.yang_parent_name = "as-scope-lsa"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self._child_classes = OrderedDict([
    self._leafs = OrderedDict()

    self.header.parent = self
    self._children_name_map["header"] = "header"

from ydk.models.ietf.ietf_routing import RoutingState, RoutingInstance, RoutingProtocols, RoutingProtocol, Ospf, Instance, AsScopeLsas, AsScopeLsa, Ospfv2

class Header(Entity):
    ""
    Decoded OSPFv2 LSA header data.
    ""
    .. attribute:: options
        LSA option
        **type**: :py:class:`Options`
        .. attribute:: lsa_id
            LSA ID
            **type**: str
            **pattern**: (([0-9]|1[0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|1[0-9]|2[0-4][0-9]|25[0-5])(\%[\p{N}\p{L}\p{P}]+)?
            **mandatory**: True
            .. attribute:: opaque_type
                Opaque type
                **type**: int
                **range**: 0..255
                **mandatory**: True
                .. attribute:: opaque_id
                    Opaque id
                    **type**: int
.. attribute:: age

LSA age
**type**: int
**range**: 0..65535
**mandatory**: True

.. attribute:: type

LSA type
**type**: int
**range**: 0..65535
**mandatory**: True

.. attribute:: adv_router

LSA advertising router
**type**: str
**pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])
**mandatory**: True

.. attribute:: seq_num

LSA sequence number
**type**: str
**mandatory**: True

.. attribute:: checksum

LSA checksum
**type**: str
**mandatory**: True

.. attribute:: length
LSA length
   type: int
   range: 0..65535
   mandatory: True

   _prefix = 'ospf'
   _revision = '2015-03-09'

   def __init__(self):

       self.yang_name = "header"
       self.yang_parent_name = "ospfv2"
       self.is_top_level_class = False
       self.has_list_ancestor = True
       self.ylist_key_names = []
       self._child_classes = OrderedDict([])
       self._leafs = OrderedDict(
           ('options', (YLeaf(YType.bits, 'options'), ['Bits'])),
           ('lsa_id', (YLeaf(YType.str, 'lsa-id'), ['str'])),
           ('opaque_type', (YLeaf(YType.uint8, 'opaque-type'), ['int'])),
           ('opaque_id', (YLeaf(YType.uint32, 'opaque-id'), ['int'])),
           ('age', (YLeaf(YType.uint16, 'age'), ['int'])),
           ('type', (YLeaf(YType.uint16, 'type'), ['int'])),
           ('adv_router', (YLeaf(YType.str, 'adv-router'), ['str'])),
           ('seq_num', (YLeaf(YType.str, 'seq-num'), ['str'])),
           ('checksum', (YLeaf(YType.str, 'checksum'), ['str'])),
           ('length', (YLeaf(YType.uint16, 'length'), ['int'])),
       )
       self.options = Bits()
       self.lsa_id = None
       self.opaque_type = None
       self.opaque_id = None
       self.age = None
       self.type = None
       self.adv_router = None
       self.seq_num = None
       self.checksum = None
       self.length = None
       self._segment_path = lambda: "header"
       self._is_frozen = True
def __setattr__(self, name, value):

class Body(Entity):
    ""
    Decoded OSPFv2 LSA body data.
    ""
    .. attribute:: router

    Router LSA
    **type**: :py:class:`Router


    .. attribute:: network

    Network LSA
    **type**: :py:class:`Network


    .. attribute:: summary

    Summary LSA
    **type**: :py:class:`Summary


    .. attribute:: external

    External LSA
    **type**: :py:class:`External


    .. attribute:: opaque

    Opaque LSA
    **type**: :py:class:`Opaque

```

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "body"
    self.yang_parent_name = "ospfv2"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict(["router", "network", "summary", "external", "opaque")
    self._leafs = OrderedDict()

    self.router =

    self.router.parent = self
    self._children_name_map["router"] = "router"

    self.network =

    self.network.parent = self
    self._children_name_map["network"] = "network"

    self.summary =

    self.summary.parent = self
    self._children_name_map["summary"] = "summary"

    self.external =
```

self.external.parent = self
self._children_name_map["external"] = "external"

self.opaque =
Body.Opaque()

self.opaque.parent = self
self._children_name_map["opaque"] = "opaque"
self._segment_path = lambda: "body"
self._is_frozen = True

def __setattr__(self, name, value):
    AsScopeLsa.Ospfv2.Body, [], name, value)

class Router(Entity):
    ""
    Router LSA.
    ""
    .. attribute:: flags

    Flags
    **type**: :py:class:`Flags`

    .. attribute:: num_of_links

    Number of links
    **type**: int

    **range**: **0..65535

    .. attribute:: link

    Router LSA link
    **type**: list of :py:class:`Link`

    """

_prefix = 'ospf'
_revision = '2015-03-09'
def __init__(self):

    self.yang_name = "router"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(["link",
                                        Body.Router.Link))

    self._leafs = OrderedDict([('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
                                ('num_of_links', (YLeaf(YType.uint16, 'num-of-links'), ['int'])),
                                ]
                              )
    self.flags = Bits()
    self.num_of_links = None

    self.link = YList(self)
    self._segment_path = lambda: "router"
    self._is_frozen = True

def __setattr__(self, name, value):
                           AsScopeLsa.Ospfv2.Body.Router, ['flags', 'num_of_links'], name, value)

class Link(Entity):
    
    Router LSA link.

    .. attribute:: link_id  (key)

    Link ID

    **type**: str


    **type**: str


    .. attribute:: link_data (key)
Link data
**type**: union of the below types:

**type**: str

**pattern**: (([0-9]\|[1-9][0-9]\|1[0-9][0-9]\|2[0-4][0-9]\|25[0-5]\.){3}([0-9]\|[1-9][0-9]\|1[0-9][0-9]\|2[0-4][0-9]\|25[0-5])(%\[\p{N}\p{L}]+)?)

**type**: int

**range**: 0..4294967295

.. attribute:: type

Link type
**type**: int

**range**: 0..255

.. attribute:: topology

Topology specific information

===

__prefix = 'ospf'
__revision = '2015-03-09'

def __init__(self):

    self.yang_name = "link"
    self.yang_parent_name = "router"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.leaf_names = ['link-id', 'link_data']
    self.child_classes =OrderedDict([('topology', "topology"),

    self.leafs =OrderedDict([
        ('link_id', YLeaf(YType.str, 'link-id')),
        ('str'), 'str')])}
('link_data', (YLeaf(YType.str, 'link-data'), ['str', 'int'])),
('type', (YLeaf(YType.uint8, 'type'), ['int']))),
]
self.link_id = None
self.link_data = None
self.type = None

self.topology = YList(self)
self._segment_path = lambda: "link" + "[link-id='" + str(self.link_id) + "]" + "[link-data='" + str(self.link_data) + "]"
self._is_frozen = True

def __setattr__(self, name, value):
AsScopeLsa.Ospfv2.Body.Router.Link, ['link_id', 'link_data', 'type'], name, value)

class Topology(Entity):
    
    Topology specific information.

    .. attribute:: mt_id  (key)

    The MT-ID for topology enabled on the link

    **type**:: int

    **range:** 0..255

    .. attribute:: metric

    Metric for the topology

    **type**:: int

    **range:** 0..65535

    

    ._prefix = 'ospf'
    ._revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "topology"
        self.yang_parent_name = "link"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['mt_id']
self._child_classes = OrderedDict({})
self._leafs = OrderedDict(
    ('mt_id', (YLeaf(YType.uint8, 'mt-id'), ['int'])),
    ('metric', (YLeaf(YType.uint16, 'metric'), ['int'])),
)
self.mt_id = None
self.metric = None
self._segment_path = lambda: "topology" + "[mt-id='" + str(self.mt_id) + ‘’]"
self._is_frozen = True

def __setattr__(self, name, value):

class Network(Entity):
    '''
    Network LSA.
    .. attribute:: network_mask

    The IP address mask for the network
    **type**:** str

    **pattern:** (([0-9]([1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]([1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])|([0-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))(\%[\p{N}\p{L}]+)?

    .. attribute:: attached_router

    List of the routers attached to the network
    **type:** list of str

    **pattern:** (([0-9]([1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]([1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])|([0-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))(\%[\p{N}\p{L}]+)?
    '''

    _prefix = 'ospf'
    _revision = '2015-03-09'
    
def __init__(self):

        _prefix = 'ospf'
        _revision = '2015-03-09'

        def __init__(self):
self.yang_name = "network"
self.yang_parent_name = "body"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([(
'network_mask', (YLeaf(YType.str, 'network-mask'), ['str'])),
('attached_router', (YLeafList(YType.str, 'attached-router'), ['str'])),
])
self.network_mask = None
self.attached_router = []
self._segment_path = lambda: "network"
self._is_frozen = True

def __setattr__(self, name, value):

class Summary(Entity):
    
    Summary LSA.

    .. attribute:: network_mask

        The IP address mask for the network

        **type**: str

        **pattern**: (([0\-9]|1[0\-9]|0\-9|1[0\-9]|0\-9|2[0\-4]\d|0\-9|25[0\-5])\.){3}(([0\-9]|1[0\-9]|0\-9|1[0\-9]|0\-9|2[0\-4]\d|0\-9|25[0\-5])\%([\w\-]+)?)

    .. attribute:: topology

        Topology specific information

        **type**: list of :py:class:`Topology

    

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):


    self.yang_name = "summary"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(["topology")

    self.network_mask = None

    self.topology = YList(self)
    self._segment_path = lambda: "summary"
    self._is_frozen = True

    def __setattr__(self, name, value):

    self._leaves = OrderedDict(
            ('network_mask', (YLeaf(YType.str, 'network-mask'), ['str'])),
    )
    self.network_mask = None

    self.topology = YList(self)
    self._segment_path = lambda: "summary"
    self._is_frozen = True

    def __getattr__(self, name):
        return None

    def __setattr__(self, name, value):
AsScopeLsa.Ospfv2.Body.Summary, ["network_mask"], name, value)

    class Topology(Entity):
        
        Topology specific information.

        .. attribute:: mt_id (key)

            The MT-IDs for topology enabled on the link

            **type**:: int

            **range:** 0..255

            .. attribute:: metric

                Metric for the topology

                **type**:: int

                **range:** 0..16777215

        

        _prefix = 'ospf'
Revision = '2015-03-09'

def __init__(self):

    self.yang_name = "topology"
    self.yang_parent_name = "summary"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['mt_id']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('mt_id', (YLeaf(YType.uint8, 'mt-id'), ['int'])),
        ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
    )
    self.mt_id = None
    self.metric = None
    self._segment_path = lambda: "topology" + "[mt-id='" + str(self.mt_id) + "']"
    self._is_frozen = True

def __setattr__(self, name, value):

class External(Entity):
    """
    External LSA.

    .. attribute:: network_mask

    The IP address mask for the network
    **type** str

    **pattern** (([0-9][1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)3(([0-9][1-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)\1\3)\1\3)\1\3)\1\3)\1\3)\1\3)\1\3)\1\3)((0-9)|((0-9)[0-9][0-9]|0-9))'[0-9]([0-9][0-9]|0-9))'?

    .. attribute:: topology

    Topology specific information

    """
def __init__(self):

    self.yang_name = "external"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict(
        [('network_mask', (YLeaf(YType.str, 'network-mask'), ['str']))],
    )
    self.network_mask = None
    self.topology = YList(self)
    self._segment_path = lambda: "external"
    self._is_frozen = True

def __setattr__(self, name, value):

class Topology(Entity):
    """
    Topology specific information.
    """

    .. attribute:: mt_id  (key)

    The MT-ID for topology enabled on the link

    **type**: int

    **range**: 0..255

    .. attribute:: flags

    Flags

    **type**: :py:class:`Flags`

.. attribute:: metric

Metric for the topology
**type**:: int
**range:** 0..16777215

.. attribute:: forwarding_address

Forwarding address
**type**:: str

.. attribute:: external_route_tag

Route tag
**type**:: int
**range:** 0..4294967295

---

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self.yang_name = "topology"
    self.yang_parent_name = "external"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ["mt_id"]
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(["mt_id", "flags", "metric", "forwarding_address", "external_route_tag"])
    self.mt_id = None
    self.flags = Bits()
self.metric = None
self.forwarding_address = None
self.external_route_tag = None
self._segment_path = lambda: "topology" + "[mt-id='" + str(self.mt_id) + "']"
self._is_frozen = True

def __setattr__(self, name, value):

class Opaque(Entity):
    ```
    Opaque LSA.
    ```
    .. attribute:: unknown_tlv

    Unknown TLV
    **type**: list of :py:class:`UnknownTlv

    .. attribute:: router_address_tlv

    Router address TLV
    **type**: :py:class:`RouterAddressTlv

    .. attribute:: link_tlv

    Link TLV
    **type**: :py:class:`LinkTlv

    ```
    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):
class UnknownTlv(Entity):
    #
    Unknown TLV.
    #
    .. attribute:: type (key)

    TLV type
    **type**: int
    **range**: 0..65535

    .. attribute:: length

    self.yang_name = "opaque"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_child_names = []
    self._child_elements = OrderedDict([("unknown-tlv", ("unknown_tlv",
            Body.Opaque.UnknownTlv)), ("router-address-tlv", ("router_address_tlv",
            Body.Opaque.RouterAddressTlv)), ("link-tlv", ("link_tlv",
            Body.Opaque.LinkTlv))])
    self._leafs =OrderedDict()

    self.router_address_tlv =
            Body.Opaque.RouterAddressTlv()
            self.router_address_tlv.parent = self
            self._children_name_map["router_address_tlv"] = "router-address-tlv"

    self.link_tlv =
            Body.Opaque.LinkTlv()
            self.link_tlv.parent = self
            self._children_name_map["link_tlv"] = "link-tlv"

    self.unknown_tlv = YList(self)
    self._segment_path = lambda: "opaque"
    self._is_frozen = True

    def _setattr__ (self, name, value):
            AsScopeLsa.Ospfv2.Body.Opaque, [], name, value)
TLV length
**type**\*: int

**range**: 0..65535

.. attribute:: value

TLV value
**type**: str

**pattern**: ([0-9a-fA-F]{2})([0-9a-fA-F]{2})*

---

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self.type = None
    self.length = None
    self.value = None

    self._segment_path = lambda: "unknown-tlv" + 
    self._is_frozen = True

    def __setattr__(self, name, value):

class RouterAddressTlv(Entity):
    ---

    Router address TLV.
.. attribute:: router_address

Router address
**type**::* str

**pattern:**::* (([0-9][1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)\(\3(\d{1,3})(([0-9][1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)\(\3(\d{1,3})\)?

.. _prefix = 'ospf'

.. _revision = '2015-03-09'

def __init__(self):

    self.yang_name = "router-address-tlv"
    self.yang_parent_name = "opaque"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
)
    self._leafs = OrderedDict(
        ("router_address", (YLeaf(YType.str, 'router-address'), ['str']))
    )
    self.router_address = None
    self._segment_path = lambda: "router-address-tlv"
    self._is_frozen = True

    def __setattr__(self, name, value):

class LinkTlv(Entity):
    ..
    Link TLV.

    .. attribute:: link_type

    Link type
    **type**::* int

    **range:**:* 0..255
mandatory: True

.. attribute:: link_id

Link ID

**type**: union of the below types:

**type**: str

**pattern**: ((([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))(\/%\{\p{N}\}\p{L}+)?

**type**: str

**pattern**: ((([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))

mandatory: True

.. attribute:: local_if_ipv4_addr

List of local interface IPv4 addresses

**type**: list of str

**pattern**: ((([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))(\/%\{\p{N}\}\p{L}+)?

.. attribute:: local_remote_ipv4_addr

List of remote interface IPv4 addresses

**type**: list of str

**pattern**: ((([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))(\/%\{\p{N}\}\p{L}+)?

.. attribute:: te_metric

TE metric

**type**: int

**range**: 0..4294967295

.. attribute:: max_bandwidth

Maximum bandwidth

**type**: :py:class:`Decimal64<ydk.types.Decimal64>`
.. attribute:: max_reservable_bandwidth

Maximum reservable bandwidth
**type**: :py:class:`Decimal64<ydk.types.Decimal64>`
**range**: \-92233720368547758.08..92233720368547758.07

.. attribute:: unreserved_bandwidth

Unresaved bandwidth
**type**: :py:class:`Decimal64<ydk.types.Decimal64>`
**range**: \-92233720368547758.08..92233720368547758.07

.. attribute:: admin_group

Administrative group/Resource class/Color
**type**: int
**range**: 0..4294967295

.. attribute:: unknown_subtlv

Unknown sub-TLV

---

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "link-tlv"
    self.yang_parent_name = "opaque"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(["unknown-subtlv", "unknown_subtlv",

Body.Opaque.LinkTlv.UnknownSubtlv))

    self._leafs = OrderedDict(
        ('link_type', (YLeaf(YType.uint8, 'link-type'), ['int'])),
        ('link_id', (YLeaf(YType.str, 'link-id'), ['str','str'])),
        ('local_if_ipv4_addr', (YLeafList(YType.str, 'local-if-ipv4-addr'), ['str'])),
        ('local.remote_ipv4_addr', (YLeafList(YType.str, 'local-remote-ipv4-addr'), ['str'])),

        ('te_metric', (YLeaf(YType.uint32, 'te-metric'), ['int'])),
        ('max_bandwidth', (YLeaf(YType.str, 'max-bandwidth'), ['Decimal64'])),
        ('max_reservable_bandwidth', (YLeaf(YType.str, 'max-reservable-bandwidth'), ['Decimal64'])),

        ('unreserved_bandwidth', (YLeaf(YType.str, 'unreserved-bandwidth'), ['Decimal64'])),

        ('admin_group', (YLeaf(YType.uint32, 'admin-group'), ['int'])),
    )

    self.link_type = None
    self.link_id = None
    self.local_if_ipv4_addr = []
    self.local.remote_ipv4_addr = []
    self.te_metric = None
    self.max_bandwidth = None
    self.max_reservable_bandwidth = None
    self.unreserved_bandwidth = None
    self.admin_group = None

    self.unknown_subtlv = YList(self)
    self._segment_path = lambda: "link-tlv"
    self._is_frozen = True

    def __setattr__(self, name, value):
            AsScopeLsa.Ospfv2.Body.Opaque.LinkTlv, ['link_type', 'link_id', 'local_if_ipv4_addr', 'local.remote_ipv4_addr',
            'te_metric', 'max_bandwidth', 'max_reservable_bandwidth', 'unreserved_bandwidth', 'admin_group'], name, value)

class UnknownSubtlv(Entity):
    """
    Unknown sub-TLV.
    """

    .. attribute:: type (key)

    TLV type
    **type**: int
    **range**: 0..65535

    .. attribute:: length
TLV length
**type**: int

**range**: 0..65535

TLV value
**type**: str

**pattern**: ([0-9a-fA-F][2]:[0-9a-fA-F][2])

---

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "unknown-subtlv"
    self.yang_parent_name = "link-tlv"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['type']
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict(
        ('type', (YLeaf(YType.uint16, 'type'), ['int'])),
        ('length', (YLeaf(YType.uint16, 'length'), ['int'])),
        ('value', (YLeaf(YType.str, 'value'), ['str'])),
    )
    self.type = None
    self.length = None
    self.value = None
    self._segment_path = lambda: "unknown-subtlv" + 

    def __setattr__(self, name, value):

class Ospfv3(Entity):
    """
    OSPFv3 LSA
    """
.. attribute:: header

Decoded OSPFv3 LSA header data

**type**: :py:class:`Header`


.. attribute:: body

Decoded OSPF LSA body data

**type**: :py:class:`Body`


```
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "ospfv3"
    self.yang_parent_name = "as-scope-lsa"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self._child_classes = OrderedDict(
        ("header", ("header",
        ("body", ("body",
    )
    self._leafs = OrderedDict()

    self.header =

    self.header.parent = self
    self._children_name_map["header"] = "header"

    self.body =

    self.body.parent = self
self._children_name_map['body'] = "body"
self._segment_path = lambda: "ospfv3"
self._is_frozen = True

def __setattr__(self, name, value):

class Header(Entity):
    """
    Decoded OSPFv3 LSA header data.
    .. attribute:: lsa_id
    
    LSA ID
    **type**: int

    **range**: 0..4294967295

    **mandatory**: True

    .. attribute:: age
    
    LSA age
    **type**: int

    **range**: 0..65535

    **mandatory**: True

    .. attribute:: type
    
    LSA type
    **type**: int

    **range**: 0..65535

    **mandatory**: True

    .. attribute:: adv_router
    
    LSA advertising router
    **type**: str

    **pattern**: (([0-9]\{1,9\}\{0-9\}|1[0-9]\{0,9\}|2[0-4]\{0,9\}|25[0-5])\{3\}\{0-9\}\{1-9\}\{0-9\}|1[0-9]\{0,9\}|2[0-4]\{0-9\}|25[0-5])
.. attribute:: seq_num
LSA sequence number
**type**: str
**mandatory**: True

.. attribute:: checksum
LSA checksum
**type**: str
**mandatory**: True

.. attribute:: length
LSA length
**type**: int
**range**: 0..65535
**mandatory**: True

.. attribute:: options
OSPFv3 LSA options
**type**: :py:class:`Options`

```python
**mandatory**: True

```

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "header"
    self.yang_parent_name = "ospfv3"
    self.is_top_level_class = False
```
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict()
self._leaves = OrderedDict(
    ('lsa_id', (YLeaf(YType.uint32, 'lsa-id'), ['int'])),
    ('age', (YLeaf(YType.uint16, 'age'), ['int'])),
    ('type', (YLeaf(YType.uint16, 'type'), ['int'])),
    ('adv_router', (YLeaf(YType.str, 'adv-router'), ['str'])),
    ('seq_num', (YLeaf(YType.str, 'seq-num'), ['str'])),
    ('checksum', (YLeaf(YType.str, 'checksum'), ['str'])),
    ('length', (YLeaf(YType.uint16, 'length'), ['int'])),
    ('options', (YLeaf(YType.bits, 'options'), ['Bits'])),
)
self.lsa_id = None
self.age = None
self.type = None
self.adv_router = None
self.seq_num = None
self.checksum = None
self.length = None
self.options = Bits()
self._segment_path = lambda: "header"
self._is_frozen = True

def __setattr__(self, name, value):

class Body(Entity):
    ""
    Decoded OSPF LSA body data.
    ""
    .. attribute:: router

    Router LSA
    
    **type**:: :py:class:`Router`
    

    .. attribute:: network

    Network LSA
    
    **type**:: :py:class:`Network`
    
.. attribute:: inter_area_prefix

Inter\-Area\-Prefix LSA

**type**: :py:class:`InterAreaPrefix

.. attribute:: inter_area_router

Inter\-Area\-Router LSA

**type**: :py:class:`InterAreaRouter

.. attribute:: as_external

AS\-External LSA

**type**: :py:class:`AsExternal

.. attribute:: nssa

NSSA LSA

**type**: :py:class:`Nssa

.. attribute:: link

Link LSA

**type**: :py:class:`Link

.. attribute:: intra_area_prefix

Intra\-Area\-Prefix LSA

**type**: :py:class:`IntraAreaPrefix

***

_prefix = 'ospf'
_revisio

def __init__(self):

    self.yang_name = "body"
    self.yang_parent_name = "ospfv3"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict()

    self.router.parent = self
    self._children_name_map["router"] = "router"

    self.network.parent = self
    self._children_name_map["network"] = "network"

    self.inter_area_prefix.parent = self
    self._children_name_map["inter_area_prefix"] = "inter-area-prefix"

    self.inter_area_router =
class Router(Entity):
    """
    Router LSA.
    """
    .. attribute:: flags

    LSA option

    **type**: :py:class:`Flags`

    **mandatory**: True
.. attribute:: options

OSPFv3 LSA options


**mandatory**: True

.. attribute:: link

Router LSA link


```
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "router"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = []

    self._leafs = OrderedDict({
        ('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
        ('options', (YLeaf(YType.bits, 'options'), ['Bits'])),
    })
    self.flags = Bits()
    self.options = Bits()

    self.link = YList(self)
    self._segment_path = lambda: "router"
    self._is_frozen = True

    def __setattr__(self, name, value):
```
class Link(Entity):
    
    Router LSA link.

    .. attribute:: interface_id (key)

    Interface ID
    **type**:: int

    **range:** 0..4294967295

    .. attribute:: neighbor_interface_id (key)

    Neighbor Interface ID
    **type**:: int

    **range:** 0..4294967295

    .. attribute:: neighbor_router_id (key)

    Neighbor Router ID
    **type**:: str

    **pattern:** ([0-9]*\d+)([0-9]*\d+)([0-9]*\d+)([0-9]*\d+)([0-9]*\d+)([0-9]*\d+)([0-9]*\d+)([0-9]*\d+)([0-9]*\d+)\.

    .. attribute:: type

    Link type
    **type**:: int

    **range:** 0..255

    .. attribute:: metric

    Metric
    **type**:: int

    **range:** 0..65535

    ***
def __init__(self):

    self.yang_name = "link"
    self.yang_parent_name = "router"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['interface_id','neighbor_interface_id','neighbor_router_id']
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'interface_id': (YLeaf(YType.uint32, 'interface-id'), ['int']),
        'neighbor_interface_id': (YLeaf(YType.uint32, 'neighbor-interface-id'), ['int']),
        'neighbor_router_id': (YLeaf(YType.str, 'neighbor-router-id'), ['str']),
        'type': (YLeaf(YType.uint8, 'type'), ['int']),
        'metric': (YLeaf(YType.uint16, 'metric'), ['int'])
    })

    self.interface_id = None
    self.neighbor_interface_id = None
    self.neighbor_router_id = None
    self.type = None
    self.metric = None
    self._segment_path = lambda: "link" + "[interface-id='" + str(self.interface_id) + "']" + "[neighbor-interface-id='" + str(self.neighbor_interface_id) + "']" + "[neighbor-router-id='" + str(self.neighbor_router_id) + "]"
    self._is_frozen = True

    def __setattr__(self, name, value):

class Network(Entity):
    
    Network LSA.

    .. attribute:: options

        OSPFv3 LSA options
        

        **mandatory**: True
.. attribute:: attached_router

List of the routers attached to the network

**type**: list of str

**pattern**: (([0-9]\\.|[1-9][0-9]\\.|1[0-9][0-9]\\.|2[0-4][0-9]\\.|25[0-5]\\.)\(3\)(([0-9]\\.|[1-9][0-9]\\.|1[0-9][0-9]\\.|2[0-4][0-9]\\.|25[0-5])\))

***

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self.yang_name = "network"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([('options', (YLeaf(YType.bits, 'options'), ['Bits'])), ('attached_router', (YLeafList(YType.str, 'attached-router'), ['str']))])
    self.options = Bits()
    self.attached_router = []
    self._segment_path = lambda: "network"
    self._is_frozen = True

    def __setattr__(self, name, value):

class InterAreaPrefix(Entity):
    
    Inter-Area-Prefix LSA.
    
    .. attribute:: metric

    Metric
    
    **type**: int
**range:** 0..16777215

.. attribute:: prefix

Prefix
**type**: str

.. attribute:: prefix_options

Prefix options
**type**: str

**mandatory**: True

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "inter-area-prefix"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.leaf_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([('metric', (YLeaf(YType.uint32, 'metric'), ['int'])), ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])), ('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str']))])

    self.metric = None
    self.prefix = None
    self.prefix_options = None
    self._segment_path = lambda: "inter-area-prefix"
    self._is_frozen = True

    def __setattr__(self, name, value):

def __setattr__(self, name, value):
```
class InterAreaRouter(Entity):
    """
    Inter-Area-Router LSA.
    .. attribute:: options

    OSPFv3 LSA options

    **mandatory\**: True

    .. attribute:: metric

    Metric
    **type\**: int

    **range\**: 0..16777215

    .. attribute:: destination_router_id

    The Router ID of the router being described by the LSA
    **type\**: str

    **pattern\**: (([0-9]\|[1-9]\[0-9]\|[0-9]\[0-9]\|[0-9]\-[0-4]\[0-9]\|[0-9]\-5]\|\.)\).([0-9]\|[1-9]\[0-9]\|[0-9]\[0-9]\|[0-9]\-[0-4]\[0-9]\|[0-9]\-5]\))

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "inter-area-router"
        self.yang_parent_name = "body"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict([(
            'options', (YLeaf(YType.bits, 'options'), ['Bits'])),
            ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
        ])
        self._children = OrderedDict([])
class AsExternal(Entity):
    
    AS-External LSA.

    .. attribute:: metric

    Metric
    *type*:** int

    *range:* **0..16777215

    .. attribute:: flags

    Flags
    *type*:** :py:class:`Flags`

    .. attribute:: referenced_ls_type

    Referenced Link State type
    *type*:** int

    *range:* **0..65535

    .. attribute:: prefix

    Prefix
    *type*:** str

    .. attribute:: prefix_options

    Prefix options
    *type*:** str
**mandatory**: True

.. attribute:: forwarding_address

Forwarding address

**type**: str

**pattern**: ((\[0-9a-fA-F]{0,4})\|[0-9a-fA-F]{0,4}\|)(0,5)((\[0-9a-fA-F]{0,4})\|[0-9a-fA-F]{0,4}\|)?(\[0-9a-fA-F]{0,4}\|)((25[0-5]|2[0-4]\[0-9]|1[0-9]\[0-9]|0[0-9]{0,2})\.){3}(25[0-5]|2[0-4]\[0-9]|1[0-9]\[0-9]|0[0-9]{0,2}))\|?(%[\p{N}\p{L}]*)?

.. attribute:: external_route_tag

Route tag

**type**: int

**range**: 0..4294967295

.. attribute:: referenced_link_state_id

Referenced Link State ID

**type**: int

**range**: 0..4294967295

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self.yang_name = "as-external"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([('metric', (YLeaf(YType.uint32, 'metric'), ['int']))],
                               ('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
                               ('referenced_ls_type', (YLeaf(YType.uint16, 'referenced-ls-type'), ['int'])))
    self._children_classes = [OrderedDict(),
                               ('prefix', (YLeaf(YType.str, 'prefix'), ['str']))],
                               ('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str']))]
self.metric = None
self.flags = Bits()
self.referenced_ls_type = None
self.prefix = None
self.prefix_options = None
self.forwarding_address = None
self.external_route_tag = None
self.referenced_link_state_id = None
self._segment_path = lambda: "as-external"
self._is_frozen = True

def __setattr__(self, name, value):
          'forwarding_address', 'external_route_tag', 'referenced_link_state_id'], name, value)

class Nssa(Entity):
    
    NSSA LSA.
    
    .. attribute:: metric

    Metric
    **type**: int

    **range:** 0..16777215

    .. attribute:: flags

    Flags
    **type**: :py:class:`Flags`
        AsScopeLsa.Ospfv3.Body.AsExternal ['metric', 'flags', 'referenced_ls_type', 'prefix', 'prefix_options',
          'forwarding_address', 'external_route_tag', 'referenced_link_state_id'], name, value>

    .. attribute:: referenced_ls_type

    Referenced Link State type
    **type**: int

    **range:** 0..65535

    .. attribute:: prefix


Prefix
  **type**: str

  .. attribute:: prefix_options

Prefix options
  **type**: str

  **mandatory**: True

  .. attribute:: forwarding_address

Forwarding address
  **type**: str

  **pattern**: ((\:|\[0-9a-fA-F]{0,4})\:)(\[0-9a-fA-F]{0,4}\:){0,5}(((\:|\[0-9a-fA-F]{0,4}\:)?(\:|\[0-9a-fA-F]{0,4}))\|(((25[0-5]|2[0-4]\d|1\d{2}|[0-9]{1,2})\.){3}(25[0-5]|2[0-4]\d|1\d{2}|[0-9]{1,2}))\|(%[\p{N}\p{L}]+)?\p{N}\p{L})+

  .. attribute:: external_route_tag

Route tag
  **type**: int

  **range**: 0..4294967295

  .. attribute:: referenced_link_state_id

Referenced Link State ID
  **type**: int

  **range**: 0..4294967295

___

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
super(RoutingState, RoutingInstance, RoutingProtocols, RoutingProtocol, Ospf, Instance, AsScopeLsas, AsScopeLsa, Ospfv3, Body, Nssa, self).__init__()

    self.yang_name = "nssa"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([
    ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
    ('flags', (YLeaf(YType.bits, 'flags'), ['Bits'])),
    ('referenced_ls_type', (YLeaf(YType.uint16, 'referenced-ls-type'), ['int'])),
    ('prefix', (YLeaf(YType.str, 'prefix'), ['str'])),
    ('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str'])),
    ('forwarding_address', (YLeaf(YType.str, 'forwarding-address'), ['str'])),
    ('external_route_tag', (YLeaf(YType.uint32, 'external-route-tag'), ['int'])),
    ('referenced_link_state_id', (YLeaf(YType.uint32, 'referenced-link-state-id'), ['int'])),
])
self.metric = None
self.flags = Bits()
self.referenced_ls_type = None
self.prefix = None
self.prefix_options = None
self.forwarding_address = None
self.external_route_tag = None
self.referenced_link_state_id = None
self._segment_path = lambda: "nssa"
self._is_frozen = True

def __setattr__(self, name, value):

class Link(Entity):
    """
    Link LSA.
    
    .. attribute:: rtr_priority

    Router Priority of the interface
    
    **type**: int

    **range**: 0..255

    .. attribute:: options

    OSPFv3 LSA options
    
    **type**: :py:class:`Options`

    * mandatory: True
.. attribute:: link_local_interface_address

The originating router's link-local interface address on the link

**type**: union of the below types:

**type**: str

**pattern**: (([0-9]|[1-9][0-9]?)\[[0-9-9][0-9-9][2][0-9-4][0-9-9][25][0-9-5]\]%(\p{N}\p{L}+)?

**type**: str

**pattern**: ((\[0-9a-fA-F][0,4]\]%(\p{N}\p{L}+)?\[0-9a-fA-F][0,4]\]%(\p{N}\p{L}+)?\[25](0-9)\[0-9-9]\[0-9-9]\[25][0-9-5]\]%(\p{N}\p{L}+)?"

.. attribute:: num_of_prefixes

Number of prefixes

**type**: int

**range**: 0..4294967295

.. attribute:: prefix_list

List of prefixes associated with the link

**type**: list of :py:class:`PrefixList`


***

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "link"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict([("prefix-list", "prefix_list"),]
    self._leafs = OrderedDict(
        ('rtr_priority', (YLeaf(YType.uint8, 'rtr-priority'), ['int'])),
        ('options', (YLeaf(YType.bits, 'options'), [Bits'])),
        ('link_local_interface_address', (YLeaf(YType.str, 'link-local-interface-address'), [str',str'])),
        ('num_of_prefixes', (YLeaf(YType.uint32, 'num-of-prefixes'), [int'])),
    )
    self.rtr_priority = None
    self.options = Bits()
    self.link_local_interface_address = None
    self.num_of_prefixes = None

    self.prefix_list = YList(self)
    self._segment_path = lambda: "link"
    self._is_frozen = True

    def __setattr__(self, name, value):

class PrefixList(Entity):
    
    List of prefixes associated with the link.
    
    .. attribute:: prefix  (key)
    
    Prefix
    
    **type**: str
    
    .. attribute:: prefix_options
    
    Prefix options
    
    **type**: str
    **mandatory**: True

....

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "prefix-list"
    self.yang_parent_name = "link"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['prefix']
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(
        [('prefix', (YLeaf(YType.str, 'prefix'), ['str']))],
        [('prefix_options', (YLeaf(YType.str, 'prefix-options'), ['str']))],
    )
    self.prefix = None
    self.prefix_options = None
    self._segment_path = lambda: "prefix-list" + "[prefix='{}']".format(self.prefix)
    self._is_frozen = True

    def _setattr_(self, name, value):

class IntraAreaPrefix(Entity):
    """
    Intra-Area-Prefix LSA.
    """
    Referenced Link State type
    **type**: int
    **range**: 0..65535

    Referenced Link State ID
    **type**: int
    **range**: 0..4294967295

    Referenced Advertising Router
    **type**: str
    **pattern**: \b((\d+\.)+\d+)+(\d+\.)+(\d+\.)+(\d+)\b
.. attribute:: num_of_prefixes

Number of prefixes
**type**: int

**range**: 0..65535

.. attribute:: prefix_list

List of prefixes associated with the link
**type**: list of :py:class:`PrefixList`

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "intra-area-prefix"
    self.yang_parent_name = "body"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(["prefix-list", "prefix_list")
    self._leafs = OrderedDict(["referenced_ls_type", YLeaf(YType.uint16, "referenced-ls-type"), ["int"]),
        ("referenced_link_state_id", YLeaf(YType.uint32, "referenced-link-state-id"), ["int"]),
        ("referenced_adv_router", YLeaf(YType.str, "referenced-adv-router"), ["str"])]
    ("num_of_prefixes", YLeaf(YType.uint16, "num-of-prefixes"), ["int"]))

self.referenced_ls_type = None
self.referenced_link_state_id = None
self.referenced_adv_router = None
self.num_of_prefixes = None

self.prefix_list = YList(self)
self._segment_path = lambda: "intra-area-prefix"
self._is_frozen = True
```
def __setattr__(self, name, value):
    'referenced_adv_router', 'num_of_prefixes'], name, value)

class PrefixList(Entity):
    
    List of prefixes associated with the link.

    .. attribute:: prefix  (key)

     Prefix
     **type**: str

    .. attribute:: prefix_options

     Prefix options
     **type**: str

     **mandatory**: True

    .. attribute:: metric

     Metric
     **type**: int

     **range**: 0..16777215

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "prefix-list"
        self.yang_parent_name = "intra-area-prefix"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = [
        ]
        self._child_classes = OrderedDict(
        )
        self._leafs = OrderedDict(
        )

        _prefix = 'ospf'
        _revision = '2015-03-09'

        def __init__(self):

            self.yang_name = "prefix-list"
            self.yang_parent_name = "intra-area-prefix"
            self.is_top_level_class = False
            self.has_list_ancestor = True
            self.ylist_key_names = [
            ]
            self._child_classes = OrderedDict(
            )
            self._leafs = OrderedDict(
            )
class Topology(Entity):
    
    OSPF topology.
    
    .. attribute:: name  (key)
        
        .. attribute:: area
            
            List of ospf areas
            
            **type**: list of :py:class:`Area`

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "topology"
        self.yang_parent_name = "instance"
        self.is_top_level_class = False
        self.has_list_ancestor = True

        self.prefix = None
        self.prefix_options = None
        self.metric = None
        self._segment_path = lambda: "prefix-list" + "[prefix='" + str(self.prefix) + "]"
        self._is_frozen = True
self.ylist_key_names = ['name']
self._child_classes = OrderedDict([('area', ('area',
self._leafs = OrderedDict([(
    ('name', (YLeaf(YType.str, 'name'), ['str']))),
])
self.name = None

self.area = YList(self)
self._segment_path = lambda: "topology" + "[name='" + str(self.name) + '"']"
self._is_frozen = True

def __setattr__(self, name, value):

class Area(Entity):
    """
    List of ospf areas
    .. attribute:: area_id  (key)

    Area ID
    **type**: union of the below types:

    - **type**: int
    **range**: 0..4294967295
    - **type**: str
    **pattern**: (([0-9]([1-9][0-9]*|1[0-9][0-9]*|2[0-4][0-9]*|25[0-5])\.)\{3\}([0-9]([1-9][0-9]*|1[0-9][0-9]*|2[0-4][0-9]*|25[0-5])\])

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "area"
        self.yang_parent_name = "topology"
class Ribs(Entity):
    ""
    Container for RIBs.
    ""
    .. attribute:: rib

        Each entry represents a RIB identified by the 'name' key. All routes in a RIB MUST belong to the same address family. For each routing instance, an implementation SHOULD provide one system-controlled default RIB for each supported address family


        ""

    ..

    _prefix = 'rt'
    _revision = '2015-05-25'

    def __init__(self):
def __setattr__(self, name, value):
    self._perform_setattr(RoutingState.RoutingInstance.Ribs, [], name, value)

class Rib(Entity):
    ""
    Each entry represents a RIB identified by the 'name'
    key. All routes in a RIB MUST belong to the same address
    family.

    For each routing instance, an implementation SHOULD
    provide one system-controlled default RIB for each
    supported address family.
    ""
    .. attribute:: name  (key)
    The name of the RIB
    **type**: str

    .. attribute:: address_family
    Address family
    **type**: :py:class:`AddressFamily <ydk.models.ietf.ietf_routing.AddressFamily>`
    **mandatory**: True

    .. attribute:: default_rib
    This flag has the value of 'true' if and only if the RIB is the default RIB for the given address family. A
default RIB always receives direct routes. By default it also receives routes from all routing protocols
    **type**: bool

    **default value**: true

    .. attribute:: routes
    Current content of the RIB

    ""

    _prefix = 'rt'
    _revision = '2015-05-25'
def __init__(self):
    super(RoutingState.RoutingInstance.Ribs.Rib, self).__init__()

    self.yang_name = "rib"
    self.yang_parent_name = "ribs"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = ['name']
    self._child_classes = OrderedDict([('routes', ('routes',
    self._leafs = OrderedDict([(u'name', (YLeaf(YType.str, 'name'), ['str'])),
        ('address_family', (YLeaf(YType.identityref, 'address-family'), ['address-family'])), ('default_rib', (YLeaf(YType.boolean, 'default-rib'), ['bool']))])

    self.name = None
    self.address_family = None
    self.default_rib = None


    self.routes.parent = self
    self._children_name_map['routes'] = 'routes'
    self._segment_path = lambda: "rib" + "[name='" + str(self.name) + "]"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(RoutingState.RoutingInstance.Ribs.Rib, ['name', 'address_family', 'default_rib'], name, value)

class Routes(Entity):
    ""
    Current content of the RIB.
    ""
    .. attribute:: route

        A RIB route entry. This data node MUST be augmented with information specific for routes of each address family
        **type**: list of :py:class:`Route`
        
        ..

_prefix = 'rt'
_revision = '2015-05-25'
def __init__(self):

    self.yang_name = "routes"
    self.yang_parent_name = "rib"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([("route", "route")])
    self._leafs = OrderedDict()

    self.route = YList(self)
    self._segment_path = lambda: "routes"
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(RoutingState.RoutingInstance.Ribs.Rib.Routes, [ ], name, value)

class Route(Entity):
    ***
    A RIB route entry. This data node MUST be augmented
    with information specific for routes of each address
    family.

    .. attribute:: destination_prefix (key)

    Destination IP address with prefix
    **type**: str

    .. attribute:: route_preference

    This route attribute, also known as administrative distance, allows for selecting the preferred route
    among routes with the same destination prefix. A smaller value means a more preferred route
    **type**: int

    **range:** 0..4294967295

    .. attribute:: metric

    Route metric
    **type**: int

    **range:** 0..4294967295

    .. attribute:: next_hop
Route's next-hop attribute


.. attribute:: source_protocol

Type of the routing protocol from which the route originated


**mandatory**: True

.. attribute:: active

Presence of this leaf indicates that the route is preferred among all routes in the same RIB that have the same destination prefix

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: last_updated

Time stamp of the last modification of the route. If the route was never modified, it is the time when the route was inserted into the RIB

**type**: str

**pattern**: **\d{4}\-\d{2}\-\d{2}T\d{2}\:\d{2}\:\d{2}(\.\d+)?(Z|\[\+\-]\d{2}\:\d{2})**

.. attribute:: update_source

Update source for the route

**type**: str

.. attribute:: tag

OSPF route tag

**type**: int

**range**: **0..4294967295**

**default value**: 0

.. attribute:: route_type

OSPF route type

```python
__prefix = 'rt'
__revision = '2015-05-25'

def __init__(self):

    self.yang_name = "route"
    self.yang_parent_name = "routes"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['destination_prefix']
    self._child_classes = OrderedDict([('next-hop', ('next-hop',
    self._leafs = OrderedDict([('destination_prefix', (YLeaf(YType.str, 'destination-prefix'), ['str'])),
        ('route_preference', (YLeaf(YType.uint32, 'route-preference'), ['int'])),
        ('metric', (YLeaf(YType.uint32, 'metric'), ['int'])),
        ('source_protocol', (YLeaf(YType.identityref, 'source-protocol'), [('ydk.models.ietf.ietf_routing', 'RoutingProtocol')])),
        ('active', (YLeaf(YType.empty, 'active'), ['Empty'])),
        ('last_updated', (YLeaf(YType.str, 'last-updated'), ['str'])),
        ('update_source', (YLeaf(YType.str, 'update-source'), ['str'])),
        ('tag', (YLeaf(YType.uint32, 'ietf-ospf:tag'), ['int'])),

    self.destination_prefix = None
    self.route_preference = None
    self.metric = None
    self.source_protocol = None
    self.active = None
    self.last_updated = None
    self.update_source = None
    self.tag = None
    self.route_type = None

    self.next_hop.parent = self
    self._children_name_map["next-hop"] = "next-hop"
    self._segment_path = lambda: "route" + "[destination-prefix='"] + str(self.destination_prefix) + "]"
    self._is_frozen = True

    def __setattr__(self, name, value):
```

class RouteType(Enum):
    ""
    RouteType (Enum Class)
    ""
    OSPF route type

    .. data:: intra_area = 0

    OSPF intra-area route

    .. data:: inter_area = 1

    OSPF inter-area route

    .. data:: external_1 = 2

    OSPF external route type 1

    .. data:: external_2 = 3

    OSPF External route type 2

    .. data:: nssa_1 = 4

    OSPF NSSA external route type 1

    .. data:: nssa_2 = 5

    OSPF NSSA external route type 2

    ""

    intra_area = Enum.YLeaf(0, "intra-area")

    inter_area = Enum.YLeaf(1, "inter-area")

    external_1 = Enum.YLeaf(2, "external-1")

    external_2 = Enum.YLeaf(3, "external-2")

    nssa_1 = Enum.YLeaf(4, "nssa-1")

    nssa_2 = Enum.YLeaf(5, "nssa-2")

class NextHop(Entity):
Route's next-hop attribute.

.. attribute:: outgoing_interface

Name of the outgoing interface

**type**: str

.. attribute:: next_hop_address

IP address

**type**: str

.. attribute:: special_next_hop

Special next-hop options


_prefix = 'rt'
_revision = '2015-05-25'

def __init__(self):

    self.yang_name = "next-hop"
    self.yang_parent_name = "route"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'outgoing_interface': (YLeaf(YType.str, 'outgoing-interface'), ['str']),
        'next_hop_address': (YLeaf(YType.str, 'next-hop-address'), ['str']),
        'special_next_hop': (YLeaf(YType.enumeration, 'special-next-hop'),
            [('ydk.models.ietf.ietf_routing', 'RoutingState',
    })
    self.outgoing_interface = None
    self.next_hop_address = None
    self.special_next_hop = None
    self._segment_path = lambda: "next-hop"
    self._is_frozen = True
def __setattr__(self, name, value):
                         [u'outgoing_interface', u'next_hop_address', u'special_next_hop'], name, value)

class SpecialNextHop(Enum):
    """
    SpecialNextHop (Enum Class)
    Special next-hop options.
    .. data:: blackhole = 0
    Silently discard the packet.
    .. data:: unreachable = 1
    Discard the packet and notify the sender with an error message indicating that the destination host is unreachable.
    .. data:: prohibit = 2
    Discard the packet and notify the sender with an error message indicating that the communication is administratively prohibited.
    .. data:: receive = 3
    The packet will be received by the local system.
    """

    blackhole = Enum.YLeaf(0, "blackhole")
    unreachable = Enum.YLeaf(1, "unreachable")
    prohibit = Enum.YLeaf(2, "prohibit")
    receive = Enum.YLeaf(3, "receive")

    def clone_ptr(self):
        self._top_entity = RoutingState()
        return self._top_entity
class Routing(Entity):
    
    Configuration parameters for the routing subsystem.
    
    .. attribute:: routing_instance
        
        Configuration of a routing instance
        
    

    _prefix = 'rt'
    _revision = '2015-05-25'

    def __init__(self):
        super(Routing, self).__init__()
        self._top_entity = None

        self.yang_name = "routing"
        self.yang_parent_name = "ietf-routing"
        self.is_top_level_class = True
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._child_classes = OrderedDict(
        )
        self._leafs = OrderedDict()

        self.routing_instance = YList(self)

        self._segment_path = lambda: "ietf-routing:routing"
        self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(Routing, [], name, value)

class RoutingInstance(Entity):
    
    Configuration of a routing instance.
    
    .. attribute:: name  (key)
        The name of the routing instance. For system-controlled entries, the value of this leaf must be the same as the name of the corresponding entry in state data. For user-controlled entries, an arbitrary name can be used
        
        **type**: str
    
    .. attribute:: type
        
        The name of the routing instance.
The type of the routing instance

**type**: \ :py:class:`RoutingInstance <ydk.models.ietf.ietf_routing.RoutingInstance>`

**default value**: rt:default-routing-instance

.. attribute:: enabled

   Enable/disable the routing instance. If this parameter is false, the parent routing instance is disabled and does not appear in state data, despite any other configuration that might be present

   **type**: bool

   **default value**: true

   .. attribute:: router_id

   A 32-bit number in the form of a dotted quad that is used by some routing protocols identifying a router

   **type**: str

   **pattern**: (([0\-9]\|[1\-9]\[0\-9]\|1[0\-9]\[0\-9]\|2[0\-4]\[0\-9]\|25[0\-5])\.){3}([0\-9]\|[1\-9]\|1[0\-9]\|0\-9]\|2[0\-4]\[0\-9]\|25[0\-5])

   .. attribute:: description

   Textual description of the routing instance

   **type**: str

   .. attribute:: interfaces

   Assignment of the routing instance's interfaces


   .. attribute:: routing_protocols

   Configuration of routing protocol instances


   .. attribute:: ribs

   Configuration of RIBs


   ..

_prefix = 'rt'
def __init__(self):
    super(Routing.RoutingInstance, self).__init__()

    self.yang_name = "routing-instance"
    self.yang_parent_name = "routing"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = ['name']
    self._child_classes = OrderedDict(
        [('interfaces', ('interfaces', Routing.RoutingInstance.Interfaces)),
         ('ribs', ('ribs', Routing.RoutingInstance.Ribs))
        ])  
    self._leafs = OrderedDict(
        [('name', (YLeaf(YType.str, 'name'), ['str'])),
         ('type', (YLeaf(YType.identityref, 'type'), [('ydk.models.ietf.ietf_routing', 'RoutingInstance')])),
         ('enabled', (YLeaf(YType.boolean, 'enabled'), ['bool'])),
         ('router_id', (YLeaf(YType.str, 'router-id'), ['str'])),
         ('description', (YLeaf(YType.str, 'description'), ['str']))
        ]
    )
    self.name = None
    self.type = None
    self.enabled = None
    self.router_id = None
    self.description = None

    self.interfaces = Routing.RoutingInstance.Interfaces()
    self.interfaces.parent = self
    self._children_name_map['interfaces'] = "interfaces"

    self.routing_protocols.parent = self
    self._children_name_map['routing_protocols'] = "routing-protocols"

    self.ribs = Routing.RoutingInstance.Ribs()
    self.ribs.parent = self
    self._children_name_map['ribs'] = "ribs"

    self._segment_path = lambda: "routing-instance" + "[name='" + str(self.name) + "]"
    self._absolute_path = lambda: "ietf-routing:routing/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(Routing.RoutingInstance, ['name', 'type', 'enabled', 'router_id', 'description'], name, value)
Assignment of the routing instance's interfaces.

.. attribute:: interface

The name of a configured network layer interface to be assigned to the routing-instance
**type**: list of str

**refers to**: :py:func:`name <ydk.models.ietf.ietf_interfaces.Interfaces.Interface>`

..

_prefix = 'rt'
_revision = '2015-05-25'

def __init__(self):
    super(Routing.RoutingInstance.Interfaces, self).__init__()

    self.yang_name = "interfaces"
    self.yang_parent_name = "routing-instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.istlist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict({
        ("interface", (YLeafList(YType.str, 'interface'), ['str']))
    })
    self.interface = []
    self._segment_path = lambda: "interfaces"
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Routing.RoutingInstance.Interfaces, ['interface'], name, value)

class RoutingProtocols(Entity):
    ..

    Configuration of routing protocol instances.

    .. attribute:: routing_protocol

    Each entry contains configuration of a routing protocol instance
    **type**: list of :py:class:`RoutingProtocol`
```python

_prefix = 'rt'
_revision = '2015-05-25'

def __init__(self):
    super(Routing.RoutingInstance.RoutingProtocols, self).__init__()

    self.yang_name = "routing-protocols"
    self.yang_parent_name = "routing-instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._leafs = OrderedDict()

    self.routing_protocol = YList(self)
    self._segment_path = lambda: "routing-protocols"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(Routing.RoutingInstance.RoutingProtocols, [], name, value)

class RoutingProtocol(Entity):
    ""
    Each entry contains configuration of a routing protocol instance.
    ""

    .. attribute:: type  (key)

    Type of the routing protocol - an identity derived from the 'routing-protocol' base identity


    .. attribute:: name  (key)

    An arbitrary name of the routing protocol instance

    **type**: str

    .. attribute:: description

    Textual description of the routing protocol instance

    **type**: str

    .. attribute:: static_routes

    Configuration of the 'static' pseudo-protocol. Address-family-specific modules augment this node with
```
their lists of routes

**type**: :py:class:`StaticRoutes


.. attribute:: ospf

OSPF

**type**: :py:class:`Ospf


```

_prefix = 'rt'
_revision = '2015-05-25'

def __init__(self):

    self.yang_name = "routing-protocol"
    self.yang_parent_name = "routing-protocols"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['type','name']
    self._child_classes = OrderedDict(
        [('static-routes', ('static_routes',

    self._leafs = OrderedDict(
        [('type', (YLeaf(YType.identityref, 'type'), [('ydk.models.ietf.ietf_routing', 'RoutingProtocol')]))],
        [('name', (YLeaf(YType.str, 'name'), [str]))],
        [('description', (YLeaf(YType.str, 'description'), [str]))],
    )

    self.type = None
    self.name = None
    self.description = None

    self.static_routes.parent = self
    self._children_name_map["static_routes"] = "static-routes"

    self.ospf.parent = self
    self._children_name_map["ospf"] = "ietf-ospf:ospf"

    self._segment_path = lambda: "routing-protocol" + "[type=" + str(self.type) + "]" + "[name=" + str(self.name) + "]"

    self._is_frozen = True
def __setattr__(self, name, value):
                     u'description'], name, value)

class StaticRoutes(Entity):
    ""
    Configuration of the 'static' pseudo-protocol.
    Address-family-specific modules augment this node with their lists of routes.
    .. attribute:: ipv6
    Configuration of a 'static' pseudo-protocol instance consists of a list of routes
    .. attribute:: ipv4
    Configuration of a 'static' pseudo-protocol instance consists of a list of routes
    ""

__prefix = 'rt'
__revision = '2015-05-25'

def __init__(self):

    self.yang_name = "static-routes"
    self.yang_parent_name = "routing-protocol"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict(["ietf-ipv6-unicast-routing:ipv6", "ipv6", 
                                       "ietf-ipv4-unicast-routing:ipv4", 
                                       "ipv4", 
    self._leafs = OrderedDict()

    self.ipv6.parent = self
    self._children_name_map["ipv6"] = "ietf-ipv6-unicast-routing:ipv6"
class Ipv6(Entity):

    Configuration of a 'static' pseudo-protocol instance
    consists of a list of routes.

    .. attribute:: route

        A user-ordered list of static routes

        **type**: list of :py:class:`Route`

        ..

    _prefix = 'v6ur'
    _revision = '2015-05-25'

    def __init__(self):
        self.yang_name = "ipv6"
        self.yang_parent_name = "static-routes"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict(["route", "

        self._leafs = YList(self)
        self._segment_path = lambda: "ietf-ipv6-unicast-routing:ipv6"
        self._is_frozen = True

        def __setattr__(self, name, value):
class Route(Entity):
    """
    A user-ordered list of static routes.
    """
    . attribute:: destination_prefix (key)

    IPv6 destination prefix
    **type**: str

    **pattern**: ((\|0-9a-fA-F\|0,4))\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\((0,4)\)\(12(0,4)\))

    **mandatory**: True

    . attribute:: description

    Textual description of the route
    **type**: str

    . attribute:: next_hop

    Configuration of next-hop
    **type**: :py:class:`NextHop`


"""

_prefix = 'v6ur'
_revision = '2015-05-25'

def __init__(self):
    self).__init__()

    self.yang_name = "route"
    self.yang_parent_name = "ipv6"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['destination_prefix']
    self._child_classes = OrderedDict(['next-hop', "next_hop", ...]
self._leafs = OrderedDict(
    ('destination_prefix', (YLeaf(YType.str, 'destination-prefix'), ['str'])),
    ('description', (YLeaf(YType.str, 'description'), ['str'])),
)
self.destination_prefix = None
self.description = None

self.next_hop.parent = self
self._children_name_map['next-hop'] = "next-hop"
self._segment_path = lambda: 'route' + '[destination-prefix=' + str(self.destination_prefix) + ']
self._is_frozen = True

def __setattr__(self, name, value):

class NextHop(Entity):
    """
    Configuration of next-hop.
    """
    .. attribute:: outgoing_interface

    Name of the outgoing interface
    **type**: str

    .. attribute:: special_next_hop

    Special next-hop options
    **type**: :py:class:`SpecialNextHop


    .. attribute:: next_hop_address

    IPv6 address of the next-hop
    **type**: str

    **pattern**: ((\[\{[0-9a-fA-F]{0,4}\}\]|\{(0-9a-fA-F){0,4}\})\{0,5\}\{(0-9a-fA-F){0,4}\}((\[0-9a-fA-F]{0,4}\}?)|((\[25[0-5]\]|2[0-4][0-9]\)\{0,1\}|(2[0-4][0-9]|0[0-9]{2}|[1-9][0-9]*|0))\{0,2\}((\[0-9a-fA-F]{0,4}\}?)|((\[25[0-5]\]|2[0-4][0-9]\)\{0,1\}|(2[0-4][0-9]|0[0-9]{2}|[1-9][0-9]*|0))\{0,2\})/?))\{N\}p{L+)?
def __init__(self):

    self.yang_name = "next-hop"
    self.yang_parent_name = "route"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict((
        ('outgoing_interface', (YLeaf(YType.str, 'outgoing-interface'), ['str'])),
                        ('next_hop_address', (YLeaf(YType.str, 'next-hop-address'), ['str'])),
            )
        ],
    )
    self.outgoing_interface = None
    self.special_next_hop = None
    self.next_hop_address = None
    self._segment_path = lambda: "next-hop"
    self._is_frozen = True

def __setattr__(self, name, value):

class SpecialNextHop(Enum):
    """
    SpecialNextHop (Enum Class)
    """
    Special next-hop options.

    .. data:: blackhole = 0

    Silently discard the packet.

    .. data:: unreachable = 1

    Discard the packet and notify the sender with an error

    message indicating that the destination host is
unreachable.

.. data:: prohibit = 2

Discard the packet and notify the sender with an error
message indicating that the communication is
administratively prohibited.

.. data:: receive = 3

The packet will be received by the local system.

blackhole = Enum.YLeaf(0, "blackhole")
unreachable = Enum.YLeaf(1, "unreachable")
prohibit = Enum.YLeaf(2, "prohibit")
receive = Enum.YLeaf(3, "receive")

class Ipv4(Entity):
    """
    Configuration of a 'static' pseudo-protocol instance
    consists of a list of routes.
    """
    .. attribute:: route

    A user-ordered list of static routes

    """

    _prefix = 'v4ur'
    _revision = '2015-05-25'

    def __init__(self):
self.yang_name = "ipv4"
self.yang_parent_name = "static-routes"
sel.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._leafs = OrderedDict()
self.route = YList(self)
self._segment_path = lambda: "ietf-ipv4-unicast-routing:ipv4"
self._is_frozen = True

def __setattr__(self, name, value):

class Route(Entity):
    """
    A user-ordered list of static routes.
    """
    .. attribute:: destination_prefix  (key)
    IPv4 destination prefix
    **type**: str


    **mandatory**: True

    .. attribute:: description
    Textual description of the route
    **type**: str

    .. attribute:: next_hop
    Configuration of next-hop
    **type**: :py:class:`NextHop`
<...>

    """
def __init__(self):

    self.yang_name = "route"
    self.yang_parent_name = "ipv4"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['destination_prefix']
    self._leafs = OrderedDict(
        ('destination_prefix', (YLeaf(YType.str, 'destination-prefix'), ['str'])),
        ('description', (YLeaf(YType.str, 'description'), ['str'])),
    )
    self.destination_prefix = None
    self.description = None

    self.next_hop.parent = self
    self._children_name_map['next_hop'] = "next-hop"
    self._segment_path = lambda: "route" + "{destination-prefix='}" + str(self.destination_prefix) + "'"
    self._is_frozen = True

    def _setattr_(self, name, value):

class NextHop(Entity):
    """
    Configuration of next-hop.
    .. attribute:: outgoing_interface

    Name of the outgoing interface
    **type**: str

    .. attribute:: special_next_hop

    Special next-hop options
    **type**: :py:class:`SpecialNextHop`
.. attribute:: next_hop_address

IPv4 address of the next-hop
**type**: str

**pattern**: (([0-9]\|1[0-9]\|0-9])\|([0-9]\|0-9))\|2([0-4]\|0-9)\|25[0-5])\|\3 ([0-9]\|1[0-9]\|0-9)\|1([0-9]\|0-9)\|2([0-4]\|0-9)\|25[0-5])\|\3 (%\p{N}\p{L}+)?

----

_prefix = 'v4ur'
_revision = '2015-05-25'
def __init__(self):

    self.yang_name = "next-hop"
    self.yang_parent_name = "route"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yslist_key_names = []
    self.child_classes = OrderedDict({})
    self.leafs = OrderedDict(
        ('outgoing_interface', YLeaf(YType.str, 'outgoing-interface'), ['str']),
        ('special_next_hop', YLeaf(YType.enumeration, 'special-next-hop'),
        ['ydk.models.ietf.ietf_routing', 'Routing',
    ('next_hop_address', YLeaf(YType.str, 'next-hop-address'), ['str']),
]

    self.outgoing_interface = None
    self.special_next_hop = None
    self.next_hop_address = None
    self.segment_path = lambda: "next-hop"
    self.is_frozen = True

def __setattr__(self, name, value):

class SpecialNextHop(Enum):
    """
Special next-hop options.

.. data:: blackhole = 0

Silently discard the packet.

.. data:: unreachable = 1

Discard the packet and notify the sender with an error message indicating that the destination host is unreachable.

.. data:: prohibit = 2

Discard the packet and notify the sender with an error message indicating that the communication is administratively prohibited.

.. data:: receive = 3

The packet will be received by the local system.

blackhole = Enum.YLeaf(0, "blackhole")
unreachable = Enum.YLeaf(1, "unreachable")
prohibit = Enum.YLeaf(2, "prohibit")
receive = Enum.YLeaf(3, "receive")

class Ospf(Entity):
    """
    OSPF.
    """

    .. attribute:: all_instances_inherit

    Inheritance support to all instances

    *type*: :py:class:`AllInstancesInherit`

.. attribute:: operation_mode

OSPF operation mode

**type**: :py:class:`OperationMode <ydk.models.ietf.ietf_ospf.OperationMode>`

**default value**: ospf:ships-in-the-night

.. attribute:: instance

An OSPF routing protocol instance


```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "ospf"
    self.yang_parent_name = "routing-protocol"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = []
    self._child_classes = OrderedDict(
        [('all-instances-inherit', ('all_instances_inherit',
        ('instance', ('instance',
    self._leafs = OrderedDict(
        [('operation_mode', (YLeaf(YType.identityref, 'operation-mode'), [('ydk.models.ietf.ietf_ospf', 'OperationMode')]))],
    self.operation_mode = None

    self.all_instances_inherit =
    self.all_instances_inherit.parent = self
    self._children_name_map['all_instances_inherit'] = "all-instances-inherit"

    self.instance = YList(self)
    self._segment_path = lambda: "ospf"
    self._is_frozen = True
```
def __setattr__(self, name, value):
    ['operation_mode'], name, value)

class AllInstancesInherit(Entity):
    
    Inheritance support to all instances.
    
.. attribute:: area

    Area config to be inherited by all areas in all instances
    **type**: :py:class:`Area

.. attribute:: interface

    Interface config to be inherited by all interfaces in all instances
    **type**: :py:class:`Interface

    
    
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self).__init__()

    self.yang_name = "all-instances-inherit"
    self.yang_parent_name = "ospf"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(

    self._leafs = OrderedDict()


    self.area.parent = self
    self._children_name_map["area"] = "area"
self.interface =
    self.interface.parent = self
    self._children_name_map["interface"] = "interface"
    self._segment_path = lambda: "all-instances-inherit"
    self._is_frozen = True

def __setattr__(self, name, value):

class Area(Entity):
    """
    Area config to be inherited by all areas in all instances.
    """
    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):
    self.yang_name = "area"
    self.yang_parent_name = "all-instances-inherit"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict()
    self._segment_path = lambda: "area"
    self._is_frozen = True

class Interface(Entity):
    """
    Interface config to be inherited by all interfaces in all instances.
    """
    _prefix = 'ospf'
def __init__(self):
)

    self.yang_name = "interface"
    self.yang_parent_name = "all-instances-inherit"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict()
    self._segment_path = lambda: "interface"
    self._is_frozen = True

class Instance(Entity):
    ""
    An OSPF routing protocol instance.
    ""

    .. attribute:: af (key)

        Address-family of the instance
        **type**: py:class:`AddressFamily <ydk.models.ietf.ietf_routing.AddressFamily>`

    .. attribute:: router_id

        Defined in RFC 2328. A 32-bit number that uniquely identifies the router
        **type**: str

        **pattern**: (([0-9])\.[1-9]\.[0-9-9]1[0-9-9][0-9-9]2[0-4][0-9-9][25][0-5])

        .. attribute:: admin_distance

            Admin distance config state

        .. attribute:: nsr

            NSR config state

        .. attribute:: graceful_restart
Graceful restart config state
**type**: :py:class:`GracefulRestart

  .. attribute:: enable

  Enable/Disable the protocol
  **type**: bool

  **default value**: true

  .. attribute:: auto_cost

  Auto cost config state
  **type**: :py:class:`AutoCost

  .. attribute:: spf_control

  SPF calculation control
  **type**: :py:class:`SpfControl

  .. attribute:: database_control

  Database maintenance control
  **type**: :py:class:`DatabaseControl

  .. attribute:: reload_control

  Protocol reload control
  **type**: :py:class:`ReloadControl

  .. attribute:: mpls

  OSPF MPLS config state
  **type**: :py:class:`Mpls

  .. attribute:: fast_reroute
This container may be augmented with global parameters for IPFRR

.. attribute:: all_areas_inherit

Inheritance for all areas

.. attribute:: area

List of ospf areas

.. attribute:: topology

OSPF topology

```python
def __init__(self):
    self.yang_name = "instance"
    self.yang_parent_name = "ospf"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.is_presence_container = False
    self._container = self._parent = self
    self.is_top_level_class = False
    self.is_presence_container = False
    self._parent = self
    self.is_top_level_class = False
    self.is_presence_container = False
    self._parent = self
    self.is_top_level_class = False
    self.is_presence_container = False
    self._parent = self
    self.is_top_level_class = False
    self.is_presence_container = False
    self._parent = self
    self.is_top_level_class = False
```
self.reload_control.parent = self
self._children_name_map["reload_control"] = "reload-control"

sel.mpls.parent = self
self._children_name_map["mpls"] = "mpls"

self.fast_reroute =
sel.fast_reroute.parent = self
self._children_name_map["fast_reroute"] = "fast-reroute"

self.all_areas_inherit =
sel.all_areas_inherit.parent = self
self._children_name_map["all_areas_inherit"] = "all-areas-inherit"

self.area = YList(self)
sel.topology = YList(self)
sel._segment_path = lambda: "instance" + "+[af={!r} + str(self.af) + "]"
sel._is_frozen = True

def __setattr__(self, name, value):
    ['af', 'router_id', 'enable'], name, value)

class AdminDistance(Entity):

    Admin distance config state.

        .. attribute:: intra_area

        Admin distance for intra-area route

        **type**: int

        **range**: 0..255

        .. attribute:: inter_area

        Admin distance for inter-area route

        **type**: int

        **range**: 0..255

        .. attribute:: internal

        Admin distance for both intra-area and inter-area route
**type**: int

**range**: 0..255

.. attribute:: external

Admin distance for both external route

**type**: int

**range**: 0..255

```

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self.yang_name = "admin-distance"
    self.yang_parent_name = "instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'intra_area': (YLeaf(YType.uint8, 'intra-area'), ['int']),
        'inter_area': (YLeaf(YType.uint8, 'inter-area'), ['int']),
        'internal': (YLeaf(YType.uint8, 'internal'), ['int']),
        'external': (YLeaf(YType.uint8, 'external'), ['int'])
    })
    self.intra_area = None
    self.inter_area = None
    self.internal = None
    self.external = None
    self._segment_path = lambda: "admin-distance"
    self._is_frozen = True

def __setattr__(self, name, value):

class Nsr(Entity):
    
    NSR config state.
.. attribute:: enable

Enable/Disable NSR
**type**: bool

Graceful Restart config state.

.. attribute:: enable

Enable/Disable graceful restart as defined in RFC 3623
**type**: bool

Enable RestartHelperSupport in RFC 3623 Section B.2
**type**: bool
.. attribute:: restart_interval

RestartInterval option in RFC 3623 Section B.1
**type**: int

**range**: 1..1800

**units**: seconds

**default value**: 120

.. attribute:: helper_strict_lsa_checking

RestartHelperStrictLSAChecking option in RFC 3623 Section B.2
**type**: bool

def __init__(self):
    self.yang_name = "graceful-restart"
    self.yang_parent_name = "instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = []
    self._child_classes = OrderedDict(
        )
    self._leafs = OrderedDict(
        ('enable', (YLeaf(YType.boolean, 'enable'), ['bool'])),
        ('helper_enable', (YLeaf(YType.boolean, 'helper-enable'), ['bool'])),
        ('restart_interval', (YLeaf(YType.uint16, 'restart-interval'), ['int'])),
        ('helper_strict_lsa_checking', (YLeaf(YType.boolean, 'helper-strict-lsa-checking'), ['bool'])),
    )
    self.enable = None
    self.helper_enable = None
    self.restart_interval = None
    self.helper_strict_lsa_checking = None
    self._segment_path = lambda: "graceful-restart"
    self._is_frozen = True

def __setattr__(self, name, value):
class AutoCost(Entity):
    
    Auto cost config state.

    .. attribute:: enable

    Enable/Disable auto cost
    **type**: bool

    .. attribute:: reference_bandwidth

    Configure reference bandwidth in term of Mbits
    **type**: int

    **range**: 1..4294967

    **units**: Mbits

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):
        self.yang_name = "auto-cost"
        self.yang_parent_name = "instance"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict([('enable', (YLeaf(YType.boolean, 'enable'), ['bool'])),
                                    ('reference_bandwidth', (YLeaf(YType.uint32, 'reference-bandwidth'), ['int']))])
        self.enable = None
        self.reference_bandwidth = None
        self._segment_path = lambda: "auto-cost"
        self._is_frozen = True

    def __setattr__(self, name, value):
class SpfControl(Entity):
    
    SPF calculation control.
    
    .. attribute:: paths

    Maximum number of ECMP paths
    
    **type**: int
    
    **range**: 1..32

    ...

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):

    self.yang_name = "spf-control"
    self.yang_parent_name = "instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict([ ('paths', (YLeaf(YType.uint16, 'paths'), ['int'])) ])

    self.paths = None
    self._segment_path = lambda: "spf-control"
    self._is_frozen = True

    def __setattr__(self, name, value):

    def __getattr__(self, name):
        if name == '__SEGMENTS_KEY_NAME':
            return []
        else:
            raise AttributeError("Attribute " + name + " referenced but not set")

    def _set_attribute(self, key, value):
        self._set_attribute_dict({key: value})

    def _set_attribute_dict(self, dict):
        self._leaf_values = dict

    def _set_value(self, key, value):
        self._leaf_values[key] = value

    def __str__(self):
        return '<{} {}>'.format(self.yang_name, self._leaf_values)

    def __repr__(self):
        return '<{} {}>'.format(self.yang_name, self._leaf_values)

class DatabaseControl(Entity):
    
    Database maintenance control.
    
    .. attribute:: max_lsa

    Database control maximum size
    
    **type**: int
    
    **range**: 1..32
Maximum number of LSAs OSPF will receive

**type**: int

**range**: 1..4294967294

```
class ReloadControl(Entity):
    "Protocol reload control.
```

```python
def __init__(self):
    self.yang_name = "reload-control"
    self.yang_parent_name = "instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict((
        ('max_lsa', (YLeaf(YType.uint32, 'max-lsa'), ['int'])),
    ))
    self.max_lsa = None
    self._segment_path = lambda: "reload-control"
    self._is_frozen = True

    def __setattr__(self, name, value):

class ReloadControl(Entity):
    "Protocol reload control."
class Mpls(Entity):
    
    OSPF MPLS config state.

    .. attribute:: te_rid

    Traffic Engineering stable IP address for system

    .. attribute:: ldp

    OSPF MPLS LDP config state

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):
        self).__init__()

        self.yang_name = "mpls"
        self.yang_parent_name = "instance"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict(
            [('te_rid', ('te_rid',
        self._leafs = OrderedDict()
self.te_rid =
    self.te_rid.parent = self
    self._children_name_map["te_rid"] = "te-rid"

    self.ldp.parent = self
    self._children_name_map["ldp"] = "ldp"
    self._segment_path = lambda: "mpls"
    self._is_frozen = True

def __setattr__(self, name, value):


class TeRid(Empty):
    """
    Traffic Engineering stable IP address for system.
    """
    .. attribute:: interface
        Take the interface's IPv4 address as TE router ID
        *type*:: str
        *refers to*:: :py:class:`name <ydk.models.ietf.ietf_interfaces.Interfaces.Interface>`

    .. attribute:: router_id
        Explicitly configure the TE router ID
        *type*:: str

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "te-rid"
self.yang_parent_name = "mpls"
self.is_top_level_class = False
self.has_list_ancestor = True
self.leafs_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([
    ('interface', (YLeaf(YType.str, 'interface'), ['str'])),
    ('router_id', (YLeaf(YType.str, 'router-id'), ['str'])),
])
self.interface = None
self.router_id = None
self._segment_path = lambda: "te-rid"
self._is_frozen = True

def __setattr__(self, name, value):

class Ldp(Entity):
    """
    OSPF MPLS LDP config state.
    """
    .. attribute:: igp_sync

    Enable LDP IGP synchronization
    
    **type**: bool

    .. attribute:: autoconfig

    Enable LDP IGP interface auto-configuration
    
    **type**: bool

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "ldp"
        self.yang_parent_name = "mpls"
        self.is_top_level_class = False
        self.has_list_ancestor = True
class FastReroute(Entity):
    
    This container may be augmented with global parameters for IPFRR.

    .. attribute:: lfa

    This container may be augmented with global parameters for LFA. Creating the container has no effect on LFA activation

    **type**: :py:class:`Lfa`


    ..

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "fast-reroute"
        self.yang_parent_name = "instance"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.yang_key_names = []
        self._child_classes = OrderedDict([
            ("lfa", (YLeaf(YType.boolean, 'igp-sync'), ['bool']))
        ]
        )
        self.igp_sync = None
        self.autoconfig = None
        self._segment_path = lambda: "ldp"
        self._is_frozen = True

        def __setattr__(self, name, value):
self.lfa =

self.lfa.parent = self
self._children_name_map["lfa"] = "lfa"
self._segment_path = lambda: "fast-reroute"
self._is_frozen = True

def __setattr__(self, name, value):

class Lfa(Entity):
    
    This container may be augmented with
global parameters for LFA.
Creating the container has no effect on
LFA activation.

    

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):
        self.yang_name = "lfa"
        self.yang_parent_name = "fast-reroute"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict(
)
        self._leafs = OrderedDict()
        self._segment_path = lambda: "lfa"
        self._is_frozen = True

class AllAreasInherit(Entity):
    
    Inheritance for all areas.

    .. attribute:: area

    Area config to be inherited by all areas

    .. type:: :py:class:`Area

Open Source Used In BGP TE Controller Version 4.3.0  2124
.. attribute:: interface

Interface config to be inherited by all interfaces in all areas

**type** : :py:class:`Interface`

```python
class Area(Entity):

```
Area config to be inherited by all areas.

```python
_ prefix = 'ospf'
_ revision = '2015-03-09'

def __init__(self):

    self.yang_name = "area"
    self.yang_parent_name = "all-areas-inherit"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yleafkey_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict()
    self._segment_path = lambda: "area"
    self._is_frozen = True

class Interface(Entity):
    ""
    Interface config to be inherited by all interfaces in all areas.
    ""

    _ prefix = 'ospf'
    _ revision = '2015-03-09'

def __init__(self):

    self.yang_name = "interface"
    self.yang_parent_name = "all-areas-inherit"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yleafkey_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict()
    self._segment_path = lambda: "interface"
```
self._is_frozen = True

class Area(Entity):
    
    List of ospf areas

    .. attribute:: area_id (key)

    Area ID
    **type**: union of the below types:

    **type**: int

    **range**: 0..4294967295

    **type**: str

    **pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])

    .. attribute:: area_type

    Area type
    **type**: :py:class:`AreaType <ydk.models.ietf.ietf_ospf.AreaType>`

    **default value**: normal

    .. attribute:: summary

    Enable/Disable summary generation to the stub or NSSA area
    **type**: bool

    .. attribute:: default_cost

    Set the summary default-cost for a stub or NSSA area
    **type**: int

    **range**: 1..16777215

    .. attribute:: range

    Summarize routes matching address/mask (border routers only)

    .. attribute:: all_interfaces_inherit
Inheritance for all interfaces
**type**: `AllInterfacesInherit`

.. attribute:: virtual_link

OSPF virtual link
**type**: list of `VirtualLink`

.. attribute:: sham_link

OSPF sham link
**type**: list of `ShamLink`

.. attribute:: interface

List of OSPF interfaces
**type**: list of `Interface`

---

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "area"
    self.yang_parent_name = "instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['area_id']

self._leafs = OrderedDict([  ('area_id', (YLeaf(YType.str, 'area-id'), ['int','str'])),  ('area_type', (YLeaf(YType.identityref, 'area-type'), [('ydk.models.ietf.ietf_ospf', 'AreaType')]),  ('summary', (YLeaf(YType.boolean, 'summary'), ['bool'])),  ('default_cost', (YLeaf(YType.uint32, 'default-cost'), ['int'])),])
self.area_id = None
self.area_type = None
self.summary = None
self.default_cost = None

self.all_interfaces_inherit.parent = self
self._children_name_map['all_interfaces_inherit'] = "all-interfaces-inherit"

def __setattr__(self, name, value):

class Range(Entity):
    
    Summarize routes matching address/mask (border routers only)

    .. attribute:: prefix (key)

    IPv4 or IPv6 prefix

    **type**: str

    .. attribute:: advertise

    Advertise or hide

    **type**: bool

    .. attribute:: cost

    **type**: int
Cost of summary route

**type**: int

**range**: 0..16777214

__init__ = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "range"
    self.yang_parent_name = "area"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_parent_key = self
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(["prefix", "advertise", "cost"])

    self._leaf_name = "range"
    self._upper_case_entity_name = "RANGE"
    self._segment_path = lambda: "range" + " [prefix='" + str(self.prefix) + "']"
    self._is_frozen = True

    def __setattr__(self, name, value):

    def _setattr__helper(self, key, value):
        if key in self._child_classes:
            self._child_classes[key]._setattr__helper(key, value)
        else:
            self._leafs_add(key, value)

    def _setattr__(self, key, value):
        self._setattr__helper(key, value)

    def _map_info(self, key):
        if key in self._child_classes:
            return self._child_classes[key]._map_info(key)
        else:
            return self._leaf_map_info(key)

    def _map_info_add(self, key, value):
        if key in self._child_classes:
            self._child_classes[key]._map_info_add(key, value)
        else:
            self._leaf_map_info_add(key, value)

    def _map_info_remove(self, key):
        if key in self._child_classes:
            self._child_classes[key]._map_info_remove(key)
        else:
            self._leaf_map_info_remove(key)

    def _map_info_remove_empty(self, key):
        if key in self._child_classes:
            self._child_classes[key]._map_info_remove_empty(key)
        else:
            self._leaf_map_info_remove_empty(key)

    class AllInterfacesInherit(Entity):
        ""
        Inheritance for all interfaces
        ""

        .. attribute:: interface

        Interface config to be inherited by all interfaces

        **type**: :py:class:`Interface`

<...>
class Interface(Entity):
    """
    Interface config to be inherited by all interfaces.
    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "all-interfaces-inherit"
        self.yang_parent_name = "area"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict(["interface", "interface")
        self._leafs = OrderedDict()

        self.interface.parent = self
        self._children_name_map["interface"] = "interface"
        self._segment_path = lambda: "all-interfaces-inherit"
        self._is_frozen = True

        def __setattr__(self, name, value):
class VirtualLink(Entity):
    
    OSPF virtual link

    .. attribute:: router_id (key)

    Virtual link router ID
    **type**: str

    **pattern**: (([0-9]|1\.|0\.|9)|1[0-9]|0\.|9|2[0-4]|0\.|9|25[0-5])\d(3)([0-9]|1\.|0\.|9|2[0-4]|0\.|9|25[0-5])

    .. attribute:: cost

    Interface cost
    **type**: int

    **range**: 1..65535

    .. attribute:: hello_interval

    Time between hello packets
    **type**: int

    **range**: 1..65535

    **units**: seconds

    .. attribute:: dead_interval

    Interval after which a neighbor is declared dead
    **type**: int

    **range**: 1..65535
.. attribute:: retransmit_interval

Time between retransmitting unacknowledged Link State Advertisements (LSAs)

.. attribute:: transmit_delay

Estimated time needed to send link-state update

.. attribute:: mtu_ignore

Enable/Disable ignoring of MTU in DBD packets

.. attribute:: lls

Enable/Disable link-local signaling (LLS) support

.. attribute:: prefix_suppression

Suppress advertisement of the prefixes

.. attribute:: bfd

Enable/disable bfd

.. attribute:: ttl_security

TTL security check

.. attribute:: enable
Enable/disable protocol on the interface
**type**: bool

**default value**: true

.. attribute:: authentication

Authentication configuration

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self.yang_name = "virtual-link"
    self.yang_parent_name = "area"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = ['router_id']
    self._leafs = OrderedDict([('router_id', (YLeaf(YType.str, 'router-id'), ['str'])), ('cost', (YLeaf(YType.uint16, 'cost'), ['int'])), ('hello_interval', (YLeaf(YType.uint16, 'hello-interval'), ['int'])), ('dead_interval', (YLeaf(YType.uint16, 'dead-interval'), ['int'])), ('retransmit_interval', (YLeaf(YType.uint16, 'retransmit-interval'), ['int'])), ('transmit_delay', (YLeaf(YType.uint16, 'transmit-delay'), ['int'])), ('mtu_ignore', (YLeaf(YType.boolean, 'mtu-ignore'), ['bool'])), ('lls', (YLeaf(YType.boolean, 'lls'), ['bool'])), ('prefix_suppression', (YLeaf(YType.boolean, 'prefix-suppression'), ['bool'])), ('bfd', (YLeaf(YType.boolean, 'bfd'), ['bool'])), ('enable', (YLeaf(YType.boolean, 'enable'), ['bool']))])

self.router_id = None
self.cost = None
self.hello_interval = None
self.dead_interval = None
```
self.retransmit_interval = None
self.transmit_delay = None
self.mtu_ignore = None
self.lls = None
self.prefix_suppression = None
self.bfd = None
self.enable = None

self.ttl_security =
self.ttl_security.parent = self
self._children_name_map["ttl_security"] = "ttl-security"

self.authentication =
self.authentication.parent = self
self._children_name_map["authentication"] = "authentication"
self._segment_path = lambda: "virtual-link" + "]router-id='" + str(self.router_id) + "]"
self._is_frozen = True

def __setattr__(self, name, value):

class TtlSecurity(Entity):
    ...
    TTL security check.

    .. attribute:: enable

    Enable/Disable TTL security check
    **type**: bool

    .. attribute:: hops

    Maximum number of hops that a OSPF packet may have traveled
    **type**: int

    **range:** 1..254

    ...

_prefix = 'ospf'
_revision = '2015-03-09'
class Authentication(Entity):
    ""
    Authentication configuration.
    .. attribute:: sa

    SA name
    **type**: str

    .. attribute:: key_chain

    key\-chain name
    **type**: str

    **refers to** : :py:class: `name <ydk.models.ietf.ietf_key_chain.KeyChains>`

    .. attribute:: key

    Key string in ASCII format
    **type**: str

    .. attribute:: crypto_algorithm
Cryptographic algorithm associated with key
**type** : py:class:`CryptoAlgorithm`

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
    self.yang_name = "authentication"
    self.yang_parent_name = "virtual-link"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._leafs = OrderedDict([('sa', (YLeaf(YType.str, 'sa'), ['str'])), ('key_chain', (YLeaf(YType.str, 'key-chain'), ['str'])), ('key', (YLeaf(YType.str, 'key'), ['str']))])
    self.sa = None
    self.key_chain = None
    self.key = None

    self.crypto_algorithm.parent = self
    self._children_name_map["crypto-algorithm"] = "crypto-algorithm"
    self._segment_path = lambda: "authentication"
    self._is_frozen = True

    def __setattr__(self, name, value):

class CryptoAlgorithm(Entity):
    ....
```
Cryptographic algorithm associated with key.

.. attribute:: hmac_sha1_12

The HMAC-SHA1-12 algorithm

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha1_20

The HMAC-SHA1-20 algorithm

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: md5

The MD5 algorithm

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: sha_1

The SHA-1 algorithm

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha_1

HMAC-SHA-1 authentication algorithm

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha_256

HMAC-SHA-256 authentication algorithm

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha_384

HMAC-SHA-384 authentication algorithm

**type**: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: hmac_sha_512

HMAC-SHA-512 authentication algorithm

**type**: :py:class:`Empty<ydk.types.Empty>`


```python
_prefix = 'ospf'
_revision = '2015-03-09'
```
def __init__(self):

    self.yang_name = "crypto-algorithm"
    self.yang_parent_name = "authentication"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(
        ('hmac_sha1_12', (YLeaf(YType.empty, 'hmac-sha1-12'), ['Empty'])),
        ('hmac_sha1_20', (YLeaf(YType.empty, 'hmac-sha1-20'), ['Empty'])),
        ('md5', (YLeaf(YType.empty, 'md5'), ['Empty'])),
        ('sha_1', (YLeaf(YType.empty, 'sha-1'), ['Empty'])),
        ('hmac_sha_1', (YLeaf(YType.empty, 'hmac-sha-1'), ['Empty'])),
        ('hmac_sha_256', (YLeaf(YType.empty, 'hmac-sha-256'), ['Empty'])),
        ('hmac_sha_384', (YLeaf(YType.empty, 'hmac-sha-384'), ['Empty'])),
        ('hmac_sha_512', (YLeaf(YType.empty, 'hmac-sha-512'), ['Empty'])),
    )
    self.hmac_sha1_12 = None
    self.hmac_sha1_20 = None
    self.md5 = None
    self.sha_1 = None
    self.hmac_sha_1 = None
    self.hmac_sha_256 = None
    self.hmac_sha_384 = None
    self.hmac_sha_512 = None
    self._segment_path = lambda: "crypto-algorithm"
    self._is_frozen = True

def __setattr__(self, name, value):

class ShamLink(Entity):
    """
    OSPF sham link
    
    .. attribute:: local_id  (key)

    Address of the local end-point

    **type**: union of the below types:

    **type**: str
.. attribute:: remote_id (key)

Address of the remote end-point

.. attribute:: interface

   Interface cost

   **type**: int

   **range**: 1..65535

   .. attribute:: hello_interval

   Time between hello packets

   **type**: int

   **range**: 1..65535

   **units**: seconds

   .. attribute:: dead_interval

   Interval after which a neighbor is declared dead

   **type**: int

   **range**: 1..65535
.. attribute:: retransmit_interval

Time between retransmitting unacknowledged Link State Advertisements (LSAs)

**type**: int

**range**: 1..65535

**units**: seconds

.. attribute:: transmit_delay

Estimated time needed to send link-state update

**type**: int

**range**: 1..65535

**units**: seconds

.. attribute:: mtu Ignore

Enable/Disable ignoring of MTU in DBD packets

**type**: bool

.. attribute:: llS

Enable/Disable link-local signaling (LLS) support

**type**: bool

.. attribute:: prefix_suppression

Suppress advertisement of the prefixes

**type**: bool

.. attribute:: bfd

Enable/disable bfd

**type**: bool

.. attribute:: ttl_security

TTL security check

**type**: :py:class:`TtlSecurity`
.. attribute:: enable

Enable/disable protocol on the interface
**type**: bool

**default value**: true

.. attribute:: authentication

Authentication configuration
**type**: :py:class:`Authentication`

```python
_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
self.yang_name = "sham-link"
sself.yang_parent_name = "area"
sself.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['local_id','remote_id']
sself._child_classes = OrderedDict(
    ('ttl-security', ('ttl_security',
    ('authentication', ('authentication',
sself._leafs = OrderedDict(
    ('local_id', (YLeaf(YType.str, 'local-id'), ['str','str'])),
    ('remote_id', (YLeaf(YType.str, 'remote-id'), ['str','str'])),
    ('cost', (YLeaf(YType.uint16, 'cost'), ['int'])),
    ('hello_interval', (YLeaf(YType.uint16, 'hello-interval'), ['int'])),
    ('dead_interval', (YLeaf(YType.uint16, 'dead-interval'), ['int'])),
    ('retransmit_interval', (YLeaf(YType.uint16, 'retransmit-interval'), ['int'])),
    ('transmit_delay', (YLeaf(YType.uint16, 'transmit-delay'), ['int'])),
    ('mtu_ignore', (YLeaf(YType.boolean, 'mtu-ignore'), ['bool'])),
    ('lls', (YLeaf(YType.boolean, 'lls'), ['bool'])),
    ('prefix_suppression', (YLeaf(YType.boolean, 'prefix-suppression'), ['bool'])),
    ('bfd', (YLeaf(YType.boolean, 'bfd'), ['bool'])),
    ('enable', (YLeaf(YType.boolean, 'enable'), ['bool'])),
)
sself.local_id = None
self.remote_id = None
```
self.cost = None
self.hello_interval = None
self.dead_interval = None
self.retransmit_interval = None
self.transmit_delay = None
self.mtu_ignore = None
self.lls = None
self.prefix_suppression = None
self.bfd = None
self.enable = None

self.ttl_security =
    self.ttl_security.parent = self
    self._children_name_map["ttl_security"] = "ttl-security"

self.authentication =
    self.authentication.parent = self
    self._children_name_map["authentication"] = "authentication"
    self._segment_path = lambda: "sham-link" + "[local-id='" + str(self.local_id) + "]'" + "[remote-id='" + str(self.remote_id) + "]"
    self._is_frozen = True

def __setattr__(self, name, value):

class TtlSecurity(Entity):
    """
    TTL security check.
    """
    .. attribute:: enable

    Enable/Disable TTL security check
    **type**: bool

    .. attribute:: hops

    Maximum number of hops that a OSPF packet may have traveled
    **type**: int
    **range:** 1..254
class Authentication(Entity):
    
    Authentication configuration.
    
    .. attribute:: sa

    SA name

    **type** : str

    .. attribute:: key_chain

    key\-chain name

    **type** : str

    **refers to** : py:class:: name <ydk.models.ietf.ietf_key_chain.KeyChains>

    .. attribute:: key

    Key string in ASCII format
**type**:: str

.. attribute:: crypto_algorithm

Cryptographic algorithm associated with key

**type**:: :py:class:`CryptoAlgorithm`

"""

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "authentication"
    self.yang_parent_name = "sham-link"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self._child_classes = OrderedDict(
        ("crypto-algorithm", (YLeaf(YType.str, 'sa'), ['str'])),
        ("key_chain", (YLeaf(YType.str, 'key-chain'), ['str'])),
        ("key", (YLeaf(YType.str, 'key'), ['str'])),
    )
    self._leaves = OrderedDict(
        ("sa", (YLeaf(YType.str, 'sa'), ['str'])),
        ("key_chain", (YLeaf(YType.str, 'key-chain'), ['str'])),
        ("key", (YLeaf(YType.str, 'key'), ['str'])),
    )
    self.sa = None
    self.key_chain = None
    self.key = None


    self.crypto_algorithm.parent = self
    self._children_name_map["crypto_algorithm"] = "crypto_algorithm"
    self._segment_path = lambda: "authentication"
    self._is_frozen = True

    def __setattr__(self, name, value):

"""
class CryptoAlgorithm(Entity):
    
    Cryptographic algorithm associated with key.

    .. attribute:: hmac_sha1_12

    The HMAC-SHA1-12 algorithm
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: hmac_sha1_20

    The HMAC-SHA1-20 algorithm
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: md5

    The MD5 algorithm
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: sha_1

    The SHA-1 algorithm
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: hmac_sha_1

    HMAC-SHA-1 authentication algorithm
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: hmac_sha_256

    HMAC-SHA-256 authentication algorithm
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: hmac_sha_384

    HMAC-SHA-384 authentication algorithm
    **type**: :py:class:`Empty<ydk.types.Empty>`

    .. attribute:: hmac_sha_512

    HMAC-SHA-512 authentication algorithm
    **type**: :py:class:`Empty<ydk.types.Empty>`
class Interface(Entity):
    """
    List of OSPF interfaces.

    .. attribute:: interface  (key)
Interface
**type**: str

**refers to**: :py:class:`name <ydk.models.ietf.ietf_interfaces.Interfaces.Interface>`

.. attribute:: network_type

Network type
**type**: :py:class:`NetworkType

.. attribute:: passive

Enable/Disable passive
**type**: bool

.. attribute:: demand_circuit

Enable/Disable demand circuit
**type**: bool

.. attribute:: multi_area

Configure ospf multi-area
**type**: :py:class:`MultiArea

.. attribute:: static_neighbors

Static configured neighbors
**type**: :py:class:`StaticNeighbors

.. attribute:: node_flag

Set prefix as a node representative prefix
**type**: bool

**default value**: false

.. attribute:: fast_reroute

Fast-reroute configuration
**type**: :py:class:`FastReroute
.. attribute:: cost

Interface cost
**type**: int

**range**: 1..65535

.. attribute:: hello_interval

Time between hello packets
**type**: int

**range**: 1..65535

**units**: seconds

.. attribute:: dead_interval

Interval after which a neighbor is declared dead
**type**: int

**range**: 1..65535

**units**: seconds

.. attribute:: retransmit_interval

Time between retransmitting unacknowledged Link State Advertisements (LSAs)
**type**: int

**range**: 1..65535

**units**: seconds

.. attribute:: transmit_delay

Estimated time needed to send link-state update
**type**: int

**range**: 1..65535

**units**: seconds

.. attribute:: mtu_ignore

Enable/Disable ignoring of MTU in DBD packets
**type**: bool

.. attribute:: lls

Enable/Disable link-local signaling (LLS) support

**type**: bool

.. attribute:: prefix_suppression

Suppress advertisement of the prefixes

**type**: bool

.. attribute:: bfd

Enable/disable bfd

**type**: bool

.. attribute:: ttl_security

TTL security check

**type**: :py:class:`TtlSecurity`

<
<
<

.. attribute:: enable

Enable/disable protocol on the interface

**type**: bool

**default value**: true

.. attribute:: authentication

Authentication configuration

**type**: :py:class:`Authentication`

<
<
<

.. attribute:: topology

OSPF interface topology

**type**: list of :py:class:`Topology`

<
<
__prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
self.yang_name = "interface"
self.yang_parent_name = "area"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['interface']
self._child_classes = OrderedDict(
    [('multi-area', ('multi_area',
     ('static-neighbors', ('static_neighbors',
     ('fast-reroute', ('fast_reroute',
     ('ttl-security', ('ttl_security',
     ('authentication', ('authentication',
     ('topology', ('topology',
])
self._leafs = OrderedDict(
    [('interface', (YLeaf(YType.str, 'interface'), ['str'])),
     ('network_type', (YLeaf(YType.enumeration, 'network-type'),
     ('passive', (YLeaf(YType.boolean, 'passive'), ['bool'])),
     ('demand_circuit', (YLeaf(YType.boolean, 'demand-circuit'), ['bool'])),
     ('node_flag', (YLeaf(YType.boolean, 'node-flag'), ['bool'])),
     ('cost', (YLeaf(YType.uint16, 'cost'), ['int'])),
     ('hello_interval', (YLeaf(YType.uint16, 'hello-interval'), ['int'])),
     ('dead_interval', (YLeaf(YType.uint16, 'dead-interval'), ['int'])),
     ('retransmit_interval', (YLeaf(YType.uint16, 'retransmit-interval'), ['int'])),
     ('transmit_delay', (YLeaf(YType.uint16, 'transmit-delay'), ['int'])),
     ('mtu_ignore', (YLeaf(YType.boolean, 'mtu-ignore'), ['bool']))
])
self.interface = None
self.network_type = None
self.passive = None
self.demand_circuit = None
self.node_flag = None
self.cost = None
self.hello_interval = None
self.dead_interval = None
self.retransmit_interval = None
self.transmit_delay = None
self.mtu_ignore = None
self.lls = None
self.prefix_suppression = None
self.bfd = None
self.enable = None

self.multi_area = 
self.multi_area.parent = self
self._children_name_map["multi_area"] = "multi-area"

self.static_neighbors = 
self.static_neighbors.parent = self
self._children_name_map["static_neighbors"] = "static-neighbors"

self.fast_reroute = 
self.fast_reroute.parent = self
self._children_name_map["fast_reroute"] = "fast-reroute"

self.ttl_security = 
self.ttl_security.parent = self
self._children_name_map["ttl_security"] = "ttl-security"

self.authentication = 
self.authentication.parent = self
self._children_name_map["authentication"] = "authentication"

self.topology = YList(self)
self._segment_path = lambda: "interface" + "[interface='" + str(self.interface) + "']"
self._is_frozen = True

def __setattr__(self, name, value):

class NetworkType(Enum):
    """
    NetworkType (Enum Class)"""
Network type.

.. data:: broadcast = 0

Specify OSPF broadcast multi-access network.

.. data:: non_broadcast = 1

Specify OSPF Non-Broadcast Multi-Access (NBMA) network.

.. data:: point_to_multipoint = 2

Specify OSPF point-to-multipoint network.

.. data:: point_to_point = 3

Specify OSPF point-to-point network.

....

broadcast = Enum.YLeaf(0, "broadcast")

non_broadcast = Enum.YLeaf(1, "non-broadcast")

point_to_multipoint = Enum.YLeaf(2, "point-to-multipoint")

point_to_point = Enum.YLeaf(3, "point-to-point")

class MultiArea(Entity):

    Configure ospf multi-area.

    .. attribute:: multi_area_id

    Multi-area ID

    **type**: union of the below types:

    **type**: int

    **range**: 0..4294967295

    **type**: str

.. attribute:: cost

    Interface cost for multi-area

    **type**: int

    **range**: 0..65535

---

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "multi-area"
    self.yang_parent_name = "interface"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(
        ('multi_area_id', (YLeaf(YType.str, 'multi-area-id'), ['int','str'])),
        ('cost', (YLeaf(YType.uint16, 'cost'), ['int'])),
    )
    self.multi_area_id = None
    self.cost = None
    self._segment_path = lambda: "multi-area"
    self._is_frozen = True

    def __setattr__(self, name, value):


class StaticNeighbors(Entity):
    ""
    Static configured neighbors.
    ""

    .. attribute:: neighbor

        Specify a neighbor router

        **type**: list of :py:class:`Neighbor`

---
class Neighbor(Entity):
    
    Specify a neighbor router.
    
    .. attribute:: address (key)

    Neighbor IP address

    **type**: union of the below types:

    **type**: str

    **pattern**: (([0\-9])\[1\-9][0\-9]|1[0\-9][0\-9]|2[0\-4][0\-9]|25[0\-5])\|\3|((0\-9)|[1\-9][0\-9]|1[0\-9][0\-9]|2[0\-4][0\-9]|25[0\-5])%(\p{N})\p{L}+?  

    **type**: str
**pattern:** ((\:|\[0-9a-fA-F]{0,4}\:)|(\[0-9a-fA-F]{0,4}\:)?\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3})\%([Nn][Pp][Ll]+)?

.. attribute:: cost

Neighbor cost
**type**:: int
**range**:: 1..65535

.. attribute:: poll_interval

Neighbor poll interval
**type**:: int
**range**:: 1..65535
**units**:: seconds

.. attribute:: priority

Neighbor priority for DR election
**type**:: int
**range**:: 1..255

_.._ 

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):

    self.yang_name = "neighbor"
    self.yang_parent_name = "static-neighbors"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = ['address']
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('address', (YLeaf(YType.str, 'address'), ['str','str'])),
        ('cost', (YLeaf(YType.uint16, 'cost'), ['int'])),
    )
('poll_interval', (YLeaf(YType.uint16, 'poll-interval'), ['int'])),
('priority', (YLeaf(YType.uint8, 'priority'), ['int'])),
]
self.address = None
self.cost = None
self.poll_interval = None
self.priority = None
self._segment_path = lambda: "neighbor" + "[address=" + str(self.address) + "]"
self._is_frozen = True

def __setattr__(self, name, value):
cNeighbors.Neighbor, ['address', 'cost', 'poll_interval', 'priority'], name, value)

class FastReroute(Entity):
    """
    Fast-reroute configuration.
    """
    .. attribute:: lfa

        LFA configuration

        **type**: :py:class:`Lfa`

=s<ork=py:class:`Lfa`

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):
        _init__()

        self.yang_name = "fast-reroute"
        self.yang_parent_name = "interface"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict([(
            "lfa", (YLeaf(YType.uint16, 'lfa-id'), ['int'])),
            "neighbor", (YLeaf(YType.uint16, 'neighbor-id'), ['int'])),
        ])
        self._is_frozen = True

class Lfa(Entity):
    """
    LFA configuration.
    .. attribute:: candidate_disabled

    Prevent the interface to be used as backup
    **type**: bool
    .. attribute:: enabled

    Activates LFA. This model assumes activation of per-prefix LFA
    **type**: bool
    .. attribute:: remote_lfa

    Remote LFA configuration
    **type**: :py:class:`RemoteLfa`
    """
self.candidate_disabled = None
self.enabled = None


self.remote_lfa.parent = self
self._children_name_map["remote_lfa"] = "remote-lfa"
self._segment_path = lambda: "lfa"
self._is_frozen = True

def __setattr__(self, name, value):

class RemoteLfa(Entity):
    """
    Remote LFA configuration.
    .. attribute:: enabled

    Activates remote LFA
    **type**: bool

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):

    self.yang_name = "remote-lfa"
    self.yang_parent_name = "lfa"
    self.is_top_level_class = False
    self.has_list ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
class TtlSecurity(Entity):

    """
    TTL security check.
    """

    .. attribute:: enable

        Enable/Disable TTL security check

        **type**: bool

    .. attribute:: hops

        Maximum number of hops that a OSPF packet may have traveled

        **type**: int

        **range**: 1..254

    """

    _prefix = 'ospf'
    _revision = '2015-03-09'

    def __init__(self):

        self.yang_name = "ttl-security"
        self.yang_parent_name = "interface"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict(["enable", (YLeaf(YType.boolean, 'enable'), ['bool'])], ["hops", (YLeaf(YType.uint8, 'hops'), ['int'])])
        self._children = OrderedDict([""])
})
self.enable = None
self.hops = None
self._segment_path = lambda: "ttl-security"
self._is_frozen = True

def __setattr__(self, name, value):

class Authentication(Entity):
    '''
    Authentication configuration.
    .. attribute:: sa
        SA name
        **type**: str
    .. attribute:: key_chain
        key-chain name
        **type**: str
        **refers to**: :py:class:`name <ydk.models.ietf.ietf_key_chain.KeyChains>`
    .. attribute:: key
        Key string in ASCII format
        **type**: str
    .. attribute:: crypto_algorithm
        Cryptographic algorithm associated with key
    '''

    _prefix = 'ospf'
    _revision = '2015-03-09'
    def __init__(self):
self.yang_name = "authentication"
self.yang_parent_name = "interface"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([("crypto-algorithm", (YLeaf(YType.str, 'sa'), ['str']))])
self._leaves = OrderedDict([(
    'sa', (YLeaf(YType.str, 'sa'), ['str'])),
    ('key_chain', (YLeaf(YType.str, 'key-chain'), ['str'])),
    ('key', (YLeaf(YType.str, 'key'), ['str']))])
self.sa = None
self.key_chain = None
self.key = None

self.crypto_algorithm.parent = self
self._children_name_map['crypto_algorithm'] = "crypto-algorithm"
self._segment_path = lambda: "authentication"
self._is_frozen = True

def __setattr__(self, name, value):

class CryptoAlgorithm(Entity):
    '''
    Cryptographic algorithm associated with key.
    .. attribute:: hmac_sha1_12
        The HMAC\-SHA1\-12 algorithm
        **type**:: :py:class:`Empty<ydk.types.Empty>`
        .. attribute:: hmac_sha1_20
            The HMAC\-SHA1\-20 algorithm
            **type**:: :py:class:`Empty<ydk.types.Empty>`
        .. attribute:: md5
The MD5 algorithm
**type**: Empty

.. attribute:: sha_1

The SHA-1 algorithm
**type**: Empty

.. attribute:: hmac_sha_1

HMAC-SHA-1 authentication algorithm
**type**: Empty

.. attribute:: hmac_sha_256

HMAC-SHA-256 authentication algorithm
**type**: Empty

.. attribute:: hmac_sha_384

HMAC-SHA-384 authentication algorithm
**type**: Empty

.. attribute:: hmac_sha_512

HMAC-SHA-512 authentication algorithm
**type**: Empty
class Topology(Entity):
    """
    OSPF interface topology.
    
    .. attribute:: name  (key)
        One of the topology enabled on this interface
        **type** str


    .. attribute:: cost
        Interface cost for this topology
        **type** int

    **range:** 0..4294967295
    """

    _prefix = 'ospf'
class Topology(Entity):
    """
    OSPF topology.
    """

    .. attribute:: name  (key)

RIB
*\**type\**: str

    .. attribute:: area

List of ospf areas
*\**type\**: list of  :py:class:`Area`
def __init__(self):
    self.yang_name = "topology"
    self.yang_parent_name = "instance"
    self.is_top_level_class = False
    self_has_list_ancestor = True
    self.ylist_key_names = ['name']
    self._leafs = OrderedDict([('name', (YLeaf(YType.str, 'name'), ['str']))])
    self.name = None
    self.area = YList(self)
    self._segment_path = lambda: "topology" + "[name='" + str(self.name) + "']"
    self._is_frozen = True

    def __setattr__(self, name, value):

    class Area(Entity):
        """
        List of ospf areas
        """

        .. attribute:: area_id  (key)

        Area ID

        **type**: union of the below types:

        **type**: int

        **range**: 0..4294967295

        **type**: str


        .. attribute:: area_type
Area type
**type**: :py:class:`AreaType <ydk.models.ietf.ietf_ospf.AreaType>`

**default value**: normal

.. attribute:: summary

Enable/Disable summary generation to the stub or NSSA area
**type**: bool

.. attribute:: default_cost

Set the summary default-cost for a stub or NSSA area
**type**: int

**range**: 1..16777215

.. attribute:: range

Summarize routes matching address/mask (border routers only)

""

_prefix = 'ospf'
_revision = '2015-03-09'

def __init__(self):
self.yang_name = "area"
self.yang_parent_name = "topology"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['area_id']
self._leafs = OrderedDict([('area_id', (YLeaf(YType.str, 'area-id'), ['int','str'])), ('area_type', (YLeaf(YType.identityref, 'area-type'), [('ydk.models.ietf.ietf_ospf', 'AreaType')])), ('summary', (YLeaf(YType.boolean, 'summary'), ['bool'])), ('default_cost', (YLeaf(YType.uint32, 'default-cost'), ['int']))])
self.area_id = None
self.area_type = None
self.summary = None
self.default_cost = None

self.range = YList(self)
self._segment_path = lambda: "area" + ":[area-id="" + str(self.area_id) + "]"
self._is_frozen = True

def __setattr__(self, name, value):

class Range(Entity):
    ""
    Summarize routes matching address/mask (border routers only)
    ""
    .. attribute:: prefix  (key)
        IPv4 or IPv6 prefix
        **type**: str
    .. attribute:: advertise
        Advertise or hide
        **type**: bool
    .. attribute:: cost
        Cost of summary route
        **type**: int
    **range**: 0..16777214

    ""

    _prefix = 'ospf'
    _revision = '2015-03-09'

def __init__(self):
    self.yang_name = "range"
    self.yang_parent_name = "area"
class Ribs(Entity):
    """
    Configuration of RIBs.
    .. attribute:: rib
    
    Each entry contains configuration for a RIB identified by the 'name' key. Entries having the same key as a system-controlled entry of the list /routing-state/routing-instance/ribs/rib are used for configuring parameters of that entry. Other entries define additional user-controlled RIBs
    
    """

    _prefix = 'rt'
    _revision = '2015-05-25'

def __init__(self):
    super(Routing.RoutingInstance.Ribs, self).__init__()

    self.yang_name = "ribs"
    self.yang_parent_name = "routing-instance"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._leafs = OrderedDict()
self.rib = YList(self)
self._segment_path = lambda: "ribs"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Routing.RoutingInstance.Ribs, [], name, value)

class Rib(Entity):
    
    Each entry contains configuration for a RIB identified
    by the 'name' key.
    
    Entries having the same key as a system-controlled entry
    of the list /routing-state/routing-instance/ribs/rib are
    used for configuring parameters of that entry. Other
    entries define additional user-controlled RIBs.
    
    .. attribute:: name (key)

    The name of the RIB. For system-controlled entries, the value of this leaf must be the same as the name
    of the corresponding entry in state data. For user-controlled entries, an arbitrary name can be used
    **type**: str
    
    .. attribute:: address_family

    Address family
    **type**: :py:class:`AddressFamily <ydk.models.ietf.ietf_routing.AddressFamily>`
    
    .. attribute:: description

    Textual description of the RIB
    **type**: str

    ..

    __prefix = 'rt'
    __revision = '2015-05-25'

def __init__(self):
    super(Routing.RoutingInstance.Ribs.Rib, self).__init__()

    self.yang_name = "rib"
    self.yang_parent_name = "ribs"
    self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['name']
self._child_classes = OrderedDict()
self._leafs = OrderedDict(
    ('name', (YLeaf(YType.str, 'name'), ['str'])),
    ('address_family', (YLeaf(YType.identityref, 'address-family'), ['ydk.models.ietf.ietf_routing.AddressFamily'])),
    ('description', (YLeaf(YType.str, 'description'), ['str'])),
)
self.name = None
self.address_family = None
self.description = None
self._segment_path = lambda: "rib" + "[name='" + str(self.name) + "']"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(Routing.RoutingInstance.Ribs.Rib, ['name', 'address_family', 'description'], name, value)

def clone_ptr(self):
    self._top_entity = Routing()
    return self._top_entity

class FibRoute(Entity):
    
    Return the active FIB route that a routing-instance uses for sending packets to a destination address.
    
    .. attribute:: input

    **type**: :py:class:`Input <ydk.models.ietf.ietf_routing.FibRoute.Input>`

    .. attribute:: output

    **type**: :py:class:`Output <ydk.models.ietf.ietf_routing.FibRoute.Output>`

    def __init__(self):
        super(FibRoute, self).__init__()
self.yang_name = "fib-route"
self.yang_parent_name = "ietf-routing"
self.is_top_level_class = True
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict()
self._leafs = OrderedDict()

self.input = FibRoute.Input()
self.input.parent = self
self._children_name_map["input"] = "input"

self.output = FibRoute.Output()
self.output.parent = self
self._children_name_map["output"] = "output"
self._segment_path = lambda: "ietf-routing:fib-route"
self._is_frozen = True

class Input(Entity):
    ""
    .. attribute:: routing_instance_name

    Name of the routing instance whose forwarding information base is being queried. If the routing instance with
    name equal to the value of this parameter doesn't exist, then this operation SHALL fail with error-tag 'data-missing'
    and error-app-tag 'routing-instance-not-found'
    **type**: str
    **mandatory**: True
    
    .. attribute:: destination_address

    Network layer destination address. Address family specific modules MUST augment this container with a leaf
    named 'address'
    **type**: :py:class:`DestinationAddress <ydk.models.ietf.ietf_routing.FibRoute.Input.DestinationAddress>`

    ""

_prefix = 'rt'
_revision = '2015-05-25'

def __init__(self):
    super(FibRoute.Input, self).__init__()}
self.yang_name = "input"
self.yang_parent_name = "fib-route"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([("destination-address", ("destination_address",
FibRoute.Input.DestinationAddress))])
self._leafs = OrderedDict([
('routing_instance_name', (YLeaf(YType.str, 'routing-instance-name'), ['str'])),
])
self.routing_instance_name = None
self.destination_address = FibRoute.Input.DestinationAddress()
self.destination_address.parent = self
self._children_name_map["destination_address"] = "destination-address"
self._segment_path = lambda: "input"
self._absolute_path = lambda: "ietf-routing:fib-route/%s" % self._segment_path()
self._is_frozen = True
def __setattr__(self, name, value):
self._perform_setattr(FibRoute.Input, [u'routing_instance_name'], name, value)

class DestinationAddress(Entity):
"""
Network layer destination address.
Address family specific modules MUST augment this
container with a leaf named 'address'.
.. attribute:: address_family
Address family
**type**\: :py:class:`AddressFamily <ydk.models.ietf.ietf_routing.AddressFamily>`
**mandatory**\: True
.. attribute:: ietf_ipv6_unicast_routing_address
IPv6 destination address
**type**\: str
**pattern:** ((\:\|[0\-9a\-fA\-F]{0,4})\:)([0\-9a\-fA\-F]{0,4}\:){0,5}((([0\-9a\-fA\-F]{0,4}\:)?(\:\|[0\-9a\-fA\F]{0,4}))\|(((25[0\-5]\|2[0\-4][0\-9]\|[01]?[0\-9]?[0\-9])\\.){3}(25[0\-5]\|2[0\-4][0\-9]\|[01]?[0\-9]?[0\9])))(%[\\p{N}\\p{L}]+)?
.. attribute:: ietf_ipv4_unicast_routing_address

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IPv4 destination address
**type**: str

**pattern**: (([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)\{3\}(([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\(|%\p{N}\p{L}\+)?

.....

_prefix = 'rt'
_revision = '2015-05-25'

def __init__(self):
    super(FibRoute.Input.DestinationAddress, self).__init__()

    self.yang_name = "destination-address"
    self.yang_parent_name = "input"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([  
        ('address_family', (YLeaf(YType.identityref, 'address-family'), [('ydk.models.ietf.ietf_routing', 'AddressFamily')]))),  
        ('ietf_ipv6_unicast_routing_address', (YLeaf(YType.str, 'ietf-ipv6-unicast-routing:address'), ['str']))),  
        ('ietf_ipv4_unicast_routing_address', (YLeaf(YType.str, 'ietf-ipv4-unicast-routing:address'), ['str']))),  
    ])
    self.address_family = None
    self.ietf_ipv6_unicast_routing_address = None
    self.ietf_ipv4_unicast_routing_address = None
    self._segment_path = lambda: "destination-address"
    self._absolute_path = lambda: "ietf-routing:fib-route/input/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(FibRoute.Input.DestinationAddress, ['address_family', 'ietf_ipv6_unicast_routing_address', 'ietf_ipv4_unicast_routing_address'], name, value)

class Output(Entity):
    .. attribute:: route

    The active FIB route for the specified destination. If the routing instance has no active FIB route for the
destination address, no output is returned - the server SHALL send an <rpc-reply> containing a single element <ok>. Address family specific modules MUST augment this list with appropriate route contents

**type**: :py:class:`Route <ydk.models.ietf.ietf_routing.FibRoute.Output.Route>`

```
_LIB = 'rt'
_revision = '2015-05-25'

def __init__(self):
    super(FibRoute.Output, self).__init__()

    self.yang_name = "output"
    self.yang_parent_name = "fib-route"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(["route", ("route", FibRoute.Output.Route)])
    self._leafs = OrderedDict()

    self.route = FibRoute.Output.Route()
    self.route.parent = self
    self._children_name_map["route"] = "route"

    self._segment_path = lambda: "fib-route/\%s" % self._segment_path()
    self._is_frozen = True

    def _setattr_(self, name, value):
        self._perform_setattr(FibRoute.Output, [], name, value)

class Route(Entity):
    ""
    The active FIB route for the specified destination.

    If the routing instance has no active FIB route for the
destination address, no output is returned - the server
    SHALL send an <rpc-reply> containing a single element
    <ok>.

    Address family specific modules MUST augment this list
    with appropriate route contents.

    .. attribute:: address_family

    Address family
```

...
**type**\: :py:class:`AddressFamily <ydk.models.ietf.ietf_routing.AddressFamily>`

**mandatory**\: True

.. attribute:: next_hop

Route’s next-hop attribute


.. attribute:: source_protocol

Type of the routing protocol from which the route originated


**mandatory**\: True

.. attribute:: active

Presence of this leaf indicates that the route is preferred among all routes in the same RIB that have the same destination prefix

**type**\: :py:class:`Empty<ydk.types.Empty>`

.. attribute:: last_updated

Time stamp of the last modification of the route. If the route was never modified, it is the time when the route was inserted into the RIB

**type**\: str

**pattern:** `\d\{4\}\-\d\{2\}\-\d\{2\}\ T\d\{2\}\:\d\{2\}\:\d\{2\}\ (\:\d\{2\}\:\d\{2\}\)?(Z\|\[\+\-\]\d\{2\}\:\d\{2\}\)`

.. attribute:: ietf_ipv6_unicast_routing_destination_prefix

IPv6 destination prefix

**type**\: str

**pattern:** `\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)`

.. attribute:: ietf_ipv4_unicast_routing_destination_prefix

IPv4 destination prefix

**type**\: str

**pattern:** `\(\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)`

.. attribute:: ietf_ipv4_unicast_routing_destination_prefix

IPv4 destination prefix

**type**\: str

**pattern:** `\(\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)\:\([0-9a-fA-F]{0,4}\)`

.. attribute:: ietf_ipv4_unicast_routing_destination_prefix
def __init__(self):
    super(FibRoute.Output.Route, self).__init__()
    self.yang_name = "route"
    self.yang_parent_name = "output"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self.address_family = None
    self.source_protocol = None
    self.active = None
    self.last_updated = None
    self.ietf_ipv6_unicast_routing_destination_prefix = None
    self.ietf_ipv4_unicast_routing_destination_prefix = None
    self.next_hop = FibRoute.Output.Route.NextHop()
    self.next_hop.parent = self
    self._children_name_map["next-hop"] = "next-hop"
    self._segment_path = lambda: "route"
    self._absolute_path = lambda: "ietf-routing:fib-route/output/%s" % self._segment_path()
    self._is_frozen = True
    def __setattr__(self, name, value):
        self._perform_setattr(FibRoute.Output.Route, [u'address_family', u'source_protocol', u'active', u'last_updated', u'ietf_ipv6_unicast_routing_destination_prefix', u'ietf_ipv4_unicast_routing_destination_prefix'], name, value)

class NextHop(Entity):
"""
Route's next\-hop attribute.
.. attribute:: outgoing_interface
Name of the outgoing interface
**type**\: str
.. attribute:: ietf_routing_next_hop_address
IP address
**type**\: str
.. attribute:: ietf_ipv6_unicast_routing_next_hop_address
IPv6 address of the next\-hop
**type**\: str
**pattern:** ((\:\|[0\-9a\-fA\-F]{0,4})\:)([0\-9a\-fA\-F]{0,4}\:){0,5}((([0\-9a\-fA\-F]{0,4}\:)?(\:\|[0\-9a\fA\-F]{0,4}))\|(((25[0\-5]\|2[0\-4][0\-9]\|[01]?[0\-9]?[0\-9])\\.){3}(25[0\-5]\|2[0\-4][0\-9]\|[01]?[0\-9]?[0\9])))(%[\\p{N}\\p{L}]+)?
.. attribute:: ietf_ipv4_unicast_routing_next_hop_address
IPv4 address of the next\-hop
**type**\: str
**pattern:** (([0\-9]\|[1\-9][0\-9]\|1[0\-9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])\\.){3}([0\-9]\|[1\-9][0\-9]\|1[0\9][0\-9]\|2[0\-4][0\-9]\|25[0\-5])(%[\\p{N}\\p{L}]+)?
.. attribute:: special_next_hop
Special next\-hop options
**type**\: :py:class:`SpecialNextHop

"""
_prefix = 'rt'
_revision = '2015-05-25'
def __init__(self):
super(FibRoute.Output.Route.NextHop, self).__init__()
self.yang_name = "next-hop"
self.yang_parent_name = "route"

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self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([('outgoing_interface', (YLeaf(YType.str, 'outgoing-interface'), ['str'])),
('ietf_routing_next_hop_address', (YLeaf(YType.str, 'next-hop-address'), ['str'])),
('ietf_ipv6_unicast_routing_next_hop_address', (YLeaf(YType.str, 'ietf-ipv6-unicast-routing:next-hop-address'), ['str'])),
('ietf_ipv4_unicast_routing_next_hop_address', (YLeaf(YType.str, 'ietf-ipv4-unicast-routing:next-hop-address'), ['str'])),
('special_next_hop', (YLeaf(YType.enumeration, 'special-next-hop'), ['ydk.models.ietf.ietf_routing', 'FibRoute', 'Output.Route.NextHop.SpecialNextHop'])),
])
self.outgoing_interface = None
self.ietf_routing_next_hop_address = None
self.ietf_ipv6_unicast_routing_next_hop_address = None
self.ietf_ipv4_unicast_routing_next_hop_address = None
self.special_next_hop = None
self._segment_path = lambda: "next-hop"
self._absolute_path = lambda: "ietf-routing:fib-route/output/route/%s" % self._segment_path()
self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(FibRoute.Output.Route.NextHop, [u'outgoing_interface', u'ietf_routing_next_hop_address', u'ietf_ipv6_unicast_routing_next_hop_address', u'ietf_ipv4_unicast_routing_next_hop_address', u'special_next_hop'], name, value)

class SpecialNextHop(Enum):
    """
    Special next-hop options.
    """
    SpecialNextHop (Enum Class)

    .. data:: blackhole = 0

    Silently discard the packet.

    .. data:: unreachable = 1

    Discard the packet and notify the sender with an error message indicating that the destination host is unreachable.

    .. data:: prohibit = 2
Discard the packet and notify the sender with an error message indicating that the communication is administratively prohibited.

.. data:: receive = 3

The packet will be received by the local system.

```
blackhole = Enum.YLeaf(0, "blackhole")
unreachable = Enum.YLeaf(1, "unreachable")
prohibit = Enum.YLeaf(2, "prohibit")
receive = Enum.YLeaf(3, "receive")
```

def clone_ptr(self):
    self._top_entity = FibRoute()
    return self._top_entity

class VrfRoutingInstance(RoutingInstance):
    """
    This identity represents a VRF routing instance. The type is distinct from the default-routing-instance. There may be multiple vrf-routing-interfaces.
    """

    _prefix = 'rt'
    _revision = '2015-05-25'

    super(VrfRoutingInstance, self).__init__(ns, pref, tag)

class Direct(RoutingProtocol):
    """
    Routing pseudo-protocol that provides routes to directly connected networks.
    """
class DefaultRoutingInstance(RoutingInstance):
    
    This identity represents either a default routing instance, or the only routing instance on systems that do not support multiple instances.

class Static(RoutingProtocol):
    
    Static routing pseudo-protocol.

class Ipv4(AddressFamily):
    
    This identity represents IPv4 address family.
    super(Ipv4, self).__init__(ns, pref, tag)

class Ipv6(AddressFamily):  
    """
    This identity represents IPv6 address family.
    """

    super(Ipv6, self).__init__(ns, pref, tag)

module ietf-inet-types {  
    namespace "urn:ietf:params:xml:ns:yang:ietf-inet-types";  
    prefix inet;

    organization  
        "IETF NETMOD (NETCONF Data Modeling Language) Working Group";
    contact  
        "WG Web:  <http://tools.ietf.org/wg/netmod/>  
        WG List:  <mailto:netmod@ietf.org>

        WG Chair: David Kessens  
            <mailto:david.kessens@nsn.com>
        WG Chair: Juergen Schoenwaelder  
            <mailto:j.schoenwaelder@jacobs-university.de>
        Editor:  Juergen Schoenwaelder  
            <mailto:j.schoenwaelder@jacobs-university.de>";
description
"This module contains a collection of generally useful derived
YANG data types for Internet addresses and related things.

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Relating to IETF Documents
(http://trustee.ietf.org/license-info).

This version of this YANG module is part of RFC 6991; see
the RFC itself for full legal notices.";

revision 2013-07-15 {
  description
  "This revision adds the following new data types:
  - ip-address-no-zone
  - ipv4-address-no-zone
  - ipv6-address-no-zone";
  reference "RFC 6991: Common YANG Data Types";
}
revision 2010-09-24 {
  description
  "Initial revision.";
  reference "RFC 6021: Common YANG Data Types";
}

typedef ip-version {
  type enumeration {
    enum "unknown" {
      value 0;
      description
      "An unknown or unspecified version of the Internet
      protocol.";
    }
    enum "ipv4" {
      value 1;
      description
      "The IPv4 protocol as defined in RFC 791.";
    }
    enum "ipv6" {
      value 2;
      description
      "The IPv6 protocol as defined in RFC 2460.";
    }
  }
}
typedef uint8 {
    range "0..63";
}

description
"This value represents the version of the IP protocol.
In the value set and its semantics, this type is equivalent
to the InetVersion textual convention of the SMIv2.";
reference
"RFC 791: Internet Protocol
RFC 4001: Textual Conventions for Internet Network Addresses";
}

typedef dscp {
    type uint8 {
        range "0..63";
    }

description
"The dscp type represents a Differentiated Services Code Point
that may be used for marking packets in a traffic stream.
In the value set and its semantics, this type is equivalent
to the Dscp textual convention of the SMIv2.";
reference
"RFC 3289: Management Information Base for the Differentiated
Services Architecture
RFC 2474: Definition of the Differentiated Services Field
(DS Field) in the IPv4 and IPv6 Headers
RFC 2780: IANA Allocation Guidelines For Values In
the Internet Protocol and Related Headers";
}

typedef ipv6-flow-label {
    type uint32 {
        range "0..1048575";
    }

description
"The ipv6-flow-label type represents the flow identifier or Flow
Label in an IPv6 packet header that may be used to
discriminate traffic flows.
In the value set and its semantics, this type is equivalent
to the IPv6FlowLabel textual convention of the SMIv2.";
reference
"RFC 3595: Textual Conventions for IPv6 Flow Label
}

typedef port-number {
type uint16 {
  range "0..65535";
}
description
"The port-number type represents a 16-bit port number of an
Internet transport-layer protocol such as UDP, TCP, DCCP, or
SCTP. Port numbers are assigned by IANA. A current list of
all assignments is available from <http://www.iana.org/>.

Note that the port number value zero is reserved by IANA. In
situations where the value zero does not make sense, it can
be excluded by subtyping the port-number type.
In the value set and its semantics, this type is equivalent
to the InetPortNumber textual convention of the SMIv2.";
reference
"RFC  768: User Datagram Protocol
RFC  793: Transmission Control Protocol
RFC 4960: Stream Control Transmission Protocol
RFC 4340: Datagram Congestion Control Protocol (DCCP)
RFC 4001: Textual Conventions for Internet Network Addresses";
}
typedef as-number {
  type uint32;
  description
  "The as-number type represents autonomous system numbers
  which identify an Autonomous System (AS). An AS is a set
  of routers under a single technical administration, using
  an interior gateway protocol and common metrics to route
  packets within the AS, and using an exterior gateway
  protocol to route packets to other ASes. IANA maintains
  the AS number space and has delegated large parts to the
  regional registries.

  Autonomous system numbers were originally limited to 16
  bits. BGP extensions have enlarged the autonomous system
  number space to 32 bits. This type therefore uses an uint32
  base type without a range restriction in order to support
  a larger autonomous system number space.

  In the value set and its semantics, this type is equivalent
to the InetAutonomousSystemNumber textual convention of
the SMIv2.";
reference
"RFC 1930: Guidelines for creation, selection, and registration
of an Autonomous System (AS)
RFC 4271: A Border Gateway Protocol 4 (BGP-4)
RFC 4001: Textual Conventions for Internet Network Addresses
typedef ip-address {
    type union {
        type inet:ipv4-address;
        type inet:ipv6-address;
    }
    description
    "The ip-address type represents an IP address and is IP version neutral. The format of the textual representation implies the IP version. This type supports scoped addresses by allowing zone identifiers in the address format."
    reference "RFC 4007: IPv6 Scoped Address Architecture";
}

typedef ipv4-address {
    type string {
        pattern "((0|[1-9]|1[0-9]|2[0-4][0-9]|25[0-5])\.){3}(0|[1-9]|1[0-9]|2[0-4][0-9]|25[0-5])(%\p{N}\p{L}+)?");
    }
    description
    "The ipv4-address type represents an IPv4 address in dotted-quad notation. The IPv4 address may include a zone index, separated by a % sign.

    The zone index is used to disambiguate identical address values. For link-local addresses, the zone index will typically be the interface index number or the name of an interface. If the zone index is not present, the default zone of the device will be used.

    The canonical format for the zone index is the numerical format";
}

typedef ipv6-address {
    type string {
        pattern "((\[^:\]+:){6}((\[^:\]+:\[^:\]+)|(.*\..*)))|(((\[^:\]+:)*\[^:\]+)?::((\[^:\]+:)*\[^:\]+)?)(%\p{N}\p{L}+)?");
        pattern "(([^::]+:)[6]((([^::]+:)[^::]+)+|(.*\..*)))((([^::]+:)[^::]+)?:(([^::]+:)[^::]+)?):(([^::]+:)[^::]+)?(\%+)?";
    }
    description
    "The ipv6-address type represents an IPv6 address in full, mixed, shortened, and shortened-mixed notation. The IPv6 address may include a zone index, separated by a % sign."
The zone index is used to disambiguate identical address values. For link-local addresses, the zone index will typically be the interface index number or the name of an interface. If the zone index is not present, the default zone of the device will be used.

The canonical format of IPv6 addresses uses the textual representation defined in Section 4 of RFC 5952. The canonical format for the zone index is the numerical format as described in Section 11.2 of RFC 4007.

reference
"RFC 4291: IP Version 6 Addressing Architecture
RFC 4007: IPv6 Scoped Address Architecture
RFC 5952: A Recommendation for IPv6 Address Text Representation";
}

typedef ip-address-no-zone {
  type union {
    type inet:ipv4-address-no-zone;
    type inet:ipv6-address-no-zone;
  }
}
description
"The ip-address-no-zone type represents an IP address and is IP version neutral. The format of the textual representation implies the IP version. This type does not support scoped addresses since it does not allow zone identifiers in the address format.";
reference "RFC 4007: IPv6 Scoped Address Architecture";
}

typedef ipv4-address-no-zone {
  type inet:ipv4-address {
    pattern "[0-9.]*";
  }
}
description
"An IPv4 address without a zone index. This type, derived from ipv4-address, may be used in situations where the zone is known from the context and hence no zone index is needed.";
}

typedef ipv6-address-no-zone {
  type inet:ipv6-address {
    pattern "[0-9a-fA-F:]*";
  }
}
description
"An IPv6 address without a zone index. This type, derived from ipv6-address, may be used in situations where the zone is
typedef ip-prefix {
    type union {
        type inet:ipv4-prefix;
        type inet:ipv6-prefix;
    }
}

description
"The ip-prefix type represents an IP prefix and is IP
version neutral. The format of the textual representations
implies the IP version."

typedef ipv4-prefix {
    type string {
        pattern "((0-9)[1-9][0-9]|0-9)[0-9]|2[0-4][0-9]|25[0-5])\.{3}(0-9)[1-9][0-9]|0-9][2][0-4][0-9]|0-9][25[0-5]](/((0-9)|((120-8)))")
    }
}

description
"The ipv4-prefix type represents an IPv4 address prefix.
The prefix length is given by the number following the
slash character and must be less than or equal to 32.

A prefix length value of n corresponds to an IP address
mask that has n contiguous 1-bits from the most
significant bit (MSB) and all other bits set to 0.

The canonical format of an IPv4 prefix has all bits of
the IPv4 address set to zero that are not part of the
IPv4 prefix."

typedef ipv6-prefix {
    type string {
        pattern "(([^:]+:){6}(([^:]+:[^:]+)|(.*\..*)))|((([^:]+:)*[^:]+)?::(([^:]+:)*[^:]+)?)(/\.[^/]+)"
    }
}

description
"The ipv6-prefix type represents an IPv6 address prefix.
The prefix length is given by the number following the
slash character and must be less than or equal to 128.

A prefix length value of n corresponds to an IP address mask that has n contiguous 1-bits from the most significant bit (MSB) and all other bits set to 0.

The IPv6 address should have all bits that do not belong to the prefix set to zero.

The canonical format of an IPv6 prefix has all bits of the IPv6 address set to zero that are not part of the IPv6 prefix. Furthermore, the IPv6 address is represented as defined in Section 4 of RFC 5952.

reference
"RFC 5952: A Recommendation for IPv6 Address Text Representation";

#define domain-name {

type string {

    length "1..253";

    pattern "(((a-zA-Z0-9_-\.\.\d\d\d\.)\d\d\d\.)([a-zA-Z0-9-\._?])\d\d\d\.)([a-zA-Z0-9-\._?])\d\d\d\.)*(((a-zA-Z0-9_-\.\.\d\d\d\.)\d\d\d\.)([a-zA-Z0-9-\._?])\d\d\d\.)([a-zA-Z0-9-\._?])\d\d\d\.)*(((a-zA-Z0-9_-\.\.\d\d\d\.)\d\d\d\.)([a-zA-Z0-9-\._?])\d\d\d\.)([a-zA-Z0-9-\._?])\d\d\d\.);";

} description

"The domain-name type represents a DNS domain name. The name SHOULD be fully qualified whenever possible.

Internet domain names are only loosely specified. Section 3.5 of RFC 1034 recommends a syntax (modified in Section 2.1 of RFC 1123). The pattern above is intended to allow for current practice in domain name use, and some possible future expansion. It is designed to hold various types of domain names, including names used for A or AAAA records (host names) and other records, such as SRV records. Note that Internet host names have a stricter syntax (described in RFC 952) than the DNS recommendations in RFCs 1034 and 1123, and that systems that want to store host names in schema nodes using the domain-name type are recommended to adhere to this stricter standard to ensure interoperability.

The encoding of DNS names in the DNS protocol is limited to 255 characters. Since the encoding consists of labels prefixed by a length bytes and there is a trailing NULL byte, only 253 characters can appear in the textual dotted notation.

The description clause of schema nodes using the domain-name
type MUST describe when and how these names are resolved to IP addresses. Note that the resolution of a domain-name value may require to query multiple DNS records (e.g., A for IPv4 and AAAA for IPv6). The order of the resolution process and which DNS record takes precedence can either be defined explicitly or may depend on the configuration of the resolver.

Domain-name values use the US-ASCII encoding. Their canonical format uses lowercase US-ASCII characters. Internationalized domain names MUST be A-labels as per RFC 5890."

reference
"RFC 952: DoD Internet Host Table Specification
RFC 1034: Domain Names - Concepts and Facilities
RFC 1123: Requirements for Internet Hosts -- Application and Support
RFC 2782: A DNS RR for specifying the location of services (DNS SRV)
RFC 5890: Internationalized Domain Names in Applications (IDNA): Definitions and Document Framework";

```c
typedef host {
    type union {
        type inet:ip-address;
        type inet:domain-name;
    }
    description
    "The host type represents either an IP address or a DNS domain name.";
}

typedef uri {
    type string;
    description
    "The uri type represents a Uniform Resource Identifier (URI) as defined by STD 66.

    Objects using the uri type MUST be in US-ASCII encoding, and MUST be normalized as described by RFC 3986 Sections 6.2.1, 6.2.2.1, and 6.2.2.2. All unnecessary percent-encoding is removed, and all case-insensitive characters are set to lowercase except for hexadecimal digits, which are normalized to uppercase as described in Section 6.2.2.1.

    The purpose of this normalization is to help provide unique URIs. Note that this normalization is not
```
sufficient to provide uniqueness. Two URIs that are
textually distinct after this normalization may still be
equivalent.

Objects using the uri type may restrict the schemes that
they permit. For example, 'data:' and 'urn:' schemes
might not be appropriate.

A zero-length URI is not a valid URI. This can be used to
express 'URI absent' where required.

In the value set and its semantics, this type is equivalent
to the Uri SMIPv2 textual convention defined in RFC 5017.";

reference
"RFC 3986: Uniform Resource Identifier (URI): Generic Syntax
RFC 3305: Report from the Joint W3C/IETF URI Planning Interest
Group: Uniform Resource Identifiers (URIs), URLs,
and Uniform Resource Names (URNs): Clarifications
and Recommendations
RFC 5017: MIB Textual Conventions for Uniform Resource
Identifiers (URIs)";
}
}

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-
0.1.5.post2/ydk/models/ietf/_yang/ietf-inet-types.yang
No license file was found, but licenses were detected in source scan.

module ietf-yang-library {
  namespace "urn:ietf:params:xml:ns:yang:ietf-yang-library";
  prefix yanglib;

  import ietf-yang-types {
    prefix yang;
  }
  import ietf-inet-types {
    prefix inet;
  }

  organization
    "IETF NETCONF (Network Configuration) Working Group";
  contact
    "WG Web:  <https://datatracker.ietf.org/wg/netconf/>"
    WG List:  <mailto:netconf@ietf.org>
    WG Chair: Mehmet Ersue
      <mailto:mehmet.ersue@nsn.com>
    WG Chair: Mahesh Jethanandani
This module contains monitoring information about the YANG modules and submodules that are used within a YANG-based server.

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This version of this YANG module is part of RFC 7895; see the RFC itself for full legal notices.

revision 2016-06-21 {
  description
    "Initial revision.";
  reference "RFC 7895: YANG Module Library."
}

typedef revision-identifier {
  type string {
    pattern "\d{4}-\d{2}-\d{2}";
  }
  description
    "Represents a specific date in YYYY-MM-DD format."
}

grouping module-list {
  description
    "The module data structure is represented as a grouping so it can be reused in configuration or another monitoring data structure."
}

grouping common-leafs {
  description
    "Common parameters for YANG modules and submodules."
  leaf name {
    type yang:yang-identifier
    description
  }
}
"The YANG module or submodule name."
}
leaf revision {
  type union {
    type revision-identifier;
    type string {
      length "0";
    }
  }
  description
  "The YANG module or submodule revision date.
  A zero-length string is used if no revision statement
  is present in the YANG module or submodule.";
}
}

grouping schema-leaf {
  description
  "Common schema leaf parameter for modules and submodules.";
  leaf schema {
    type inet:uri;
    description
    "Contains a URL that represents the YANG schema
    resource for this module or submodule.
    This leaf will only be present if there is a URL
    available for retrieval of the schema for this entry.";
  }
}

list module {
  key "name revision";
  description
  "Each entry represents one revision of one module
  currently supported by the server.";
  uses common-leafs;
  uses schema-leaf;
  leaf namespace {
    type inet:uri;
    mandatory true;
    description
    "The XML namespace identifier for this module.";
  }
  leaf-list feature {
    type yang:yang-identifier;
    description
    "List of YANG feature names from this module that are
    supported by the server, regardless of whether they are
    defined in the module or any included submodule.";
  }
}
list deviation {
  key "name revision";
  description "List of YANG deviation module names and revisions used by this server to modify the conformance of the module associated with this entry. Note that the same module can be used for deviations for multiple modules, so the same entry MAY appear within multiple 'module' entries.
  The deviation module MUST be present in the 'module' list, with the same name and revision values.
  The 'conformance-type' value will be 'implement' for the deviation module.";
  uses common-leafs;
}
leaf conformance-type {
  type enumeration {
    enum "implement" {
      description "Indicates that the server implements one or more protocol-accessible objects defined in the YANG module identified in this entry. This includes deviation statements defined in the module.
      For YANG version 1.1 modules, there is at most one module entry with conformance type 'implement' for a particular module name, since YANG 1.1 requires that, at most, one revision of a module is implemented.
      For YANG version 1 modules, there SHOULD NOT be more than one module entry for a particular module name.";
    }
    enum "import" {
      description "Indicates that the server imports reusable definitions from the specified revision of the module but does not implement any protocol-accessible objects from this revision.
      Multiple module entries for the same module name MAY exist. This can occur if multiple modules import the same module but specify different revision dates in the import statements.";
    }
  }
  mandatory true;
  description "Indicates the type of conformance the server is claiming for the YANG module identified by this entry.";
}
list submodule {

key "name revision";
description
   "Each entry represents one submodule within the 
   parent module.";
uses common-leafs;
uses schema-leaf;
}
}
}

notification yang-library-change {
  description
   "Generated when the set of modules and submodules supported 
   by the server has changed.";
leaf module-set-id {
  type leafref {
    path "/yanglib:modules-state.yanglib:module-set-id";
  }
  mandatory true;
  description
   "Contains the module-set-id value representing the 
   set of modules and submodules supported at the server at 
   the time the notification is generated.";
}
}

container modules-state {
  config false;
  description
   "Contains YANG module monitoring information.";
leaf module-set-id {
  type string;
  mandatory true;
  description
   "Contains a server-specific identifier representing 
   the current set of modules and submodules. The 
   server MUST change the value of this leaf if the 
   information represented by the 'module' list instances 
   has changed.";
}
uses module-list;
}
}

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2.tar.gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/_yang/ietf-yang-library.yang

No license file was found, but licenses were detected in source scan.
module ietf-ip {
prefix ip;
import ietf-interfaces {
  prefix if;
}
import ietf-inet-types {
  prefix inet;
}
import ietf-yang-types {
  prefix yang;
}
organization
  "IETF NETMOD (NETCONF Data Modeling Language) Working Group";
contact
  "WG Web:   <http://tools.ietf.org/wg/netmod/>
  WG List:  <mailto:netmod@ietf.org>
  WG Chair: Thomas Nadeau
    <mailto:tnadeau@lucidvision.com>
  WG Chair: Juergen Schoenwaelder
    <mailto:j.schoenwaelder@jacobs-university.de>
  Editor:   Martin Bjorklund
    <mailto:mbj@tail-f.com>";
description
  "This module contains a collection of YANG definitions for
configuring IP implementations.
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authors of the code. All rights reserved.
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Relating to IETF Documents
(http://trustee.ietf.org/license-info).
This version of this YANG module is part of RFC 7277; see
the RFC itself for full legal notices.";
revision 2014-06-16 {
  description
    "Initial revision.";
  reference
    "RFC 7277: A YANG Data Model for IP Management";
}
/*
* Features
*/
feature ipv4-non-contiguous-netmasks {
  description
    "Indicates support for configuring non-contiguous
subnet masks.
}
}

feature ipv6-privacy-autoconf {
    description
    "Indicates support for Privacy Extensions for Stateless Address
    Autoconfiguration in IPv6.
"
    reference
    "RFC 4941: Privacy Extensions for Stateless Address
    Autoconfiguration in IPv6"
}
/*
* Typedefs
*/
typedef ip-address-origin {
    type enumeration {
        enum other {
            description
            "None of the following."
        }
        enum static {
            description
            "Indicates that the address has been statically
            configured - for example, using NETCONF or a Command Line
            Interface."
        }
        enum dhcp {
            description
            "Indicates an address that has been assigned to this
            system by a DHCP server."
        }
        enum link-layer {
            description
            "Indicates an address created by IPv6 stateless
            autoconfiguration that embeds a link-layer address in its
            interface identifier."
        }
        enum random {
            description
            "Indicates an address chosen by the system at
            random, e.g., an IPv4 address within 169.254/16, an
            RFC 4941 temporary address, or an RFC 7217 semantically
            opaque address."
            reference
            "RFC 4941: Privacy Extensions for Stateless Address
            Autoconfiguration in IPv6
            RFC 7217: A Method for Generating Semantically Opaque
            Interface Identifiers with IPv6 Stateless
            Address Autoconfiguration (SLAAC)"
typedef neighbor-origin {
  type enumeration {
    enum other {
      description "None of the following.";
    }
    enum static {
      description "Indicates that the mapping has been statically
      configured - for example, using NETCONF or a Command Line
      Interface.";
    }
    enum dynamic {
      description "Indicates that the mapping has been dynamically resolved
      using, e.g., IPv4 ARP or the IPv6 Neighbor Discovery
      protocol.";
    }
  }
  description "The origin of a neighbor entry.";
}
/
* Configuration data nodes
*/
augment "/if:interfaces/if:interface" {
  description "Parameters for configuring IP on interfaces.
  If an interface is not capable of running IP, the server
  must not allow the client to configure these parameters.";
  container ipv4 {
    presence "Enables IPv4 unless the 'enabled' leaf
    (which defaults to 'true') is set to 'false'";
    description "Parameters for the IPv4 address family.";
    leaf enabled {
      type boolean;
      default true;
      description "Controls whether IPv4 is enabled or disabled on this
      interface. When IPv4 is enabled, this interface is
      connected to an IPv4 stack, and the interface can send
and receive IPv4 packets.

leaf forwarding {
  type boolean;
  default false;
  description
  "Controls IPv4 packet forwarding of datagrams received by,
  but not addressed to, this interface. IPv4 routers
  forward datagrams. IPv4 hosts do not (except those
  source-routed via the host).";
}

leaf mtu {
  type uint16 {
    range "68..max";
  }
  units octets;
  description
  "The size, in octets, of the largest IPv4 packet that the
  interface will send and receive.
  The server may restrict the allowed values for this leaf,
  depending on the interface's type.
  If this leaf is not configured, the operationally used MTU
  depends on the interface's type.";
  reference
  "RFC 791: Internet Protocol";
}

list address {
  key "ip";
  description
  "The list of configured IPv4 addresses on the interface.";
  leaf ip {
    type inet:ipv4-address-no-zone;
    description
    "The IPv4 address on the interface.";
  }
  choice subnet {
    mandatory true;
    description
    "The subnet can be specified as a prefix-length, or,
    if the server supports non-contiguous netmasks, as
    a netmask.";
    leaf prefix-length {
      type uint8 {
        range "0..32";
      }
      description
      "The length of the subnet prefix.";
    }
  }
}
leaf netmask {
    if-feature ipv4-non-contiguous-netmasks;
    type yang:dotted-quad;
    description
    "The subnet specified as a netmask.";
}

list neighbor {
    key "ip";
    description
    "A list of mappings from IPv4 addresses to
    link-layer addresses. Entries in this list are used as static entries in the
    ARP Cache.";
    reference
    "RFC 826: An Ethernet Address Resolution Protocol";
    leaf ip {
        type inet:ipv4-address-no-zone;
        description
        "The IPv4 address of the neighbor node.";
    }
    leaf link-layer-address {
        type yang:phys-address;
        mandatory true;
        description
        "The link-layer address of the neighbor node.";
    }
}

container ipv6 {
    presence
    "Enables IPv6 unless the 'enabled' leaf
    (which defaults to 'true') is set to 'false'";
    description
    "Parameters for the IPv6 address family.";
    leaf enabled {
        type boolean;
        default true;
        description
        "Controls whether IPv6 is enabled or disabled on this
        interface. When IPv6 is enabled, this interface is
        connected to an IPv6 stack, and the interface can send
        and receive IPv6 packets.";
    }
    leaf forwarding {
        type boolean;
        default false;
description
"Controls IPv6 packet forwarding of datagrams received by, but not addressed to, this interface. IPv6 routers forward datagrams. IPv6 hosts do not (except those source-routed via the host).";

reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6)
   Section 6.2.1, IsRouter";

}
leaf mtu {
type uint32 {
   range "1280..max";
}
units octets;
description
"The size, in octets, of the largest IPv6 packet that the interface will send and receive. The server may restrict the allowed values for this leaf, depending on the interface's type. If this leaf is not configured, the operationally used MTU depends on the interface's type."

reference
   Section 5";
}
list address {
key "ip";
description
"The list of configured IPv6 addresses on the interface.";
leaf ip {
type inet:ipv6-address-no-zone;
description
"The IPv6 address on the interface.";
}
leaf prefix-length {
type uint8 {
   range "0..128";
}
mandatory true;
description
"The length of the subnet prefix.";
}

list neighbor {
key "ip";
description
"A list of mappings from IPv6 addresses to link-layer addresses.";
Entries in this list are used as static entries in the Neighbor Cache.

reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6)"

leaf ip {
  type inet:ipv6-address-no-zone;
  description
    "The IPv6 address of the neighbor node."
}

leaf link-layer-address {
  type yang:phys-address;
  mandatory true;
  description
    "The link-layer address of the neighbor node."
}

leaf dup-addr-detect-transmits {
  type uint32;
  default 1;
  description
    "The number of consecutive Neighbor Solicitation messages
    sent while performing Duplicate Address Detection on a
    tentative address. A value of zero indicates that
    Duplicate Address Detection is not performed on
    tentative addresses. A value of one indicates a single
    transmission with no follow-up retransmissions."
  reference
    "RFC 4862: IPv6 Stateless Address Autoconfiguration"
}

container autoconf {
  description
    "Parameters to control the autoconfiguration of IPv6
    addresses, as described in RFC 4862."
  reference
    "RFC 4862: IPv6 Stateless Address Autoconfiguration"
  leaf create-global-addresses {
    type boolean;
    default true;
    description
      "If enabled, the host creates global addresses as
      described in RFC 4862."
    reference
      "RFC 4862: IPv6 Stateless Address Autoconfiguration
      Section 5.5"
  }
  leaf create-temporary-addresses {
    if-feature ipv6-privacy-autoconf;
    type boolean;
default false;
description
"If enabled, the host creates temporary addresses as
described in RFC 4941."
reference
"RFC 4941: Privacy Extensions for Stateless Address
Autoconfiguration in IPv6"
}
leaf temporary-valid-lifetime {
  if-feature ipv6-privacy-autoconf;
type uint32;
units "seconds";
default 604800;
description
"The time period during which the temporary address
is valid.";
reference
"RFC 4941: Privacy Extensions for Stateless Address
Autoconfiguration in IPv6
- TEMP_VALID_LIFETIME"
}
leaf temporary-preferred-lifetime {
  if-feature ipv6-privacy-autoconf;
type uint32;
units "seconds";
default 86400;
description
"The time period during which the temporary address is
preferred.";
reference
"RFC 4941: Privacy Extensions for Stateless Address
Autoconfiguration in IPv6
- TEMP_PREFERRED_LIFETIME"
}
/*
* Operational state data nodes
*/
augment "/if:interfaces-state/if:interface" {
description
"Data nodes for the operational state of IP on interfaces.");
container ipv4 {
presence "Present if IPv4 is enabled on this interface"
config false;
description
"Interface-specific parameters for the IPv4 address family.";
leaf forwarding {
  type boolean;
  description
  "Indicates whether IPv4 packet forwarding is enabled or
disabled on this interface.";
}

leaf mtu {
  type uint16 {
    range "68..max";
  }
  units octets;
  description
  "The size, in octets, of the largest IPv4 packet that the
interface will send and receive.";
  reference
  "RFC 791: Internet Protocol";
}

list address {
  key "ip";
  description
  "The list of IPv4 addresses on the interface.";
  leaf ip {
    type inet:ipv4-address-no-zone;
    description
    "The IPv4 address on the interface.";
  }
  choice subnet {
    description
    "The subnet can be specified as a prefix-length, or,
if the server supports non-contiguous netmasks, as
a netmask.";
    leaf prefix-length {
      type uint8 {
        range "0..32";
      }
      description
      "The length of the subnet prefix.";
    }
    leaf netmask {
      if-feature ipv4-non-contiguous-netmasks;
      type yang:dotted-quad;
      description
      "The subnet specified as a netmask.";
    }
  }
  leaf origin {
    type ip-address-origin;
    description
"The origin of this address."
}
}

list neighbor {
    key "ip";
    description
    "A list of mappings from IPv4 addresses to
    link-layer addresses.
    This list represents the ARP Cache.";
    reference
    "RFC 826: An Ethernet Address Resolution Protocol";
    leaf ip {
        type inet:ipv4-address-no-zone;
        description
        "The IPv4 address of the neighbor node.";
    }
    leaf link-layer-address {
        type yang:phys-address;
        description
        "The link-layer address of the neighbor node.";
    }
    leaf origin {
        type neighbor-origin;
        description
        "The origin of this neighbor entry.";
    }
}
}

container ipv6 {
    presence "Present if IPv6 is enabled on this interface";
    config false;
    description
    "Parameters for the IPv6 address family.";
    leaf forwarding {
        type boolean;
        default false;
        description
        "Indicates whether IPv6 packet forwarding is enabled or
        disabled on this interface.";
        reference
        "RFC 4861: Neighbor Discovery for IP version 6 (IPv6)
         Section 6.2.1, IsRouter";
    }
    leaf mtu {
        type uint32 {
            range "1280..max";
        }
        units octets;
    }
}
description
"The size, in octets, of the largest IPv6 packet that the
interface will send and receive.";
reference
Section 5";
}
list address {
  key "ip";
  description
  "The list of IPv6 addresses on the interface.";
  leaf ip {
    type inet:ipv6-address-no-zone;
    description
    "The IPv6 address on the interface.";
  }
  leaf prefix-length {
    type uint8 {
      range "0..128";
    }
    mandatory true;
    description
    "The length of the subnet prefix.";
  }
  leaf origin {
    type ip-address-origin;
    description
    "The origin of this address.";
  }
  leaf status {
    type enumeration {
      enum preferred {
        description
        "This is a valid address that can appear as the
destination or source address of a packet.";
      }
      enum deprecated {
        description
        "This is a valid but deprecated address that should
no longer be used as a source address in new
communications, but packets addressed to such an
address are processed as expected.";
      }
      enum invalid {
        description
        "This isn't a valid address, and it shouldn't appear
as the destination or source address of a packet.";
      }
    }
  }
}
enum inaccessible {
    description
    "The address is not accessible because the interface
to which this address is assigned is not
operational.";
}
enum unknown {
    description
    "The status cannot be determined for some reason.";
}
enum tentative {
    description
    "The uniqueness of the address on the link is being
verified. Addresses in this state should not be
used for general communication and should only be
used to determine the uniqueness of the address.";
}
enum duplicate {
    description
    "The address has been determined to be non-unique on
the link and so must not be used.";
}
enum optimistic {
    description
    "The address is available for use, subject to
restrictions, while its uniqueness on a link is
being verified.";
}
}

description
"The status of an address. Most of the states correspond
to states from the IPv6 Stateless Address
Autoconfiguration protocol.";
reference
"RFC 4293: Management Information Base for the
Internet Protocol (IP)
- IpAddressStatusTC
RFC 4862: IPv6 Stateless Address Autoconfiguration";
}
}
list neighbor {
    key "ip";
    description
    "A list of mappings from IPv6 addresses to
link-layer addresses.
This list represents the Neighbor Cache.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6)";
leaf ip {
    type inet:ipv6-address-no-zone;
    description
    "The IPv6 address of the neighbor node."
}
leaf link-layer-address {
    type yang:phys-address;
    description
    "The link-layer address of the neighbor node."
}
leaf origin {
    type neighbor-origin;
    description
    "The origin of this neighbor entry."
}
leaf is-router {
    type empty;
    description
    "Indicates that the neighbor node acts as a router."
}
leaf state {
    type enumeration {
        enum incomplete {
            description
            "Address resolution is in progress, and the link-layer address of the neighbor has not yet been determined."
        }
        enum reachable {
            description
            "Roughly speaking, the neighbor is known to have been reachable recently (within tens of seconds ago)."
        }
        enum stale {
            description
            "The neighbor is no longer known to be reachable, but until traffic is sent to the neighbor no attempt should be made to verify its reachability."
        }
        enum delay {
            description
            "The neighbor is no longer known to be reachable, and traffic has recently been sent to the neighbor. Rather than probe the neighbor immediately, however, delay sending probes for a short while in order to give upper-layer protocols a chance to provide reachability confirmation."
        }
    }
}
enum probe {
    description
    "The neighbor is no longer known to be reachable, and
    unicast Neighbor Solicitation probes are being sent
    to verify reachability.";
}

description
"The Neighbor Unreachability Detection state of this
entry.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6)
Section 7.3.2";

module iana-if-type {
    namespace "urn:ietf:params:xml:ns:yang:iana-if-type";
    prefix ianaift;

    import ietf-interfaces {
        prefix if;
    }

    organization "IANA";
    contact
        "Internet Assigned Numbers Authority

        Postal: ICANN
        4676 Admiralty Way, Suite 330
        Marina del Rey, CA 90292

        Tel: +1 310 823 9358
        <mailto:iana@iana.org>";
    description
    "This YANG module defines YANG identities for IANA-registered
    interface types.

    This YANG module is maintained by IANA and reflects the
    'ifType definitions' registry.";
}
The latest revision of this YANG module can be obtained from the IANA web site.

Requests for new values should be made to IANA via email (iana@iana.org).

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The initial version of this YANG module is part of RFC 7224; see the RFC itself for full legal notices.

"IANA 'ifType definitions' registry.
<http://www.iana.org/assignments/smi-numbers>";

revision 2014-05-08 {
  description
    "Initial revision."
  reference
    "RFC 7224: IANA Interface Type YANG Module"
}

identity iana-interface-type {
  base if:interface-type;
  description
    "This identity is used as a base for all interface types
    defined in the 'ifType definitions' registry."
}

identity other {
  base iana-interface-type;
}
identity regular1822 {
  base iana-interface-type;
}
identity hdh1822 {
  base iana-interface-type;
}
identity ddnX25 {
  base iana-interface-type;
}
identity rfc877x25 {
  base iana-interface-type;
  reference
    "RFC 1382 - SNMP MIB Extension for the X.25 Packet Layer";
}
identity ethernetCsmacd {
  base iana-interface-type;
  description
    "For all Ethernet-like interfaces, regardless of speed, as per RFC 3635."
  reference
    "RFC 3635 - Definitions of Managed Objects for the Ethernet-like Interface Types";
}
identity iso88023Csmacd {
  base iana-interface-type;
  status deprecated;
  description
    "Deprecated via RFC 3635. Use ethernetCsmacd(6) instead."
  reference
    "RFC 3635 - Definitions of Managed Objects for the Ethernet-like Interface Types";
}
identity iso88024TokenBus {
  base iana-interface-type;
}
identity iso88025TokenRing {
  base iana-interface-type;
}
identity iso88026Man {
  base iana-interface-type;
}
identity starLan {
  base iana-interface-type;
  status deprecated;
  description
    "Deprecated via RFC 3635. Use ethernetCsmacd(6) instead."
  reference
    "RFC 3635 - Definitions of Managed Objects for the Ethernet-like Interface Types";
identity proteon10Mbit {
    base iana-interface-type;
}
identity proteon80Mbit {
    base iana-interface-type;
}
identity hyperchannel {
    base iana-interface-type;
}
identity fddi {
    base iana-interface-type;
    reference
    "RFC 1512 - FDDI Management Information Base";
}
identity lapb {
    base iana-interface-type;
    reference
    "RFC 1381 - SNMP MIB Extension for X.25 LAPB";
}
identity sdlc {
    base iana-interface-type;
}
identity ds1 {
    base iana-interface-type;
    description
    "DS1-MIB.";
    reference
    "RFC 4805 - Definitions of Managed Objects for the DS1, J1, E1, DS2, and E2 Interface Types";
}
identity e1 {
    base iana-interface-type;
    status obsolete;
    description
    "Obsolete; see DS1-MIB.";
    reference
    "RFC 4805 - Definitions of Managed Objects for the DS1, J1, E1, DS2, and E2 Interface Types";
}

identity basicISDN {
    base iana-interface-type;
    description
    "No longer used. See also RFC 2127.";
}
identity primaryISDN {
base iana-interface-type;
  description
    "No longer used. See also RFC 2127.";
}

identity propPointToPointSerial {
  base iana-interface-type;
  description
    "Proprietary serial.";
}

identity ppp {
  base iana-interface-type;
}

identity softwareLoopback {
  base iana-interface-type;
}

identity eon {
  base iana-interface-type;
  description
    "CLNP over IP.";
}

identity ethernet3Mbit {
  base iana-interface-type;
}

identity nsip {
  base iana-interface-type;
  description
    "XNS over IP.";
}

identity slip {
  base iana-interface-type;
  description
    "Generic SLIP.";
}

identity ultra {
  base iana-interface-type;
  description
    "Ultra Technologies.";
}

identity ds3 {
  base iana-interface-type;
  description
    "DS3-MIB.";
  reference
    "RFC 3896 - Definitions of Managed Objects for the
     DS3/E3 Interface Type";
}

identity sip {
  base iana-interface-type;
description
"SMDS, coffee.”;
reference
"RFC 1694 - Definitions of Managed Objects for SMDS Interfaces using SMIV2”;
}
identity frameRelay {
  base iana-interface-type;
  description
  "DTE only.”;
  reference
  "RFC 2115 - Management Information Base for Frame Relay DTEs Using SMIV2”;
}
identity rs232 {
  base iana-interface-type;
  reference
  "RFC 1659 - Definitions of Managed Objects for RS-232-like Hardware Devices using SMIV2”;
}
identity para {
  base iana-interface-type;
  description
  "Parallel-port.”;
  reference
  "RFC 1660 - Definitions of Managed Objects for Parallel-printer-like Hardware Devices using SMIV2”;
}
identity arcnet {
  base iana-interface-type;
  description
  "ARCnet.”;
}
identity arcnetPlus {
  base iana-interface-type;
  description
  "ARCnet Plus.”;
}

identity atm {
  base iana-interface-type;
  description
  "ATM cells.”;
}
identity miox25 {
base iana-interface-type;
reference
"RFC 1461 - SNMP MIB extension for Multiprotocol Interconnect over X.25";
}
identity sonet {
  base iana-interface-type;
  description
  "SONET or SDH.";
}
identity x25ple {
  base iana-interface-type;
  reference
  "RFC 2127 - ISDN Management Information Base using SMIv2";
}
identity iso88022llc {
  base iana-interface-type;
}
identity localTalk {
  base iana-interface-type;
}
identity smdsDxi {
  base iana-interface-type;
}
identity frameRelayService {
  base iana-interface-type;
  description
  "FRNETSERV-MIB.";
  reference
  "RFC 2954 - Definitions of Managed Objects for Frame Relay Service";
}
identity v35 {
  base iana-interface-type;
}
identity hssi {
  base iana-interface-type;
}
identity hippi {
  base iana-interface-type;
}

identity modem {
  base iana-interface-type;
  description
  "Generic modem.";
}
identity aal5 {
identity sonetPath {
    base iana-interface-type;
}
identity sonetVT {
    base iana-interface-type;
}
identity smdsIcip {
    base iana-interface-type;
    description
    "SMDS InterCarrier Interface.";
}
identity propVirtual {
    base iana-interface-type;
    description
    "Proprietary virtual/internal.";
    reference
    "RFC 2863 - The Interfaces Group MIB";
}
identity propMultiplexor {
    base iana-interface-type;
    description
    "Proprietary multiplexing.";
    reference
    "RFC 2863 - The Interfaces Group MIB";
}
identity ieee80212 {
    base iana-interface-type;
    description
    "100BaseVG.";
}
identity fibreChannel {
    base iana-interface-type;
    description
    "Fibre Channel.";
}

identity hippiInterface {
    base iana-interface-type;
    description
    "HIPPI interfaces.";
}
identity frameRelayInterconnect {
base iana-interface-type;
status obsolete;
description
"Obsolete; use either
    frameRelay(32) or frameRelayService(44).";
}

identity aflane8023 {
    base iana-interface-type;
description
    "ATM Emulated LAN for 802.3.";
}

identity aflane8025 {
    base iana-interface-type;
description
    "ATM Emulated LAN for 802.5.";
}

identity cctEmul {
    base iana-interface-type;
description
    "ATM Emulated circuit.";
}

identity fastEther {
    base iana-interface-type;
    status deprecated;
description
    "Obsoleted via RFC 3635.
    ethernetCsmacd(6) should be used instead.";
    reference
    "RFC 3635 - Definitions of Managed Objects for the
        Ethernet-like Interface Types";
}

identity isdn {
    base iana-interface-type;
description
    "ISDN and X.25.";
    reference
    "RFC 1356 - Multiprotocol Interconnect on X.25 and ISDN
        in the Packet Mode";
}

identity v11 {
    base iana-interface-type;
description
    "CCITT V.11/X.21.";
}

identity v36 {
identity g703at64k {
  base iana-interface-type;
  description
  "CCITT G703 at 64Kbps.";
}
identity g703at2mb {
  base iana-interface-type;
  status obsolete;
  description
  "Obsolete; see DS1-MIB.";
}
identity qllc {
  base iana-interface-type;
  description
  "SNA QLLC.";
}
identity fastEtherFX {
  base iana-interface-type;
  status deprecated;
  description
  "Obsoleted via RFC 3635. ethernetCsmacd(6) should be used instead.";
  reference
  "RFC 3635 - Definitions of Managed Objects for the Ethernet-like Interface Types";
}
identity channel {
  base iana-interface-type;
  description
  "Channel.";
}
identity ieee80211 {
  base iana-interface-type;
  description
  "Radio spread spectrum.";
}
identity ibm370parChan {
  base iana-interface-type;
  description
  "IBM System 360/370 OEMI Channel.";
}
identity escon {
"IBM Enterprise Systems Connection."

}

identity dlsw {
    base iana-interface-type;
    description
    "Data Link Switching."
}

identity isdns {
    base iana-interface-type;
    description
    "ISDN S/T interface."
}

identity isdnu {
    base iana-interface-type;
    description
    "ISDN U interface."
}

identity lapd {
    base iana-interface-type;
    description
    "Link Access Protocol D."
}

identity ipSwitch {
    base iana-interface-type;
    description
    "IP Switching Objects."
}

identity rsrb {
    base iana-interface-type;
    description
    "Remote Source Route Bridging."
}

identity atmLogical {
    base iana-interface-type;
    description
    "ATM Logical Port."
    reference
    "RFC 3606 - Definitions of Supplemental Managed Objects
     for ATM Interface"
}

identity ds0 {
    base iana-interface-type;
    description
    "Digital Signal Level 0."
    reference
    "RFC 2494 - Definitions of Managed Objects for the DS0
     and DS0 Bundle Interface Type"
identity ds0Bundle {
    base iana-interface-type;
    description "Group of ds0s on the same ds1."
    reference "RFC 2494 - Definitions of Managed Objects for the DS0 and DS0 Bundle Interface Type";
}
identity bsc {
    base iana-interface-type;
    description "Bisynchronous Protocol.";
}
identity async {
    base iana-interface-type;
    description "Asynchronous Protocol.";
}
identity cnr {
    base iana-interface-type;
    description "Combat Net Radio.";
}
identity iso88025Dtr {
    base iana-interface-type;
    description "ISO 802.5r DTR.";
}
identity eplrs {
    base iana-interface-type;
    description "Ext Pos Loc Report Sys.";
}
identity arap {
    base iana-interface-type;
    description "Appletalk Remote Access Protocol.";
}
identity propCnls {
    base iana-interface-type;
    description "Proprietary Connectionless Protocol.";
}
identity hostPad {
    base iana-interface-type;
    description "CCITT-ITU X.29 PAD Protocol.";
}
identity termPad {
  base iana-interface-type;
  description
    "CCITT-ITU X.3 PAD Facility.";
}
identity frameRelayMPI {
  base iana-interface-type;
  description
    "Multiprotocol Interconnect over FR.";
}
identity x213 {
  base iana-interface-type;
  description
    "CCITT-ITU X213.";
}
identity adsl {
  base iana-interface-type;
  description
    "Asymmetric Digital Subscriber Loop.";
}
identity radsl {
  base iana-interface-type;
  description
    "Rate-Adapt. Digital Subscriber Loop.";
}
identity sdsl {
  base iana-interface-type;
  description
    "Symmetric Digital Subscriber Loop.";
}
identity vdsl {
  base iana-interface-type;
  description
    "Very H-Speed Digital Subscriber Loop.";
}
identity iso88025CRFPInt {
  base iana-interface-type;
  description
    "ISO 802.5 CRFP.";
}
identity myrinet {
  base iana-interface-type;
  description
    "Myricom Myrinet.";
}
identity voiceEM {
  base iana-interface-type;
  description

"Voice receive and transmit."

identity voiceFXO {
    base iana-interface-type;
    description
    "Voice Foreign Exchange Office.";
}

identity voiceFXS {
    base iana-interface-type;
    description
    "Voice Foreign Exchange Station.";
}

identity voiceEncap {
    base iana-interface-type;
    description
    "Voice encapsulation.";
}

identity voiceOverIp {
    base iana-interface-type;
    description
    "Voice over IP encapsulation.";
}

identity atmDxi {
    base iana-interface-type;
    description
    "ATM DXI.";
}

identity atmFuni {
    base iana-interface-type;
    description
    "ATM FUNI.";
}

identity atmIma {
    base iana-interface-type;
    description
    "ATM IMA.";
}

identity pppMultilinkBundle {
    base iana-interface-type;
    description
    "PPP Multilink Bundle.";
}

identity ipOverCdlc {
    base iana-interface-type;
    description
    "IBM ipOverCdlc.";
}

identity ipOverClaw {
base iana-interface-type;
description
"IBM Common Link Access to Workstn."
;
}
identity stackToStack {
base iana-interface-type;
description
"IBM stackToStack."
;
}
identity virtualIpAddress {
base iana-interface-type;
description
"IBM VIPA."
;
}
identity mpc {
base iana-interface-type;
description
"IBM multi-protocol channel support."
;
}
identity ipOverAtm {
base iana-interface-type;
description
"IBM ipOverAtm."
reference
"RFC 2320 - Definitions of Managed Objects for Classical IP
and ARP Over ATM Using SMIv2 (IPOA-MIB)"
;
}
identity iso88025Fiber {
base iana-interface-type;
description
"ISO 802.5j Fiber Token Ring."
;
}
identity tdlc {
base iana-interface-type;
description
"IBM twinaxial data link control."
;
}
identity gigabitEthernet {
base iana-interface-type;
status deprecated;
description
"Obsoleted via RFC 3635.
ethernetCsmacd(6) should be used instead."
reference
"RFC 3635 - Definitions of Managed Objects for the
Ethernet-like Interface Types";
identity hdlc {
  base iana-interface-type;
  description  
 "HDLC.;"
}

identity lapf {
  base iana-interface-type;
  description  
 "LAP F.;"
}

identity v37 {
  base iana-interface-type;
  description  
 "V.37.;"
}

identity x25mlp {
  base iana-interface-type;
  description  
 "Multi-Link Protocol.;"
}

identity x25huntGroup {
  base iana-interface-type;
  description  
 "X25 Hunt Group.;"
}

identity transpHdlc {
  base iana-interface-type;
  description  
 "Transp HDLC.;"
}

identity interleave {
  base iana-interface-type;
  description  
 "Interleave channel.;"
}

identity fast {
  base iana-interface-type;
  description  
 "Fast channel.;"
}

identity ip {
  base iana-interface-type;
  description  
 "IP (for APPN HPR in IP networks).;"
}

identity docsCableMaclayer {
base iana-interface-type;
description
"CATV Mac Layer.";
}
identity docsCableDownstream {
base iana-interface-type;
description
"CATV Downstream interface.";
}
identity docsCableUpstream {
base iana-interface-type;
description
"CATV Upstream interface.";
}
identity a12MppSwitch {
base iana-interface-type;
description
"Avalon Parallel Processor.";
}
identity tunnel {
base iana-interface-type;
description
"Encapsulation interface.";
}
identity coffee {
base iana-interface-type;
description
"Coffee pot.";
reference
"RFC 2325 - Coffee MIB";
}
identity ces {
base iana-interface-type;
description
"Circuit Emulation Service.";
}
identity atmSubInterface {
base iana-interface-type;
description
"ATM Sub Interface.";
}

identity l2vlan {
base iana-interface-type;
description
"Layer 2 Virtual LAN using 802.1Q.";
}
identity l3ipvlan {
base iana-interface-type;
description
"Layer 3 Virtual LAN using IP.;"
}
identity l3ipxvlan {
    base iana-interface-type;
description
"Layer 3 Virtual LAN using IPX.;"
}
identity digitalPowerline {
    base iana-interface-type;
description
"IP over Power Lines.;"
}
identity mediaMailOverIp {
    base iana-interface-type;
description
"Multimedia Mail over IP.;"
}
identity dtm {
    base iana-interface-type;
description
"Dynamic synchronous Transfer Mode.;"
}
identity dcn {
    base iana-interface-type;
description
"Data Communications Network.;"
}
identity ipForward {
    base iana-interface-type;
description
"IP Forwarding Interface.;"
}
identity msdsl {
    base iana-interface-type;
description
"Multi-rate Symmetric DSL.;"
}
identity ieee1394 {
    base iana-interface-type;

description
"IEEE1394 High Performance Serial Bus.;"
}
identity if-gsn {
    base iana-interface-type;

description
"HIPPI-6400.";
}

identity dvbRccMacLayer {
    base iana-interface-type;
    description
    "DVB-RCC MAC Layer."
}

identity dvbRccDownstream {
    base iana-interface-type;
    description
    "DVB-RCC Downstream Channel."
}

identity dvbRccUpstream {
    base iana-interface-type;
    description
    "DVB-RCC Upstream Channel."
}

identity atmVirtual {
    base iana-interface-type;
    description
    "ATM Virtual Interface."
}

identity mplsTunnel {
    base iana-interface-type;
    description
    "MPLS Tunnel Virtual Interface."
}

identity srp {
    base iana-interface-type;
    description
    "Spatial Reuse Protocol."
}

identity voiceOverAtm {
    base iana-interface-type;
    description
    "Voice over ATM."
}

identity voiceOverFrameRelay {
    base iana-interface-type;
    description
    "Voice Over Frame Relay."
}

identity idsl {
    base iana-interface-type;
    description
    "Digital Subscriber Loop over ISDN."
}

identity compositeLink {
identity AviciCompositeLink {
  base iana-interface-type;
  description
    "Avici Composite Link Interface.";
}

identity ss7SigLink {
  base iana-interface-type;
  description
    "SS7 Signaling Link.";
}

identity propWirelessP2P {
  base iana-interface-type;
  description
    "Prop. P2P wireless interface.";
}

identity frForward {
  base iana-interface-type;
  description
    "Frame Forward Interface.";
}

identity rfc1483 {
  base iana-interface-type;
  description
    "Multiprotocol over ATM AAL5.";
  reference
    "RFC 1483 - Multiprotocol Encapsulation over ATM Adaptation Layer 5";
}

identity usb {
  base iana-interface-type;
  description
    "USB Interface.";
}

identity ieee8023adLag {
  base iana-interface-type;
  description
    "IEEE 802.3ad Link Aggregate.";
}

identity bgppolicyaccounting {
  base iana-interface-type;
  description
    "BGP Policy Accounting.";
}

identity frf16MfrBundle {
  base iana-interface-type;
  description
    "FRF.16 Multilink Frame Relay.";
}

identity h323Gatekeeper {
base iana-interface-type;
description
"H323 Gatekeeper.";
}
identity h323Proxy {
base iana-interface-type;
description
"H323 Voice and Video Proxy.";
}
identity mpls {
base iana-interface-type;
description
"MPLS.";
}
identity mfSigLink {
base iana-interface-type;
description
"Multi-frequency signaling link.";
}
identity hdsl2 {
base iana-interface-type;
description
"High Bit-Rate DSL - 2nd generation.";
}
identity shdsl {
base iana-interface-type;
description
"Multirate HDSL2.";
}
identity ds1FDL {
base iana-interface-type;
description
"Facility Data Link (4Kbps) on a DS1.";
}
identity pos {
base iana-interface-type;
description
"Packet over SONET/SDH Interface.";
}

identity dvbAsiIn {
base iana-interface-type;
description
"DVB-ASI Input.";
}
identity dvbAsiOut {
base iana-interface-type;
description
"DVB-ASI Output.";
}
identity plc {
base iana-interface-type;
description
"Power Line Communications.";
}
identity nfas {
base iana-interface-type;
description
"Non-Facility Associated Signaling.";
}
identity tr008 {
base iana-interface-type;
description
"TR008.";
}
identity gr303rdt {
base iana-interface-type;
description
"Remote Digital Terminal.";
}
identity gr303idt {
base iana-interface-type;
description
"Integrated Digital Terminal.";
}
identity isup {
base iana-interface-type;
description
"ISUP.";
}
identity propdocswirelessmaclayer {
base iana-interface-type;
description
"Cisco proprietary Maclayer.";
}

identity propdocswirelessdownstream {
base iana-interface-type;
description
"Cisco proprietary Downstream.";
}
identity propdocswirelessupstream {

base iana-interface-type;

description
"Cisco proprietary Upstream.";
}

identity hiperlan2 {
base iana-interface-type;

description
"HIPERLAN Type 2 Radio Interface.";
}

identity propBWAp2Mp {
base iana-interface-type;

description
"PropBroadbandWirelessAccessplp2Multipt (use of this value
for IEEE 802.16 WMAN interfaces as per IEEE Std 802.16f
is deprecated, and ieee80216WMAN(237) should be used
instead).";
}

identity sonetOverheadChannel {
base iana-interface-type;

description
"SONET Overhead Channel.";
}

identity digitalWrapperOverheadChannel {

description
"Digital Wrapper.";
}

identity aal2 {
base iana-interface-type;

description
"ATM adaptation layer 2.";
}

identity radioMAC {
base iana-interface-type;

description
"MAC layer over radio links.";
}

identity atmRadio {
base iana-interface-type;

description
"ATM over radio links.";
}

identity imt {
base iana-interface-type;

description
"Inter-Machine Trunks.";
}

identity mvl {
base iana-interface-type;
description
"Multiple Virtual Lines DSL.";
}
identity reachDSL {
base iana-interface-type;
description
"Long Reach DSL.";
}
identity frDlcEndPt {
base iana-interface-type;
description
"Frame Relay DLCI End Point.";
}
identity atmVciEndPt {
base iana-interface-type;
description
"ATM VCI End Point.";
}
identity opticalChannel {
base iana-interface-type;
description
"Optical Channel.";
}
identity opticalTransport {
base iana-interface-type;
description
"Optical Transport.";
}
identity propAtm {
base iana-interface-type;
description
"Proprietary ATM.";
}
identity voiceOverCable {
base iana-interface-type;
description
"Voice Over Cable Interface.";
}

identity infiniband {
base iana-interface-type;
description
"Infiniband.";
}
declaration teLink {
base iana-interface-type;
description
"TE Link."
};
}
identity q2931 {
base iana-interface-type;
description
"Q.2931."
};
}
identity virtualTg {
base iana-interface-type;
description
"Virtual Trunk Group."
};
}
identity sipTg {
base iana-interface-type;
description
"SIP Trunk Group."
};
}
identity sipSig {
base iana-interface-type;
description
"SIP Signaling."
};
}
identity docsCableUpstreamChannel {
base iana-interface-type;
description
"CATV Upstream Channel."
};
}
identity econet {
base iana-interface-type;
description
"Acorn Econet."
};
}
identity pon155 {
base iana-interface-type;
description
"FSAN 155Mb Symmetrical PON interface."
};
}

identity pon622 {
base iana-interface-type;
description
"FSAN 622Mb Symmetrical PON interface."
};
}
identity bridge {
identity linegroup {
    base iana-interface-type;
    description
    "Interface common to multiple lines.";
}

identity voiceEMFGD {
    base iana-interface-type;
    description
    "Voice E&M Feature Group D.";
}

identity voiceFGDEANA {
    base iana-interface-type;
    description
    "Voice FGD Exchange Access North American.";
}

identity voiceDID {
    base iana-interface-type;
    description
    "Voice Direct Inward Dialing.";
}

identity mpegTransport {
    base iana-interface-type;
    description
    "MPEG transport interface.";
}

identity sixToFour {
    base iana-interface-type;
    status deprecated;
    description
    "6to4 interface (DEPRECATED).";
    reference
    "RFC 4087 - IP Tunnel MIB";
}

identity gtp {
    base iana-interface-type;
    description
    "GTP (GPRS Tunneling Protocol).";
}

identity pdnEtherLoop1 {
    base iana-interface-type;
    description
    "Paradyne EtherLoop 1.";
}

identity pdnEtherLoop2 {
    base iana-interface-type;
    description
    "Paradyne EtherLoop 2.";
}
base iana-interface-type;
description
"Paradyne EtherLoop 2.";
}

identity opticalChannelGroup {
  base iana-interface-type;
description
"Optical Channel Group.";
}

identity homepna {
  base iana-interface-type;
description
"HomePNA ITU-T G.989.";
}

identity gfp {
  base iana-interface-type;
description
"Generic Framing Procedure (GFP).";
}

identity ciscoISLvlan {
  base iana-interface-type;
description
"Layer 2 Virtual LAN using Cisco ISL.";
}

identity actelisMetaLOOP {
  base iana-interface-type;
description
"Acteleis proprietary MetaLOOP High Speed Link.";
}

identity fcipLink {
  base iana-interface-type;
description
"FCIP Link.";
}

identity rpr {
  base iana-interface-type;
description
"Resilient Packet Ring Interface Type.";
}

identity qam {
  base iana-interface-type;
description
"RF Qam Interface.";
}

identity lmp {
base iana-interface-type;
description
"Link Management Protocol."
reference
"RFC 4327 - Link Management Protocol (LMP) Management Information Base (MIB)"

}
identity cblVectaStar {
    base iana-interface-type;
description
"Cambridge Broadband Networks Limited VectaStar."
}
identity docsCableMCmtsDownstream {
    base iana-interface-type;
description
"CATV Modular CMTS Downstream Interface."
}
identity adsl2 {
    base iana-interface-type;
    status deprecated;
description
"Asymmetric Digital Subscriber Loop Version 2
(DEPRECATED/OBSOLETED - please use adsl2plus(238) instead)."
reference
"RFC 4706 - Definitions of Managed Objects for Asymmetric Digital Subscriber Line 2 (ADSL2)"
}
identity macSecControlledIF {
    base iana-interface-type;
description
"MACSecControlled."
}
identity macSecUncontrolledIF {
    base iana-interface-type;
description
"MACSecUncontrolled."
}
identity aviciOpticalEther {
    base iana-interface-type;
description
"Avici Optical Ethernet Aggregate."
}
identity atmbond {
    base iana-interface-type;
description
"atmbond."
}
identity voiceFGDOS {
  base iana-interface-type;
  description
      "Voice FGD Operator Services."
};

identity mocaVersion1 {
  base iana-interface-type;
  description
      "MultiMedia over Coax Alliance (MoCA) Interface
       as documented in information provided privately to IANA."
};

identity ieee80216WMAN {
  base iana-interface-type;
  description
      "IEEE 802.16 WMAN interface."
};

identity adsl2plus {
  base iana-interface-type;
  description
      "Asymmetric Digital Subscriber Loop Version 2
       Version 2 Plus and all variants."
};

identity dvbRcsMacLayer {
  base iana-interface-type;
  description
      "DVB-RCS MAC Layer."
  reference
      "RFC 5728 - The SatLabs Group DVB-RCS MIB"
};

identity dvbTdm {
  base iana-interface-type;
  description
      "DVB Satellite TDM."
  reference
      "RFC 5728 - The SatLabs Group DVB-RCS MIB"
};

identity dvbRcsTdma {
  base iana-interface-type;
  description
      "DVB-RCS TDMA."
  reference
      "RFC 5728 - The SatLabs Group DVB-RCS MIB"
};

identity x86Laps {
  base iana-interface-type;
  description
      "LAPS based on ITU-T X.86/Y.1323."
};
identity wwanPP {
    base iana-interface-type;
    description
        "3GPP WWAN.";
}
identity wwanPP2 {
    base iana-interface-type;
    description
        "3GPP2 WWAN.";
}
identity voiceEBS {
    base iana-interface-type;
    description
        "Voice P-phone EBS physical interface.";
}
identity iPwType {
    base iana-interface-type;
    description
        "Pseudowire interface type."
    reference
        "RFC 5601 - Pseudowire (PW) Management Information Base (MIB)";
}
identity ilan {
    base iana-interface-type;
    description
        "Internal LAN on a bridge per IEEE 802.1ap.";
}
identity pip {
    base iana-interface-type;
    description
        "Provider Instance Port on a bridge per IEEE 802.1ah PBB."
}
identity aluELP {
    base iana-interface-type;
    description
        "Alcatel-Lucent Ethernet Link Protection.";
}
identity gpon {
    base iana-interface-type;
    description
        "Gigabit-capable passive optical networks (G-PON) as per ITU-T G.948."
}
identity vdsl2 {
    base iana-interface-type;
    description
        "Very high speed digital subscriber line Version 2
         (as per ITU-T Recommendation G.993.2).";
"RFC 5650 - Definitions of Managed Objects for Very High Speed Digital Subscriber Line 2 (VDSL2);"

identity capwapDot11Profile {
    base iana-interface-type;
    description "WLAN Profile Interface."
    reference "RFC 5834 - Control and Provisioning of Wireless Access Points (CAPWAP) Protocol Binding MIB for IEEE 802.11";
}

identity capwapDot11Bss {
    base iana-interface-type;
    description "WLAN BSS Interface."
    reference "RFC 5834 - Control and Provisioning of Wireless Access Points (CAPWAP) Protocol Binding MIB for IEEE 802.11";
}

identity capwapWtpVirtualRadio {
    base iana-interface-type;
    description "WTP Virtual Radio Interface."
    reference "RFC 5833 - Control and Provisioning of Wireless Access Points (CAPWAP) Protocol Base MIB";
}

identity bits {
    base iana-interface-type;
    description "bitsport.";
}

identity docsCableUpstreamRfPort {
    base iana-interface-type;
    description "DOCSIS CATV Upstream RF Port.";
}

identity cableDownstreamRfPort {
    base iana-interface-type;
    description "CATV downstream RF Port.";
}

identity vmwareVirtualNic {

base iana-interface-type;
description
"VMware Virtual Network Interface.";
}
identity iee802154 {
  base iana-interface-type;
description
"IEEE 802.15.4 WPAN interface.";
reference
"IEEE 802.15.4-2006";
}
identity otnOdu {
  base iana-interface-type;
description
"OTN Optical Data Unit.";
}
identity otnOtU {
  base iana-interface-type;
description
"OTN Optical channel Transport Unit.";
}
identity ifVfiType {
  base iana-interface-type;
description
"VPLS Forwarding Instance Interface Type.";
}
identity g9981 {
  base iana-interface-type;
description
"G.998.1 bonded interface.";
}
identity g9982 {
  base iana-interface-type;
description
"G.998.2 bonded interface.";
}
identity g9983 {
  base iana-interface-type;
description
"G.998.3 bonded interface.";
}
identity aluEpon {
  base iana-interface-type;
description
"Ethernet Passive Optical Networks (E-PON).";
}
identity aluEponOnu {

base iana-interface-type;
description
"EPON Optical Network Unit.";
}

identity aluEponPhysicalUni {
base iana-interface-type;
description
"EPON physical User to Network interface.";
}

identity aluEponLogicalLink {
base iana-interface-type;
description
"The emulation of a point-to-point link over the EPON layer.";
}

identity aluGponOnu {
base iana-interface-type;
description
"GPON Optical Network Unit.";
reference
"ITU-T G.984.2";
}

identity aluGponPhysicalUni {
base iana-interface-type;
description
"GPON physical User to Network interface.";
reference
"ITU-T G.984.2";
}

identity vmwareNicTeam {
base iana-interface-type;
description
"VMware NIC Team.";
}

Found in path(s):
* /opt/cola/permits/1203831141_1631819327.37/0/ydk-models-ietf-0-1-5-post2-tar-gz/ydk-models-ietf-0.1.5.post2/ydk/models/ietf/_yang/iana-if-type.yang

1.131 telnetd-x jline-3.12.1
1.131.1 Available under license:
No license file was found, but licenses were detected in source scan.

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-->

Found in path(s):
* /opt/cola/permits/1324584140_1652333625.9299338/0/jline-3-12-1-jar/META-INF/maven/org.jline/jline-builtins/pom.xml
* /opt/cola/permits/1324584140_1652333625.9299338/0/jline-3-12-1-jar/META-INF/maven/org.jline/jline-reader/pom.xml
* /opt/cola/permits/1324584140_1652333625.9299338/0/jline-3-12-1-jar/META-INF/maven/org.jline/jline-style/pom.xml
* /opt/cola/permits/1324584140_1652333625.9299338/0/jline-3-12-1-jar/META-INF/maven/org.jline/jline-terminal-jna/pom.xml
* /opt/cola/permits/1324584140_1652333625.9299338/0/jline-3-12-1-jar/META-INF/maven/org.jline/jline-terminal/pom.xml
* /opt/cola/permits/1324584140_1652333625.9299338/0/jline-3-12-1-jar/META-INF/maven/org.jline/jline-remote-ssh/pom.xml
* /opt/cola/permits/1324584140_1652333625.9299338/0/jline-3-12-1-jar/META-INF/maven/org.jline/jline-remote-telnet/pom.xml

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-->

Found in path(s):
* /opt/cola/permits/1324584140_1652333625.9299338/0/jline-3-12-1-jar/META-INF/maven/org.jline/jline-remote-ssh/pom.xml
* /opt/cola/permits/1324584140_1652333625.9299338/0/jline-3-12-1-jar/META-INF/maven/org.jline/jline-remote-telnet/pom.xml

No license file was found, but licenses were detected in source scan.

Manifest-Version: 1.0
Bundle-Description: JLine
Bundle-License: https://opensource.org/licenses/BSD-3-Clause
Bundle-SymbolicName: org.jline
sd;uses:="org.fusesource.jansi.internal.org.jline.terminal.org.jline.
terminal.impl.jline;version="3.12.1",org.jline.terminal.impl.jline.jna;uses:="org.jline.
uses:="org.jline.terminal.org.jline.terminal.impl.jline.terminal.impl.jline";version="3.12.1"Bundle-Name: JLine Bundle
Bundle-Version: 3.12.1
Created-By: Apache Maven Bundle Plugin
Build-Jdk: 1.8.0-adoptopenjdk

Found in path(s):
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#  
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green
olive
navy
purple
teal
silver
grey
red
lime
yellow
blue
fuchsia
aqua
white
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auto_left_margin, bw, bw
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can_change, ccc, cc
ceol_standout_glitch, xhp, xs
col_addr_glitch, xhpa, YA
cpi_changes_res, cpix, YF
cr_cancels_micro_mode, crxm, YB
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erase_overstrike, eo, eo
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enter_scancode_mode, smsc, S4
exit_pc_charset_mode, rmpch, S3
exit_scancode_mode, rmsc, S5
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key_mouse, kmous, Km
mouse_info, minfo, Mi
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pkey_plab, pfxl, x1
req_mouse_pos, reqmp, RQ
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set_a_foreground, setaf, AF
set_color_band, setcolor, Yz
set_lr_margin, smgmlr, ML
set_page_length, slines, YZ
set_tb_margin, smgtb, MT
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enter_left_hl_mode, elhlm, Xl
enter_low.hl_mode, elo, Xo
enter_right.hl_mode, erhlm, Xr
enter_top.hl_mode, ethlm, Xt
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set_pglen_inch, slength, sL

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1.132 jctools-core 3.1.0

1.132.1 Available under license:

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</scm>

<developers>
<developer>
<url>https://github.com/nitsanw</url>
</developer>
Home-page: https://github.com/etingof/pyasn1
Author: Ilya Etingof
Author-email: etingof@gmail.com
Maintainer: Ilya Etingof <etingof@gmail.com>
License: BSD
Description: Pure-Python implementation of ASN.1 types and DER/BER/CER codecs (X.208)
Platform: any
Classifier: Development Status :: 5 - Production/Stable
Classifier: Environment :: Console
Classifier: Intended Audience :: Developers
Classifier: Intended Audience :: Education
Classifier: Intended Audience :: Information Technology
Classifier: Intended Audience :: System Administrators
Classifier: Intended Audience :: Telecommunications Industry
Classifier: License :: OSI Approved :: BSD License
Classifier: Natural Language :: English
Classifier: Operating System :: OS Independent
Classifier: Programming Language :: Python :: 2
Classifier: Programming Language :: Python :: 2.4
Classifier: Programming Language :: Python :: 2.5
Classifier: Programming Language :: Python :: 2.6
Classifier: Programming Language :: Python :: 2.7
Classifier: Programming Language :: Python :: 3
Classifier: Programming Language :: Python :: 3.2
Classifier: Programming Language :: Python :: 3.3
Classifier: Programming Language :: Python :: 3.4
Classifier: Programming Language :: Python :: 3.5
Classifier: Programming Language :: Python :: 3.6
Classifier: Programming Language :: Python :: 3.7
Classifier: Topic :: Communications
Classifier: Topic :: Software Development :: Libraries :: Python Modules

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* /opt/cola/permits/1110812511_1607462013.57/0/pyasn1-0-4-8-tar-gz/pyasn1-0.4.8/pyasn1.egg-info/PKG-INFO

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.. _license:

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=======

.. include:: ../../LICENSE.rst

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ASN.1 library for Python
------------------------

This is a free and open source implementation of ASN.1 types and codecs as a Python package. It has been first written to support particular protocol (SNMP) but then generalized to be suitable for a wide range of protocols based on [ASN.1 specification](https://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-X.208-198811-W!!PDF-E&type=items).

Features
--------
Why using pyasn1

ASN.1 solves the data serialisation problem. This solution was designed long ago by the wise Ancients. Back then, they did not have the luxury of wasting bits. That is why ASN.1 is designed to serialise data structures of unbounded complexity into something compact and efficient when it comes to processing the data.

That probably explains why many network protocols and file formats still rely on the 30+ years old technology. Including a number of high-profile Internet protocols and file formats.

Quite a number of books cover the topic of ASN.1. [Communication between heterogeneous systems](http://www.oss.com/asn1/dubuisson.html) by Olivier Dubuisson is one of those high quality books freely available on the Internet.

The pyasn1 package is designed to help Python programmers tackling network protocols and file formats at the comfort of their Python prompt. The tool struggles to capture all aspects of a rather complicated ASN.1 system and to represent it on the Python terms.

How to use pyasn1

With pyasn1 you can build Python objects from ASN.1 data structures. For example, the following ASN.1 data structure:

```
bash
Record ::= SEQUENCE {
    id        INTEGER,
    room  [0] INTEGER OPTIONAL,
    house [1] INTEGER DEFAULT 0
}
```

Could be expressed in pyasn1 like this:
```python
class Record(Sequence):
    componentType = NamedTypes(
        NamedType('id', Integer()),
        OptionalNamedType('room', Integer().subtype(
            implicitTag=Tag(tagClassContext, tagFormatSimple, 0)
        )
    ),
    DefaultedNamedType('house', Integer(0).subtype(
        implicitTag=Tag(tagClassContext, tagFormatSimple, 1)
    )
)
```

It is in the spirit of ASN.1 to take abstract data description and turn it into a programming language specific form. Once you have your ASN.1 data structure expressed in Python, you can use it along the lines of similar Python type (e.g. ASN.1 ‘SET’ is similar to Python `dict`, ‘SET OF’ to `list`):

```python
>>> record = Record()
>>> record['id'] = 123
>>> record['room'] = 321
>>> str(record)
Record:
id=123
room=321

>>> from pyasn1.codec.der.encoder import encode
>>> substrate = encode(record)
>>> hexdump(substrate)
00000: 30 07 02 01 7B 80 02 01 41
```

Conversely, you can turn serialised ASN.1 content, as received from network or read from a file, into a Python object which you can introspect, modify, encode and send back.
```python
>>> from pyasn1.codec.der.decoder import decode
>>> received_record, rest_of_substrate = decode(substrate, asn1Spec=Record())
>>> for field in received_record:
...    print('{} is {}'.format(field, received_record[field]))
id is 123
room is 321
house is 0
>>> record == received_record
True
>>> received_record.update(room=123)
>>> substrate = encode(received_record)
>>> hexdump(substrate)
00000: 30 06 02 01 7B 80 01 7B
```

The pyasn1 classes struggle to emulate their Python prototypes (e.g. int, list, dict etc.). But ASN.1 types exhibit more complicated behaviour. To make life easier for a Pythonista, they can turn their pyasn1 classes into Python built-ins:

```python
>>> from pyasn1.codec.native.encoder import encode
>>> encode(record)
{'id': 123, 'room': 321, 'house': 0}
```

Or vice-versa -- you can initialize an ASN.1 structure from a tree of Python objects:

```python
>>> from pyasn1.codec.native.decoder import decode
>>> record = decode({'id': 123, 'room': 321, 'house': 0}, asn1Spec=Record())
>>> str(record)
Record:
id=123
room=321
```

With ASN.1 design, serialisation codecs are decoupled from data objects, so you could turn every single ASN.1 object into many different serialised forms. As of this moment, pyasn1 supports BER, DER, CER and Python built-ins codecs. The extremely compact PER encoding is expected to be introduced in the upcoming pyasn1 release.
More information on pyasn1 APIs can be found in the [documentation](http://snmplabs.com/pyasn1/), compiled ASN.1 modules for different protocols and file formats could be found in the pyasn1-modules [repo](https://github.com/etingof/pyasn1-modules).

How to get pyasn1

-----------------

The pyasn1 package is distributed under terms and conditions of 2-clause BSD [license](http://snmplabs.com/pyasn1/license.html). Source code is freely available as a GitHub [repo](https://github.com/etingof/pyasn1).

You could `pip install pyasn1` or download it from [PyPI](https://pypi.org/project/pyasn1).

If something does not work as expected, [open an issue](https://github.com/etingof/pyasn1/issues) at GitHub or post your question [on Stack Overflow](https://stackoverflow.com/questions/ask) or try browsing pyasn1 [mailing list archives](https://sourceforge.net/p/pyasn1/mailman/pyasn1-users/).

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Found in path(s):
* /opt/cola/permissions/1110812511_1607462013.57/0/pyasn1-0.4.8.tar.gz/pyasn1-0.4.8/README.md

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# License: http://snmplabs.com/pyasn1/license.html

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ASN.1 library for Python

=================================

.. toctree::
:maxdepth: 1

Abstract Syntax Notation One (ASN.1) is a technology for exchanging structured data in a universally understood, hardware agnostic way. Many industrial, security and telephony applications heavily rely on ASN.1.

The `pyasn1 <https://pypi.org/project/pyasn1/>`_ library implements ASN.1 support in pure-Python.

What is ASN.1
--------------

ASN.1 is a large, arguably over-engineered and extremely old data modelling and serialisation tool. It is probably among the first serialisation protocols in the history of computer science and technology.

ASN.1 started its life over 30 years ago as a serialisation mechanism for the first electronic mail (known as X.400). Later on if was split off the e-mail application and become a stand-alone tech still being actively supported by its designers and widely used in industry and technology.

Since then ASN.1 is sort of haunted by its relations with the OSI model -- the first, unsuccessful, version of the Internet. You can read many interesting `discussions <https://news.ycombinator.com/item?id=8871453>`_ on that topic.

In the following years, generations of software engineers tackled the serialisation problem many times. We can see that in Google's `ProtoBuffers <https://developers.google.com/protocol-buffers/>`_, or `FlatBuffers <https://google.github.io/flatbuffers/>`_, for example. Interestingly, many new takes on binary protocol design do not depart far from ASN.1 from technical perspective. It's more of a matter of striking a balance between processing overhead, wire format overhead and human readability.

Looking at what ASN.1 has to offer, it has three loosely coupled parts:

* Data types: the standard introduces a collection of basic data types
(integers, bits, strings, arrays and records) that can be used for describing arbitrarily complex, nested data structures.

* Serialisation protocols: the above data structures could be converted into a series of octets for storage or transmission over the wire as well as recovered back into their structured form. The system is fully agnostic to hardware architectures differences.

* Schema language: ASN.1 data structures could be described in terms of a schema language for ASN.1 compiler to turn it into platform-specific implementation.

ASN.1 applications
-------------------

Being an old and generally successful standard, ASN.1 is widely adopted for many uses. To give you an example, these technologies use ASN.1 for their data exchange needs:

* Signaling standards for the public switched telephone network (SS7 family)
* Network management standards (SNMP, CMIP)
* Directory standards (X.500 family, LDAP)
* Public Key Infrastructure standards (X.509, etc.)
* PBX control (CSTA)
* IP-based Videoconferencing (H.323 family)
* Biometrics (BIP, CBEFF, ACBio)
* Intelligent transportation (SAE J2735)
* Cellular telephony (GSM, GPRS/EDGE, UMTS, LTE)

ASN.1 gotchas
-------------

Apparently, ASN.1 is hard to implement properly. Quality open-source ASN.1 tools are rare, but ad-hoc implementations are numerous. Judging from the statistics on discovered security vulnerabilities, many people have implemented ASN.1 parsers and oftentimes fell victim to its edge cases.

On the bright side, ASN.1 has been around for a long time, it is well understood and security reviewed.
Use case
--------

.. toctree::
   :maxdepth: 2

/example-use-case

Download & Install
------------------

.. toctree::
   :maxdepth: 2

/download

Changes
-------

All changes and release history is maintained in changelog. There you
could also download the latest unreleased pyasn1 tarball containing
the latest fixes and improvements.

.. toctree::
   :maxdepth: 1

/changelog

License
-------

The PyASN1 software is distributed under 2-clause BSD License.

.. toctree::
   :maxdepth: 2

/license

Getting help
------------

Please, file your `issues <https://github.com/etingof/pyasn1/issues>`_
and `PRs <https://github.com/etingof/pyasn1/pulls>`_ at GitHub.
Alternatively, you could ask for help at
`Stack Overflow <http://stackoverflow.com/questions/tagged/pyasn1>`_
or search
`pyasn1-users <https://lists.sourceforge.net/lists/listinfo/pyasn1-users>`_
mailing list archive.

Books on ASN.1

--------------

The pyasn1 implementation is largely based on reading up the following awesome books:

* `ASN.1 - Communication between heterogeneous systems <http://www.oss.com/asn1/dubuisson.html>`_ by Olivier Dubuisson

Here you can get the official standards which is hard to read:


On the other end of the readability spectrum, here is a quick and sweet write up:


If you are working with ASN.1, we'd highly recommend reading a proper book on the subject.

Found in path(s):
* `/opt/cola/permits/1110812511_1607462013.57/0/pyasn1-0.4.8-tar-gz/pyasn1-0.4.8/docs/source/contents.rst`

1.134 wheel 0.36.2

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1.142 libxfont 7.5-41.el8

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/* lib/font/fontfile/gunzip.c 
   written by Mark Eichin <eichin@kitten.gen.ma.us> September 1996. 
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The KStem stemmer in analysis/common/src/org/apache/lucene/analysis/en was developed by Bob Krovetz and Sergio Guzman-Lara (CIIR-UMass Amherst) under the BSD-license.

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analysis/common/src/resources/org/apache/lucene/analysis/ar/stopwords.txt,
analysis/common/src/resources/org/apache/lucene/analysis/fa/stopwords.txt,
analysis/common/src/resources/org/apache/lucene/analysis/ro/stopwords.txt,
analysis/common/src/resources/org/apache/lucene/analysis/bg/stopwords.txt,
analysis/common/src/resources/org/apache/lucene/analysis/hi/stopwords.txt,
analysis/common/src/resources/org/apache/lucene/analysis/bn/stopwords.txt

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(common) are based on BSD-licensed reference implementations created by Jacques Savoy and
Ljiljana Dolamic. These files reside in:
analysis/common/src/java/org/apache/lucene/analysis/de/GermanLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/de/GermanMinimalStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/es/SpanishLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/fr/FrenchLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/fr/FrenchMinimalStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/hu/HungarianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/it/ItalianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/pt/PortugueseLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/ru/RussianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/sv/SwedishLightStemmer.java

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===========================================================================

Kuromoji Japanese Morphological Analyzer - Apache Lucene Integration
===========================================================================

This software includes a binary and/or source version of data from

mecab-ipadic-2.7.0-20070801

which can be obtained from

http://atilika.com/releases/mecab-ipadic/mecab-ipadic-2.7.0-20070801.tar.gz

or

http://jaist.dl.sourceforge.net/project/mecab/mecab-ipadic/2.7.0-20070801/mecab-ipadic-2.7.0-20070801.tar.gz

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1.147 perl-parent 0.237-1.el8

1.147.1 Available under license:

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---
abstract: 'Establish an ISA relationship with base classes at compile time'
author:
- 'Max Maischein <corion@cpan.org>'
build_requires:
  ExtUtils::MakeMaker: '0'
configure_requires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.34, CPAN::Meta::Converter version 2.150005'
license: perl
meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
name: parent
no_index:
directory:
  - t
  - inc
requires:
  Test::More: '0.4'
perl: '5.006'
resources:
  repository: https://github.com/Corion/parent
  version: '0.237'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548129_1591379747.05/0/perl-parent-0.237-1.el8.src.rpm-cosi-expand-archive-Q995NCX6/perl-parent.spec
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(encoding utf8)

=head1 NAME

parent - Establish an ISA relationship with base classes at compile time

=head1 SYNOPSIS

package Baz;
use parent qw(Foo Bar);

=head1 DESCRIPTION

Allows you to both load one or more modules, while setting up inheritance from those modules at the same time. Mostly similar in effect to

    package Baz;
    BEGIN {        
       require Foo;
       require Bar;
       push @ISA, qw(Foo Bar);
    }

By default, every base class needs to live in a file of its own. If you want to have a subclass and its parent class in the same file, you can tell C<parent> not to load any modules by using the C<-norequire> switch:

    package Foo;
    sub exclaim { "I CAN HAS PERL" }

    package DoesNotLoadFooBar;
    use parent -norequire, 'Foo', 'Bar';
    # will not go looking for Foo.pm or Bar.pm

This is equivalent to the following code:

    package Foo;
    sub exclaim { "I CAN HAS PERL" }

    package DoesNotLoadFooBar;
    push @DoesNotLoadFooBar::ISA, 'Foo', 'Bar';

This is also helpful for the case where a package lives within a differently named file:

    package MyHash;
use Tie::Hash;
use parent -norequire, 'Tie::StdHash';

This is equivalent to the following code:

package MyHash;
require Tie::Hash;
push @ISA, 'Tie::StdHash';

If you want to load a subclass from a file that C<require> would
not consider an eligible filename (that is, it does not end in
either C.<.pm> or C.<.pmc>), use the following code:

package MySecondPlugin;
require './plugins/custom.plugin'; # contains Plugin::Custom
use parent -norequire, 'Plugin::Custom';

=head1 HISTORY

This module was forked from L<base> to remove the cruft
that had accumulated in it.

=head1 CAVEATS

=head1 SEE ALSO
L<base>

=head1 AUTHORS AND CONTRIBUTORS
Rafaël Garcia-Suarez, Bart Lateur, Max Maischein, Anno Siegel, Michael Schwern

=head1 MAINTAINER
Max Maischein C< corion@cpan.org >

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Based on the idea of C<base.pm>, which was introduced with Perl 5.004_04.

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=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548129_1591379747.05/0/perl-parent-0.237-1.el8.src.rpm-cosi-expand-archive-Q995NCX6/parent-0.237.tar.gz-cosi-expand-archive-VnAWPUbE/parent-0.237/lib/parent.pm
1.148 gnutls 3.6.16-4.el8

1.148.1 Available under license:

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Version 2.1, February 1999

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1.151 kerberos 1.18

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lib/gssapi/mechglue/g_inquire_context.c
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- lib/kdb/iprop.x
- lib/kdb/kdb_convert.c
- lib/kdb/kdb_log.c
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util/unlink.py
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backport frop python3 Lib/test/support.py

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/* nicstar.c v0.22 Jawaid Bazyar (bazyar@hypermall.com)*/
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/* http://www.hypermall.com*/
/* 10/1/97 - commented out CFG_PHYIE bit - we don't care when the PHY interrupts us (except possibly for removal/insertion of the cable?)*/
/* 10/4/97 - began heavy inline documentation of the code. Corrected typos*/
/* and spelling mistakes.*/
/* 10/5/97 - added code to handle PHY interrupts, disable PHY on loss of link, and correctly re-enable PHY when link is re-established. (put back CFG_PHYIE)*/
/* Modified to work with the IDT7721 nicstar -- AAL5 (tested) only.*/
/* R. D. Rechenmacher <ron@fnal.gov>, Aug. 6, 1997*/
/* Linux driver for the IDT77201 NICStAR PCI ATM controller.*/
/* PHY component is expected to be 155 Mbps S/UNI-Lite or IDT 77155;*/
/* see init_nicstar() for PHY initialization to change this. This driver*/
/* expects the Linux ATM stack to support scatter-gather lists*/
/* (skb->atm.iovcnt != 0) for Rx skb's passed to vcc->push.*/
/* Implementing minimal-copy of received data:*/
/* IDT always receives data into a small buffer, then large buffers*/
/* as needed. This means that data must always be copied to create*/
/* the linear buffer needed by most non-ATM protocol stacks (e.g. IP)*/
/* Fix is simple: make large buffers large enough to hold entire SDU, and leave <small_buffer_data> bytes empty at the start. Then
* copy small buffer contents to head of large buffer.
* Trick is to avoid fragmenting Linux, due to need for a lot of large
* buffers. This is done by 2 things:
* 1) skb->destructor / skb->atm.recycle_buffer
*   combined, allow nicstar_free_rx_skb to be called to
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* 2) skb_clone of received buffers
* See nicstar_free_rx_skb and linearize_buffer for implementation
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* M. Welsh, 6 July 1996

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Compliance of KeyUsage extension return value with security API.

Sascha Weinreuter &lt;Sascha.Weinreuter@064:cit.de&gt; - fixed SMIME saveChanges() bug.

Andre Wehnert &lt;aw5@mail.inf.tu-dresden.de&gt; - fixing key schedule problem in RC5-64, fixing buffer cleaning issue in buffered block cipher.

Luigi Lo Iacono &lt;lo_iacono@064:nue.et-inf.uni-siegen.de&gt; - adding SIC mode to the blockciphers in the provider.

Tim Sakach &lt;ttsakach@064:certivo.net&gt; - SMIME v2 compatibility patches.
<li>Marcus Povey &lt;mpovey@brookes.ac.uk&gt; - adding the PGP mode to the lightweight API and the provider.</li>
<li>Sebastian Clau&szlig; &lt;sc2@#064;inf.tu-dresden.de&gt; - adding randomness setting to the certificate and CRL generators.</li>
<li>Nicolas Bielza &lt;nicolas.bielza@alligacom.com&gt; - isolating the tagging bug in the ASN.1 library that was misrepresenting some ASN.1 constructed data types. Contributions to the streaming S/MIME classes.</li>
<li>Casey Marshall &lt;rudio@#064;metastatic.org&gt; - fixing the clone problem with Macs in the clean room JCE.</li>
<li>Rick Zeldes &lt;rick.zeldes@#064;eds.com&gt; - initial code for CMS/SIMIME CompressedData.</li>
<li>Jarek Gawor &lt;gawor@#064;mcs.anl.gov&gt; - adding the PGP mode to the lightweight API and the provider.</li>
<li>Sebastian Clau&szlig; &lt;sc2@#064;inf.tu-dresden.de&gt; - adding randomness setting to the certificate and CRL generators.</li>
<li>Nicolas Bielza &lt;nicolas.bielza@alligacom.com&gt; - isolating the tagging bug in the ASN.1 library that was misrepresenting some ASN.1 constructed data types. Contributions to the streaming S/MIME classes.</li>
<li>Casey Marshall &lt;rudio@#064;metastatic.org&gt; - fixing the clone problem with Macs in the clean room JCE.</li>
<li>Rick Zeldes &lt;rick.zeldes@#064;eds.com&gt; - initial code for CMS/SIMIME CompressedData.</li>

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**Open Source Used In BGP TE Controller Version 4.3.0 2592**

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<li>Brett Neumieier &lt;&amp;lt;random@#064;rnd.cx&amp;gt; - patch to OriginatorIdentifierOrKey object, improvements to encoders package, introduction of UrlBase64.</li>
<li>Graham Coles &lt;graham.coles@#064;retail-logic.com&gt; - patch to isParityAdjusted in DESKeySpec.</li>
<li>J&ouml;rn von Kattch&eacute;e &lt;J.Kattchee@#064;seeburger.de&gt; - patch to SMIMEGenerator for preventing class cast exceptions with BodyParts containing Multipart objects.</li>
<li>Matteo Artuso &lt;matartuso@#064;libero.it&amp;gt; - picking up the possible overead in ASN1InputStream.</li>
<li>Julian Morrison &lt;julian&amp;#064;extropy.demon.co.uk&amp;gt; - spotting the slow down in Diffie-Hellman key generation.</li>
<li>Elmar Sonnenschein &lt;eso@#064;esomail.de&amp;gt; - fix to long conversion in clean room SecureRandom.</li>
<li>J&ouml;rn Schwarze &lt;JSchwarze@#064;ule.de&amp;gt; - Locale fix for the clean room JCE.</li>
<li>Bryan Lovquist &lt;bl&amp;#064;cpp.com.au&amp;gt; - Other provider compatibility fixes for CMS signing.</li>
<li>Artem Portnoy &lt;Artem_Portnoy@#064;ibi.com&amp;gt; - generalisations for CMSProcessableBodyPart in S/MIME. Header fix for mime messages.</li>
<li>Michael H&auml;usler &lt;haeusler@#064;ponton-consulting.de&amp;gt; - missing OID update for SHA1 with RSA Signature.</li>
<li>Johan Seland &lt;johans@#064;netfonds.no&amp;gt; - general toString for BigInteger class.</li>
<li>Johannes Nicolai &lt;johannes.nicolai@#064;novosec.com&amp;gt; - further enhancements to OCSP response generation, fix to CertificateID issuer.</li>
<li>Marc Doberva &lt;marc.doberva@#064;lexsi.com&amp;gt; - help in isolating the JSSE/BC RSA key issue.</li>
<li>Jan Dvorak &lt;jan.dvorak@#064;mathan.cz&amp;gt; - initial implementation of the light weight Null block cipher.</li>
<li>Joe Cohen &lt;jcohen@#064;forumsy.com&amp;gt; - converting the ArrayOutOfBoundsException in DERInputStream into what it should have been.</li>
<li>Chris Long &lt;aclong@#064;ec.ece.cmu.edu&amp;gt; - adding public key decoding to PEMReader.</li>
<li>Hes Siemelink &lt;hes@#064;4ze.com&amp;gt; - findIssuer fix for CertPathBuilder, toMimeMessage converter for Mail API, getSize() fix for zero length messages in SMIMEMessage.</li>
<li>Stefan Puiu &lt;stefanpuiuro@#064;yahoo.com&amp;gt; - initial implementation V3 policy mapping, policy qualifier objects in ASN.1 X.509 package.</li>
<li>Kaiser Yang &lt;kaiseryang@#064;yahoo.com&amp;gt; - Finding BigInteger loop problem in prime generation.</li>
<li>Jiri Urbanece &lt;jiri.urbanece@#064;logicacmg.com&amp;gt; - patch to fix defect in DERBMPString.equals().</li>
<li>Justin Kolb &lt;jkolb@#064;4pristx.com&amp;gt; - patch to DSA signature generation in OpenPGP. Fix for the unexpected "Unexpected end of ZLIB input stream" exception.</li>
<li>Ralf Hauser &lt;ralfhauser@#064;gmx.ch&amp;gt; - patch to exception handling in PublicKeyRing, PEMReader, 1.4 build script, X509 Certificate Factory, CertPathValidatorUtilities, fromAddress null check in SignedMailValidator, ReadOnceInputStream testing utility in MIME tests.</li>
<li>Michal Dvorak &lt;M_Dvorak@#064;kb.cz&amp;gt; - getNextUpdate patch for OCSP SingleResp.</li>
<li>Klaus Greve Fiorentini &lt;klaus@064cpqd.com.br&gt; - array fix in PGP PublicKeyEncSessionPacket.</li>
<li>Olivier Refalo &lt;Olivier_Refalo@064fpl.com&gt; - null pointer exception fix for JDK 1.3 CMSSignedData objects.</li>
<li>Mariusz Bandola &lt;mariusz.bandola@064cryptotech.com.pl&gt; - patch to DERGeneralizedTime.</li>
<li>Compliance patch for OCSP TBSRequest class. Patch to X509Name for delaing with general objects in sequences.</li>
<li>Brien Oberstein &lt;brien.oberstein@064transacttools.net&gt; - patch to S2K algorithm in OpenPGP, initial PGP version 3 secret key support, initial PGP version 3 signature generation, RIPEMD160 addition to PGPUtil.</li>
<li>ian Haywood &lt;ian@064haywood.bpa.nu&gt; - addition of getSignatureType to PGPSignature.</li>
<li>Jonathan Edwards &lt;s34gull@064mac.com&gt; - initial support for reading multiple rings from a PGP key file.</li>
<li>Andrew Thornton &lt;andrew@064caret.cam.ac.uk&gt; - patch for RSA PUBLIC KEY in PEMReader.</li>
<li>Gregor Leander &lt;g@064bos-bremen.de&gt; - initial parsing of multiple sequence entries in an X.500 Name.</li>
<li>Antoon Bosselaers &lt;Antoon.Bosselaers@064esat.kuleuven.ac.be&gt; - help with RIPEMD320 implementation.</li>
<li>Peter Sylvester &lt;Peter.Sylvester@064edelweb.fr&gt; - improvements to the ASN.1 BasicConstraints object.</li>
<li>Doug &lt;ummmmm@064myrealbox.com&gt; - addition of isEncryptionKey method to OpenPGP public keys.</li>
<li>Francois Staes &lt;fstaes@064netconsult.be&gt; - improvements to DEBitString, DERGeneralizedTime and initial implmentation of DERGeneralString. addition of settable signed object info to CMSSignedDataGenerator, patch to DH key agreement.</li>
<li>W.R. Dittmer &lt;wdittmer@064cs.vu.nl&gt; - patch to decoding of SignatureCreationTime in BCPG. Patch to PGPKeyPair to fix nullpointer exception.</li>
<li>Perez Paz Luis Alberto &lt;laperez@064banxico.org.mx&gt; - patch to use of BitString in X.500 name.</li>
<li>James Wright &lt;James_Wright@064harte-hanks.com&gt; - patches for dealing with "odd" ArmoredInputStreams.</li>
<li>Jim Ford &lt;jim@064muirford.com&gt; - patch to PGPSecretKey to avoid null pointer exception on encoding secret keys, comments on KeyExpirationTime, getBitStrength for ElGamal keys. Signature creation time patch for newly created v4 signatures.</li>
<li>Michael Hausler &lt;haeusler@064ponton-consulting.de&gt; - extra aliases for provider.</li>
<li>Sai Pullabhotla &lt;psai@064linorna.com&gt; - fix to PGP compressed data generator to improve compression levels. Performance improvements for KeyBasedLargeFileProcessor.</li>
<li>Joseph Miller &lt;joseph@064digiweb.net.nz&gt; - addition of ZeroBytePadding.</li>
<li>Lars &lt;xyz@064sagemdenmark.dk&gt; - patch to explicit padded mode for CBC block cipher MAC.</li>
<li>Jeroen van Vianen &lt;jeroen@064vanvianen.nl&gt; - the Signed and Encrypted mail example.</li>
<li>Jun Sun &lt;JSun@064diversinet.com&gt; - patch to SecureRandom to work around problem in wtk 1.0.4 and wtk 2.1.</li>
<li>Petr Dukem &lt;pdukem@064email.cz&gt; - patch to CMSSignedDataGenerator to allow it to work with PKCS11 providers.</li>
<li>Filipe Silva &lt;filipe.silva@064wedoconsulting.com&gt; - patch to fix overead issue in BCPGlnputStream.</li>
<li>Alpesh Parmar &lt;alps@064linuxmail.org&gt; - patch for class cast problem in PGPPublicKey.getSignatures().</li>
<li>Jay Gengelbach &lt;jgengelbach@064webmethods.com&gt; - patch to fix isSigningKey in PGPSecretKey class, patch to hashedPackets in PGP signatureGenerator, initial cut for indefinite length output.</li>
<li>Doug &lt;doug@064tigerprivacy.com&gt; - public key ring patches for ElGamal Signatures, problem key ring
data. &lt;/li&gt;
&lt;li&gt;Matthew Mundy &lt;mmundy1@umbc.edu&gt; - infinite loop prevention patch to PKCS5S2ParametersGenerator. &lt;/li&gt;
&lt;li&gt;Tom Cargill &lt;cargill@064profcon.com&gt; - spelling patch in provider. &lt;/li&gt;
&lt;li&gt;Breitenstrom Christian &lt;C.Breitenstrom@064t-systems.com&gt; - compatibility patch to SignaturePacket, DetachedSignatureProcessor. &lt;/li&gt;
&lt;li&gt;Zanotti Mirko &lt;zanotti@064cad.it&gt; - patch to ordered equality test for X509Name. &lt;/li&gt;
&lt;li&gt;Nicola Scendoni &lt;nts.endoni@064fabeCopy.it&gt; - patch to add sorting to CertPath validation. &lt;/li&gt;
&lt;li&gt;Ville Skytt@auuml;l &lt;ville.skytt@064iki.fi&gt; - patch to CRLDistPoint for cRLIssuer field. KeyStore compliance on add patches. DiffieHellman patch for provider compliance. Support for PEM object "TRUSTED CERTIFICATE". Exception handling patch in PEMReader. JavaDoc clean up. &lt;/li&gt;
&lt;li&gt;Bruce Gordon &lt;bruce.gordon@064savvis.net&gt; - patch to secret key creation encoding NullPointerException in OpenPGP, speed up for BCPGInputStream. &lt;/li&gt;
&lt;li&gt;Miles Whiteley &lt;Miles.Whiteley@064savvis.net&gt; - "223" fix for BCPGInputStream new packets. &lt;/li&gt;
&lt;li&gt;Albert Moliner &lt;amoliner@064evintia.com&gt; - initial TSP implementation. &lt;/li&gt;
&lt;li&gt;Carlos Lozano &lt;Carlos@064evintia.com&gt; - initial TSP implementation, patch to SignerInformation for supported repeated signers, initial updates for supporting repeated attributes in CMS. &lt;/li&gt;
&lt;li&gt;Javier Delgadillo &lt;javi@064javi.codewarp.org&gt; - initial Mozilla PublicKeyAndChallenge classes. &lt;/li&gt;
&lt;li&gt;Joni Hahkala &lt;Joni.hahkala@064cern.ch&gt; - initial implementations of VOMS Attribute Certificate Validation, IetfAttrSyntax, and ObjectDigestInfo. We also wish to thank the &lt;a href="http://www.eu-egee.org">EGEE project</a> for making the work available. &lt;/li&gt;
&lt;li&gt;Rolf Schillinger &lt;rolf@064sir-wum.de&gt; - initial implementation of Attribute Certificate generation. &lt;/li&gt;
&lt;li&gt;Sergey Bahtin &lt;Sergey.Bahtin@064yahoo.com&gt; - fix for recovering certificate aliases in BK5 and UBER key stores. Initial implementations of GOST-28147, GOST-3410, EC GOST-3410, GOST OFB mode (GOFB) and GOST-3411. &lt;/li&gt;
&lt;li&gt;Franck Leroy &lt;Franck.Leroy@064keynectis.com&gt; - ANS.1 set sorting. Contributions to TSP implementation. Test vectors for Bleichenbacher's forgery attack. &lt;/li&gt;
&lt;li&gt;Atsuhiiko Yamanaka &lt;ymoon@064jcraft.com&gt; - patch for improving use of Montgomery numbers in BigInteger library. Patch to use size of private exponent in DH parameters. &lt;/li&gt;
&lt;li&gt;Nickolay Bolshakov &lt;tyrex@064rekgsoft.ru&gt; - patch for class cast exception in AuthorityInformationAccess class. &lt;/li&gt;
&lt;li&gt;Soren Hilmer &lt;soren.hilmer@064tietoenator.com&gt; - patches for CertID with issuerSerial set in TSP implementation, additional compliance testing. &lt;/li&gt;
&lt;li&gt;Steve Mitchell &lt;mitchell@064interontrust.com&gt; - patch for stateful path validator fix. Patch to allow BigInteger class to create negative numbers from byte arrays. Additions to allow different providers to be used for asymmetric/symmetric encryption in OpenPGP. Optimisation to avoid redundant verification in path validator. Suggestion to use PKIXParameters.getSigProvider() correctly. &lt;/li&gt;
&lt;li&gt;Dirk Eisner &lt;D.Eisner@seeburger.de&gt; - initial implementation of ISO 7816-4 padding. &lt;/li&gt;
&lt;li&gt;Julien Pasquier &lt;Julien Pasquier@064froe.fre.fr&gt; - initial implementation of attribute classes from RFC 3126. Fix to KEKIdentifier, OtherKeyAttribute parsing. Initial ContentHints class. &lt;/li&gt;
&lt;li&gt;Matteo &lt;matartuso@064libero.it&gt; - sequence patch to ASN1Dump. &lt;/li&gt;
&lt;li&gt;Andrew Paterson &lt;andrew.paterson@064burnsec.com&gt; - patches to PGP tools, isRevoke method on PGPPublicKey. &lt;/li&gt;
&lt;li&gt;Vladimir Molotkov &lt;vladimir.n.molotkov@064intel.com&gt; - extensive provider exception handling compliance testing. &lt;/li&gt;
&lt;li&gt;Florin Kollan &lt;adlocflo@064web.de&gt; - fix to ElGamalKeyParameters equality testing. &lt;/li&gt;
&lt;li&gt;Pavel Vassiliev &lt;paulvas@064gmail.com&gt; - Initial GOST28147Mac implementation. &lt;/li&gt;
<li>Tom Pesman &lt;tom@tnux.net&gt; - addition of DES-EDE encryption for RSA Private keys to PEMWriter.</li>
<li>Lukasz Kowalczyk &lt;lukasz.b.kowalczyk@064gmail.com&gt; - patch to fix parsing issue with OpenSSL PEM based certificate requests.</li>
<li>Arndt Hasch &lt;Arndt.Hasch@064maxence.de&gt; - additional fix for partial reading with new style PGP packets.</li>
<li>Fix Bernd (KCDP 11) &lt;bernd.fix@credit-suisse.com&gt; - fix for 31 byte issue and exception throwing by Whirlpool.</li>
<li>David M. Lee &lt;dmlee@064Crossroads.com&gt; - code for add and remove secret key in the PGPSecretKeyRing class. Additions to S/MIME and CMS unit tests.</li>
<li>Mike Dillon &lt;md5@064embody.org&gt; - additional checks for PGP secret and public key construction, patches to copyWithNewPassword.</li>
<li>tu-vi cung &lt;t2cung@hotmail.com&gt; - patch for out of bounds problem in getDecoderStream method.</li>
<li>Chris Schultz &lt;cschultz@064gmail.com&gt; - fix for InputStream constructor for X509V2AttributeCertificate.</li>
<li>David M. Lee &lt;dmlee@064Crossroads.com&gt; - implementation assistance with streaming CMS classes.</li>
<li>Joel Rees &lt;rees@064ddcom.co.jp&gt; - fix to correct getOID methods from returning same set on X.509 attribute certificates.</li>
<li>Francesc Sau &lt;francesc.sau@064partners.netfocus.es&gt; - micro fix for tsp Accuracy class.</li>
<li>Larry Bugbee &lt;bugbee@064mac.com&gt; - initial ECNR implementation.</li>
<li>Remi Blancher &lt;Remi.Blancher@064keynectis.com&gt; - Contributions to TSP implementation. Initial implementation of RFC 3739 and ICAO ASN.1 classes.</li>
<li>Brian O'Rourke &lt;rianorourke@064gmail.com&gt; - patch for signature creation time override in OpenPGP.</li>
<li>Andreas Schwier &lt;andreas.schwie@064cardcontact.de&gt; - implementation of ISO9797 MAC Algorithm 3, addition of DES-EDE 64 MAC to the provider, fix to EC point encoding, addition of EC and RSA-PSS OIDs to CMS, addition of AES-CMAC and DESede-CMAC to JCE provider.</li>
<li>David Josse &lt;david.josse@064transacttools.net&gt; - Patch for trailer function in version 2 signature packets.</li>
<li>Kishimoto Kazuhiko &lt;kazu-k@064hi-ho.ne.jp&gt; - RFC 3280 updates to policy processing in the CertPath validator. Additional test data not covered by NIST.</li>
<li>Lawrence Tan &lt;lwrntan@gmail.com&gt; - Large field OID sample test data. Missing key types in JDKKeyFactory.</li>
<li>Carlos Valiente &lt;superdupont@064gmail.com&gt; - Addition of CRL writing to the PEMWriter class.</li>
<li>Keyon AG, Martin Christinat, &lt;a href="http://www.keyon.ch">http://www.keyon.ch</a&gt; - fixing incorrect ASN.1 encoding of field elements in X9FieldElement class.</li>
<li>Olaf Keller, &lt;olaf.keller@064bluewin.ch&gt; - initial implementation of the elliptic curves over binary fields F2m. Additional tests and modifications to elliptic curve support for both F2m and Fp. Performance improvements to F2m multiplication. Initial implementation of WNAF/WTNAF point multiplication. Improvement to k value generation in ECDSA.</li>
<li>Jaouml;rg Eichhorn &lt;teichhorn@064ponton-consulting.de&gt; - patch to fix EOF read on SharedFileInputStream, support for F2m compression.</li>
<li>Karsten Ohme &lt;widersandt@064t-online.de&gt; - initial check against for out of range data on non byte aligned RSA keys. Addition of equals/hashCode on ECCurve.Fp. Additional curve type support for Fp, contributions to F2m compression. F2m decoding for ECPointUtil. Infinity fix and prime192v2 fix for Fp. Extra validation for RSA key creation. Fix to name typos for some OpenSSL key generators. RFC-1779 table, improved...
RFC 2253 compliance for X509Name. Additional constructor validation for X.509/ESS ASN.1 classes. Validation for Printable, IA5, and Numeric Strings. Fix for RFC 5280 NameConstraint checking for RDNs.


CertPath support for implicit DSA parameters and a range of NameConstraints. Addition of support for V1 attribute certificates and attribute certificate path validation. Initial classes for ASN.1 ISIS-MTT support. Enhancements for improving compliance with the NIST CertPath tests.

Carlos Lozano Ruiz &lt;carlos@tradise.com&gt; - patch for &lt;&lt;ctrl&gt;&lt;m&gt; only handling in CRLFOutputStream.

John Alfred Prufrock &lt;j.a.prufrock@64gmail.com&gt; - mods to GOST-3411 and MD2 to support ExtendedDigest.

Stefan Neusatz Guilhen &lt;stneusatz@64gmail.com&gt; - initial version of RoleSyntax, improvements to AttributeCertificateHolder and AttributeCertificateIssuer.

Marzio Lo Giudice &lt;marzio.logiudice@64gmail.com&gt; - fix to endianess in KDF2BytesGenerator, additional KDF2 tests.

Georg Lippold &lt;georg.lippold@64gmx.de&gt; - initial implementation of NaccacheStern cipher.

Chris Viles &lt;chris_viles@64yahoo.com&gt; - fix to SignatureSubpacket critical bit setting.

Pasi Eronen &lt;pasi.eronen@64nokia.com&gt; - extra toString() support for ASN.1 library. Initial patch for large OID components.


Maria Ivanova &lt;maria.ivanova@64gmail.com&gt; - support for tags > 30 in ASN.1 parsing.

Armin Hauml.berling &lt;arminha@64student.ethz.ch&gt; - first cut of internationalisation, initial PKIX validation classes.

Marius Schilder &lt;m.schilder@64google.com&gt; - main set of test vectors for Bleichenbacher's forgery attack.

Xavier Le Vourch &lt;xavier@64brittanysoftware.com&gt; - general code clean ups.

Erik Tews &lt;e_tews@64cde.informatik.tu-darmstadt.de&gt; - initial threaded random seed generator, constant-time PKCS#1.5 decoding.

Thomas Dixon &lt;reikomusha@64gmail.com&gt; - initial implementations of TEA/XTEA, Salsa20, ISAAC, and Noekeon. XTEA enhancements.

Frank Cornelis &lt;info@64frankcornelis.be&gt; - addition of crlAccessMethod in X509ObjectIdentifiers.

Rui Joaquim &lt;rojaquim@64cc.isel.ipl.pt&gt; - initial implementation of RSA blinding for signatures.

David Stacey &lt;DStacey@64allantgroup.com&gt; - addition of trust packet checking on revocation signatures in PGPSecretKeyRing.

Martijn Brinkers &lt;list@64mitm.nl&gt; - better exception handling in CMS enveloping, “just in time” modifications for CRL and Sequence evaluation.

Julius Davies &lt;juliusdavies@64gmail.com&gt; - additional modes and algorithm support in PEMReader.

Matthias &lt;g@64rtner.de&gt; - GnuPG compatibility changes for PBEFileProcessor.

Olga K&amp;uml;ther &lt;olga.kaether@64hip-consulting.com&gt; - initial implementation of TeleTruST EC curves, additional ISO 9797 MACs, contributions to EAC OIDs, addition of EAC algorithms to CMS Signing.

Germano Rizzo &lt;germano.rizzo@64gmail.com&gt; - initial implementation of CMac, EAX, HC-128, and
Open Source Used In BGP TE Controller Version 4.3.0

Núria Marí&iacute; &lt;numaa&#064;hotmail.com&gt; - patch for alternate data type recognition in CMSSignedDataParser.

Janis Schuller &lt;js&#064;#064tzi.de&gt; - addition of NotationData packets for OpenPGP.

Michael Samblanet &lt;mike&#064;#064samblanet.com&gt; - patches towards improved Sun/default provider support in CMS.

Mike StJohns &lt;mstjohns&#064;comcast.net&gt; - patches for supporting empty subject in X.509 certificate generation, noneWithECDSA, updates to KeyPurposeId.

Ramon Keller &lt;ramon.keller&#064;#064gmx.ch&gt; - patch to deal with null revocations return from other CRL in X509V2CRLGenerator.

Mark Nelson &lt;mark&#064;#064nbr.com&gt; - correction to excluded DN in name constraints processing for PKIX processing.

Eugene Golushkov &lt;eugene_fff&#064;#064ukr.net&gt; - mask fix to single byte read in TlsInputStream.

Julien Pasquier &lt;julienpasquier&#064;#064free.fr&gt; - additional classes for supporting signature policy and signer certificates in the ASN.1 esf and ess libraries.

Peter Knopp &lt;pknopp&#064;#064mtg.de&gt; - fix for named curve recognition in ECGOST key generation.

Jakub Gwozdzi &lt;gwozdziu&#064;#064rpm.pl&gt; - addition of getTsa() to TimeStampTokenInfo.

Bartosz Malkowski &lt;bmalkow&#064;#064tigase.org&gt; - initial implementation of VMPC cipher, VMPRandomGenerator, VMPCMac.

Tal Yacobi &lt;tal.yacobi&#064;octavian-tech.com&gt; - fix for issue in OpenPGP examples [#BJA-55].

Massimiliano Ziccardi &lt;massimiliano.ziccardi&#064;#064gmail.comt&gt; - support for counter signature reading in CMS API, update for multiple counter signature attributes, JCA compliance patch for PEM parsing in CertificateFactory.

Andrey Pavlenko &lt;andrey.a.pavlenko&#064;#064gmail.com&gt; - security manager patch for PKCS1Encoding property check.

J Ross Nicoll &lt;jrn&#064;#064jrn.me.uk&gt; - improved exception handling for getInstance() in ASN.1 library.

Matthew Stevenson &lt;mavricknz&#064;#064yahoo.com&gt; - patch to construtor for CRMF CertSequence.

Gabriele Contini &lt;gcontini&#064;#064hotpop.com&gt; - identified a bug in ASN.1 library with handling of unterminated NDEF s.

Roelof Naude &lt;roelof.naude&#064;#064epiuse.com&gt; - patch for TLS client to send empty client certs in response to HP_CERTIFICATEREQUEST.

Patrick Peck &lt;peck&#064;#064signature.at&gt; - identified problem with DERApplicationSpecific and high tag numbers in ASN.1 library.

Michael LeMay &lt;lemaymd&#064;#064lemaymd.com&gt; - identified problem with EAX [#BJA-93].

Alex Dupre &lt;ale&#064;#064FreeBSD.org&gt; - fix to use of Signature rather than SignatureSpi in provider [#BJA-90]. Addition of null provider use to SignedPublicKeyAndChallenge and PKCS10CertificationRequest.

Michael Schoene &lt;michael&#064;#064sigrd-und-michael.de&gt; - fix of improper handling of null in ExtendedPKIXParameters.setTrustedACIssuers(), check for V2 signingCertificate attribute in TimeStampResponse.validate().

Ion Larrañaga &lt;ilarra&#064;#064s21sec.com&gt; - fix to default partial packet generation in BCPGOutputStream.

Bob Kerns &lt;bob.kerns&#064;#064positscience.com&gt; - fix to hashCode for X509CertificateObject.

Stefan Meyer &lt;stefan.meyer&#064;#064ewe.de&gt; - backport for PKIXCertPathValidator and SMIMESignedMailReviewer.

Robert J. Moore &lt;Robert.J.Moore&#064;#064allanbank.com&gt; - speedups for OpenPGPCFB mode, clean room JCE patches.
Rui Hodai &lt;rui@064po.ntts.co.jp&gt; speed ups for Camellia implementation, CamelliaLightEngine.

Emir Bucalovic &lt;emir.bucalovic@064mail.com&gt; initial implementation of Grain-v1 and Grain-128.

Torbjorn Svensson &lt;ttobbe79@064gmail.com&gt; initial implementation of Grain-v1 and Grain-128.

Paul FitzPatrick &lt;bouncycastle_pfitz@064fitzpatrick.cc&gt; error message fix to X509LDAPCertStoreSpi, comparison fix to BCStrictStyle.

Henrik Andersson &lt;k.henrik.andersson@064gmail.com&gt; addition of UniqueIssuerID to certificate generation.

Cagdas Cirit &lt;cagdascirit@064gmail.com&gt; subjectAlternativeName fix for x509CertStoreSelector.

Harakiri &lt;harakiri_23@064yahoo.com&gt; datahandler patch for attached parts in SMIME signatures.

Pedro Henriques &lt;pmahenriques@064gmail.com&gt; explicit bounds checking for DESKeyGenerator, code simplification for OAEPEncoding.

Lothar Kimmeringer &lt;job@064kimmeringer.de&gt; verbose mode for ASN1Dump, support for DERExternal, DNS performance fix for S/MIME API.

Richard Farr &lt;rfarr.se@064gmail.com&gt; initial SRP-6a implementation.

Thomas Castiglione &lt;castiglione@064au.ibm.com&gt; patch to encoding for CRMF OptionalValidity.

Elisabetta Romani &lt;eromani@064sogei.it&gt; patch for recognising multiple counter signatures.

Robin Lundgren &lt;r737lundgren@064gmail.com&gt; CMPCertificate constructor from X509CertificateStructure fix.

Petr Kadlec &lt;mormegil@064centrum.cz&gt; fix to sign extension key and IV problem in HC-128, HC-256.

Andreas Antener &lt;antener_a@064gmx.ch&gt; fix to buffer reset in AsymmetricBufferedBlockCipher.

Harendra Rawat &lt;hsrawat@064yahoo.com&gt; fix for BERConstructedOctetString.

Rolf Lindemann &lt;lidemann@064trustcenter.de&gt; patch for PKCS12 key store to support more flexible attribute specifications [#BMA-42].

Alex Artamonov &lt;alexart.home@064gmail.com&gt; name look up patch for GOST-2001 parameters.

Mike Lyons &lt;mlyons@064layer7tech.com&gt; work arounds for EC JDK bug 6738532 and JSSE EC naming conventions.

Chris Cole &lt;chris_h_cole@064yahoo.com&gt; identified a problem handling null passwords when loading a BKS keystore.

Tomas Krivanek &lt;tom@064atack.cz&gt; added checking of Sender header to SignedMailValidator.

Michael &lt;emfau@064t-online.de&gt; correction of field error in getResponse method in CertRepMessage.

Trevor Perrin &lt;trevor@064cryptography.com&gt; addition of constant time equals to avoid possible timing attacks.

Markus Kilaring:s &lt;markus@064primekey.se&gt; several enhancements to TimeStampResponseGenerator.

Dario Novakovic &lt;darionis@064yahoo.com&gt; fix for NPE when checking revocation reason on CRL without extensions.

Michael Smith &lt;msmith@064cbnco.com&gt; bug fixes and enhancements to the CMP and CRMF classes, initial Master List classes.

Andrea Zilio &lt;andrea.zilio@064gmail.com&gt; fix for PEM password encryption of private keys.

Alex Birkett &lt;alex@064birkett.co.uk&gt; added support for EC cipher suites in TLS client (RFC 4492) [#BJA-291].

Wayne Grant &lt;wayne@064gmail.com&gt; additional OIDs for PKCS10 and certificate generation support.

Frank Cornelis &lt;info@064frankcornelis.be&gt; additional support classes for CAdES, enhancements to OCSP classes.

Jan Dittberner &lt;jan@064dittberner.info&gt; addHeader patch for SMIME generator.
<li>Bob McGowan &lt;boab.mcgoo@btinternet.com&gt; patch to support different object and mgf digests in PSS signing.</li>
<li>Ivo Matheis &lt;i.matheis@seeburger.de&gt; fix to padding verification in ISO-9796-1.</li>
<li>Marco Sandrini &lt;nessche@064gmail.com&gt; patch to add IV to ISO9797Alg3Mac.</li>
<li>Alf Malf &lt;alfilmalf@064hotmail.com&gt; removal of unnecessary limit in CMSContentInfoParser.</li>
<li>Alfonso Massa &lt;alfonso.mass@064insiel.it&gt; contributions to CMS time stamp classes.</li>
<li>Giacomo Boccardo &lt;gboccardo@064unimaticaspa.it&gt; initial work on CMSTimeStampedDataParser.</li>
<li>Arnis Tartu &lt;arnis@064ut.eu&gt; patches for dealing with OIDs with specific key sizes associated in CMS.</li>
<li>Janusz Sikociski &lt;J.Sikocinski@064gdzie.pl&gt; addition of Features subpacket support to OpenPGP API.</li>
<li>Juri Hudolejev &lt;jhudolejev@064gmail.com&gt; JavaDoc fix to CMSSignedDataParser.</li>
<li>Liane Velten &lt;liane.velten@064hp-consulting.com&gt; fine tuning of code for DHP parameters validation.</li>
<li>Shawn Willden &lt;swillden@064google.com&gt; additional functionality to PGPKeyRing.</li>
<li>Atanas Krachev &lt;akrachev@064gmail.com&gt; added support for revocation signatures in OpenPGP.</li>
<li>Mickael Laiking &lt;mickael.laiking@064keynectis.com&gt; initial cut of EAC classes.</li>
<li>Tim Buktu &lt;tbuktu@064hotmail.com&gt; Initial implementation of NTRU signing and encryption.</li>
<li>Bernd &lt;bernd@064hotmail.com&gt; Fix for open of PGP literal data stream with UTF-8 naming.</li>
<li>Steing Inge Morisbak &lt;stein.inge.morisbak@064BEKK.no&gt; Test code for lower case Hex data in PEM headers.</li>
<li>Andreas Schmid &lt;andreas.schmid@064tngetech.com&gt; Additional expiry time check in PGPKPublicKeys.</li>
<li>Phil Steitz &lt;phil.steitz@gmail.com&gt; Final patch eliminating JCE dependencies in the OpenPGP BC classes.</li>
<li>Ignat Korchagin &lt;ignat.korchagin@064gmail.com&gt; Initial implementation of DSTU-4145-2002, long hash fix for DSTU-4145-2002.</li>
<li>Petar Petrov &lt;p.petrov@064bers-soft.com&gt; Testing and debugging of UTF-8 OpenPGP passwords.</li>
<li>Daniel Fitzpatrick &lt;daniel.f.nwr@064gmail.com&gt; Initial implementation of ephemeral key support for IES, initial implementations of RSA-KEM and ECIES-KEM, initial implementation of homogeneous projective coordinates for EC.</li>
<li>Andy Neilson &lt;andy.neilson@064quest.com&gt; a further patches to deal with multiple providers and PEMReader.</li>
<li>Ted Shaw &lt;xiao.xj@064gmail.com&gt; patch to MiscPEMGenerator for handling new PKCS10CertificationRequests.</li>
<li>Elerseth &lt;elerseth@064WPECGLYbV18R167Vz2Lvd2EUVW99v3yNV3IWROG8.fms&gt; speed up for SIC/CTR mode. Provider compatibility generalisations for EC operations.</li>
<li>Kenny Root &lt;kenny@064the-b.org&gt; patch for issuerAltName, subjectAltName support in X509CertificateObject, BaseBlockCipher.getIV() patch for Aead.</li>
<li>Maarten Bodewes &lt;maarten.bodewes@064gmail.com&gt; initial implementation of HKDF and NIST SP 800-108 MAC based KDF functions.</li>
<li>Philip Clay &lt;phil_b@064yahoo.com&gt; Initial implementation of J-PAKE.</li>
<li>Brian Carlstrom &lt;bdc@064carlstrom.com&gt; compliance patches for some JCA/JCE keystore and ciper classes, miscellaneous code quality improvements, intial provider PBKDF2WithHmacSHA1 SecretKeyFactory.</li>
<li>Samuel Lidé@primekey.se &lt;samuel@064primekey.se&gt; patch to add DSTU-4145 to DefaultSignatureAlgorithmFinder</li>
<li>Sergio Demian Lerner &lt;sergiolerner@certimix.com&gt; pointing out anInfinity issue in ECDSASigner signature verification.</li>
<li>Tim Whittington &lt;Tim.Whittington@orionhealth.com&gt; patch to remove extra init call in CMac, additional of Memoable interface for Digest classes, initial implementation of GMAC, further correctness tests for IV and reset processing in OCB, CCM, and block cipher reset. Initial implementation of Skein, XSalsa20, ChaCha, reduced round Salsa20, Threepass, and the Poly1305 MAC. Documentation updates. Added OCB support to Noekeon and CAST5 in the provider, exception testing for CTS, optimisations for CCM, provider support for AAD cipher methods, safe CipherInput/OutputStream implementations for use with AAD and subsequent bug fixes, cleanup after IDEA patent expiry, work on JCE SipHash support, optimisations for AESFastEngine, further work on EncodableDigest for SHA-2 digests, contributions to BCrypt/OpenBSDBCrypt, PGP API documentation and code quality work.</li>
<li>Marcus Lundblad &lt;marcus.lundblad@primekey.se&gt; patch for working around JDK jarsigner TSP bug, optional setting of IssuerSerial in TimeStampTokenGenerator, additional extensions enhancement for time stamp token generation.</li>
<li>Andrey Zhozhin &lt;zhozhin@xrm.ru&gt; patch for override of TSP SignedInfo attributes.</li>
<li>Sergey Tiunov &lt;5555d@064gmail.com&gt; initial cut of DVCS classes.</li>
<li>Damian Kolas &lt;fatfredyy@064gmail.com&gt; ASN1Sequence patch for class cast issue in X9Curve.</li>
<li>Ash Hughes &lt;ashley.hughes@064blueyonder.co.uk&gt; patches for supporting PGPSecretKeyRing/PGPSecretKeys encodings with empty private keys, initial code for PGPSignatureSubpacketVector.getEmbeddedSignatures().</li>
<li>Andi Hirsch &lt;dev@064ndaniel-hirsch.de&gt; patch to support parsing of explicit EC parameters in PEM files.</li>
<li>Daniele Ricci &lt;daniele.athom@064gmail.com&gt; initial implementation of EC keys for OpenPGP and RFC6637 support.</li>
<li>Mathias Herberts &lt;Mathias.Herberts@064gmail.com&gt; fix to inOff usage in RFC3394WrapEngine.</li>
<li>Daniil Ivanov &lt;daniil.ivanov@064gmail.com&gt; addition of provider support for GOST HMAC SecretKeyFactory.</li>
<li>Daniele Grasso &lt;daniele.grasso86@064gmail.com&gt; contributions to final Key calculation code for SRP6.</li>
<li>Andrey Utkin &lt;cindrhc@064gmail.com&gt; patch to reconstruction of ECGOST keys from PrivateKeyInfo objects in provider classes.</li>
<li>Arnis Tartu &lt;arnis@064ut.ee&gt; checker for generated key vs OID in JceCMSContentEncryptorBuilder.</li>
<li>AxelVDB &lt;axel-vdb@riseup.net&gt; initial implementation of Shacal2.</li>
<li>Roberto Tyley &lt;&gt; further work on completing gradle build.</li>
<li>Waldemar Dick &lt;wdick@064devmue.de&gt; code improvement in x500 ASN.1 package.</li>
<li>Sid Steward &lt;sid.steward@064pdflabs.com&gt; code improvements to ASN1Boolean.</li>
<li>Alex Klyubin &lt;klyubin@064google.com&gt; AlgorithmParameters check for EC key agreement.</li>
<li>Jonathan Gillett &lt;gsoc.student@064gmail.com&gt; Initial support for block cipher IVs in IESEngine, IES MAC length check bug fix.</li>
<li>Andreas Reiter &lt;andreis.reiter@064iaik.tugraz.at&gt; Reported incomplete status of CertificateVerify
processing in (D)TLS server, and provided fix.</li>
<li>Kieran Miller &lt;kieran.miller#064gmail.com&gt; initial implementation for RFC 5649 key wrap with padding.</li>
<li>Oliver Ehli &lt;ehli#064arago.de&gt; Additional support for BSI plain ECDSA in the provider.</li>
<li>Daniel Heldt &lt;Daniel.Heldt#064cryptovision.com&gt; Initial support for encodable state message digests.</li>
<li>Robert Bushman &lt;bouncycastle#064traxel.com&gt; Clean up of DirectKeySignature example.</li>
<li>Maurice Aarts &lt;aarts#064risecure.com&gt; updated to KDF generator to follow NIST SP 800-108.</li>
<li>Franziskus Kiefer &lt;https://github.com/franziskuskiefer&gt; initial implementation of Cramer-Shoup.</li>
<li>KB Sriram &lt;mail_kb#064yahoo.com&gt; testing for odd encodings for PGP User Attribute Subpackets.</li>
<li>Kieran Miller &lt;kieran.miller#064gmail.com&gt; initial implementation for RFC 5649 key wrap with padding.</li>
<li>Oliver Ehli &lt;ehli#064arago.de&gt; Additional support for BSI plain ECDSA in the provider.</li>
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<li>Oliver Ehli &lt;ehli#064arago.de&gt; Additional support for BSI plain ECDSA in the provider.</li>
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<li>Maurice Aarts &lt;aarts#064risecure.com&gt; updated to KDF generator to follow NIST SP 800-108.</li>
<li>Franziskus Kiefer &lt;https://github.com/franziskuskiefer&gt; initial implementation of Cramer-Shoup.</li>
<li>KB Sriram &lt;mail_kb#064yahoo.com&gt; testing for odd encodings for PGP User Attribute Subpackets.</li>
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<li>Oliver Ehli &lt;ehli#064arago.de&gt; Additional support for BSI plain ECDSA in the provider.</li>
<li>Daniel Heldt &lt;Daniel.Heldt#064cryptovision.com&gt; Initial support for encodable state message digests.</li>
<li>Robert Bushman &lt;bouncycastle#064traxel.com&gt; Clean up of DirectKeySignature example.</li>
<li>Maurice Aarts &lt;aarts#064risecure.com&gt; updated to KDF generator to follow NIST SP 800-108.</li>
<li>Franziskus Kiefer &lt;https://github.com/franziskuskiefer&gt; initial implementation of Cramer-Shoup.</li>
<li>KB Sriram &lt;mail_kb#064yahoo.com&gt; testing for odd encodings for PGP User Attribute Subpackets.</li>
<li>Kieran Miller &lt;kieran.miller#064gmail.com&gt; initial implementation for RFC 5649 key wrap with padding.

Open Source Used In BGP TE Controller Version 4.3.0 2601
bschuette &lt;https://github.com/bschuette&gt; Fixed typo in DefaultSignatureAlgorithmIdentifierFinder, additional methods on CMSSignedDataParser.

Leonard Dallot &lt;https://github.com/dalloatztag&gt; Fix to S2K usage of none on changing passwords on keys without passwords originally.

Jan Willem Janssen &lt;j.w.janssen@bouncycastle.nl&gt; Support for DSAParameters in lightweight SubjectPublicKeyInfoFactory, initial object signer verifier for BC lightweight EC.

Sebastian Oerding &lt;sebastian.oerding@robotron.de&gt; Fixes to toString() in X509.CertificatePolicies.

Kai Kramer &lt;Kai.kramer@604gmail.com&gt; Code to deal with orphaned chain certificates in the PKCS#12 KeyStore.

Benoit Charles &lt;benoit.charles@604opentrust.com&gt; Fix for IES data length check on decryption.

Niko &lt;nink95@604gmail.com&gt; Fix to cast issue in getOutputSize() for ECIES.

akwizgran &lt;https://github.com/akwizgran&gt; Fixed clone of key in Blake2bDgest copy constructor, Blake2b reset issue for variant keys.

Matthias Edelhoff &lt;Matthias.Edelhoff@604cryptovision.com&gt; BasicConstraintsValidation pathlen fix in PKIX certpath classes.

Lukasz Deputat &lt;lukasz.deputat@604gmail.com&gt; Fixed bugs in TlsUtils read methods [#BJA-592].

Justin Ludwig &lt;https://github.com/justinludwig&gt; Iterator fix for PGPOrjectFactory to handle stream packets at start of iterated data.

Andr&eacute;eacute; Berenguel &lt;https://github.com/aberenguel&gt; Fix to include ECNamedCurveSpec in EC AlgorithmParameterSpi.

Slawomir Jarosinski &lt;https://github.com/slawejkjarosinski&gt; Patch to make cipher/hash/signature name methods in PGP internal API public.

Andrey Vasilyev &lt;https://github.com/andrey-vasilyev&gt; Initial implementation of GOST R 34.11-2012.

William Glanton &lt;wglanton77@604gmail.com&gt; Fixed bug in Poly1305 [#BIA-620].

jdvorak001 &lt;https://github.com/jdvorak001&gt; Speed improvements for ASN.1 ObjectIdentifier cache.

Joseph Naegele &lt;jnaegele@604grierforensics.com&gt; Patch for handling multiple certificates in a DANE SMIMEA entry.


The Google Security Team (Project Wycheproof) &lt;https://github.com/google/wycheproof&gt; defect analysis and additional test cases for the provider.

Gorka Irazoqui &lt;girazoki@wpi.edu&gt; from Intel Security Center of Excellence &lt;https://security-center.intel.com/&gt; detection of the issue with AESFastEngine (CVE-2016-100339), additional suggestions for improvement to hardening of AESEngine and finding cache sensitivities in EC key generation/signing.

Joerg Senekowitsch &lt;joerg.senekowitsch@veridos.com&gt; patch to deal with hard coded boolean in EAC ECDSAPublicKey.

Alexandr Krivoshe &lt;wipe@ya.ru&gt; N4 calculation fix to GOFB mode.

Artem Storozhuk &lt;storozh72@604gmail.com&gt; N4 calculation fix to GOFB mode.

Na Yu &lt;na.yu@604samsung.com&gt; Constructor patches to CMC PKIData.

Evangelos Karatsiolis &lt;ekaratsiolis@mtg.de&gt; Corrected use of explicit tagging in X.509 PolicyConstraints class.

VivleSoren &lt;https://github.com/VivleSoren&gt; additional constructor for McElieceCCA2PrivateParameters.

mtausig &lt;https://github.com/mtausig&gt; JavaDoc fix for MCSEncryptedDataGenerator.


Sebastian Wolfgang Roland &lt;sebastianwolfgang.roland@604stud.tu-darmstadt.de&gt; Initial XMSS/XMSS-MT implementation.
<li>didisoft &lt;https://github.com/didisoft&gt; test code for PGP signature removal involving user ids.</li>
<li>Mike Safonov &lt;https://github.com/MikeSafonov&gt; initial implementation of GOST3410-2012 for light weight provider and JCA, parameters patches for ECGOST keys, initial implementation of GOST3412-2015, addition of fromExtensions() for CRLDistPoint.</li>
<li>Artem Storozhuk &lt;storoijs72&#064;gmail.com&gt; initial implementation of DSTU7564 (digest) and DSTU7624 (cipher) and their associated modes.</li>
<li>Andreas Glaser &lt;andreas.glaser&#064;de.com&gt; patch to recognise ANSSI curves for PKCS#10 requests.</li>
<li>codeborne &lt;https://github.com/chxp&gt; patch to correct OIDs used in public key digest parameters for ECGOST-2012.</li>
<li>FauxFaux &lt;https://github.com/FauxFaux&gt; patch for JDK 1.9 update to DBRG.java.</li>
<li>4garbage &lt;https://github.com/4garbage&gt; patch to allow GOST3410-94 private keys encoded as integers.</li>
<li>ekszz &lt;https://github.com/ekszz&gt; corrections to SM2 signer to include default identity value.</li>
<li>jminer &lt;https://github.com/jminer&gt; fix to Blake2b for hashes in range of 2**64-127 to 2**64.</li>
<li>str4d &lt;https://github.com/str4d&gt; initial implementation of Blake2s.</li>
<li>Scott Woodward &lt;scott&#064;064bitconsulting.com&gt; performance fixes for CTRSP800DRBG.</li>
<li>David Strawn &lt;https://github.com/ismarcte&gt; fix for off by one error in SCRYPRT bounds checking.</li>
<li>chris mccown &lt;0xchrismccown&#064;gmail.com&gt; identification of serialisation issue with XMSS/XMSSMT private keys (see also CVE-2018-1000613).</li>
<li>ZZMarquis &lt;https://github.com/ZZMarquis&gt; offset patches for SM2 encryption and decryption, improvement to Array constant time comparison.</li>
<li>Andreas Kretschmer &lt;https://github.com/Akretsch&gt; NPE fix for CertTemplate.getVersion()</li>
<li>Armin Lunkeit, Michael Tautenhahn &lt;mailto:&amp;gt; identification of M-R test issue on higher certainty values in RSA key pair generation.</li>
<li>Vincent Breitmoser &lt;https://github.com/Valodim&gt; fix to ignore unnecessary checksum calculator on PGP secret key encryption.</li>
<li>Adam Vartanian &lt;https://github.com/flooey&gt; use of ShortBuffer exception and buffer size pre-check in Cipher.doFinal().</li>
<li>Bernd &lt;https://github.com/ekci&gt; Fix to make PGPUtil.pipeFileContents use buffer and not leak file handle.</li>
<li>Shartung &lt;https://github.com/shartung&gt; Additional EC Key Agreement algorithms in support of German BSI TR-031111.</li>
<li>Paul Schaub &lt;https://github.com/vanitasvitae&gt; bringing PGPSecretKey.getUserIds() into line with PGPPublicKey.getUserIds(). Exception message fix in BcPublicKeyDataDecryptorFactory. Additional tests on PGP key ring generation.</li>
<li>Nick of Nexxar &lt;https://github.com/nros&gt; update to OpenPGP package to handle a broader range of EC curves.</li>
<li>catbref &lt;https://github.com/catbref&gt; sample implementation of RFC 7748/Ed25519 (incorporated work from github users Valodim and str4d as well).</li>
<li>gerlion &lt;https://github.com/gerlion&gt; detection of concurrency issue with pre-1.60 EC math library.</li>
<li>fgrieu &lt;fgrieu&#064;gmail.com&gt; identification and suggested fixes for possible timing vulnerability in OAEPEncoding and RSAEngine.</li>
<li>MTG &lt;https://github.com/mtgag&gt; patch for decoding issues in PKIPublicationInfo and CertifiedKeyPair.</li>
<li>Andreas Gadermaier &lt;https://github.com/Akretsch&gt; initial version of Argon2 PBKDF algorithm.</li>
<li>Tony Washer &lt;https://github.com/Akretsch&gt; review of qTesla, Java 1.9 module code, additional test code and debugging for GOST, DSTU, and ECNR algorithms. Initial lightweight implementation of the ZUC ciphers and
macs.

Vincent Bouckaert &lt;https://github.com/veebee&gt;; initial version of RFC 4998 ASN.1 classes.


Gabriel Sroka &lt;https://github.com/gabrielsroka&gt;; corrected comments in RSA validation.

Sarah-mdv &lt;https://github.com/sarah-mdv&gt; improvements to JceKeyTransRecipientInfoGenerator, tests for JournalingSecureRandom, initial implementation of JounaledAlgorithm.

Jesse Feinman &lt;https://github.com/jessefeinman&gt; performance optimisation in RSAKeyParameters.

Gilis95 &lt;https://github.com/Gilis95&gt; improved JSSE compatibility for setEnabledCipherSuites.

Haemin Yoo &lt;https://github.com/yoohaemin&gt; Javadoc fixes.

Antoine Toulme &lt;https://github.com/atoulme&gt; Initial implementation of EthereumIESEngine.

Golden Looly &lt;https://github.com/looly&gt; Patch for addition of C1C3C2 mode to SM2Engine.

Moses Palm&amp;eacute;r, TrueSec &lt;Henrik.Palmer&amp;#064truesec.se&gt; Additional improvements to constant time comparisons.

Ren&amp;eacute; Korthaus&amp;lt;https://github.com/securitykernel&amp;gt; Update to XMSS/XMSS^MT OID values to bring them in line with RFC 8391.

THausherr &lt;https://github.com/THausherr&gt; Addition generic support for CMS/TSP functions.

Gaylor Bosson &lt;https://github.com/Gilthoniel&gt; Initial implementation of Blake2xs.

gaelalaire &lt;https://github.com/gaelalaire&gt; Patch for unprotected PGP private keys as SExpr.

im-scooter &lt;https://github.com/im-scooter&gt; Patch for case-insensitive behaviour of Param-Z.

Nick hitchan &lt;https://github.com/hitchan&gt; Fix for typo in engineInitSign() in EdEc SignatureSpi.

dbusche &lt;https://github.com/dbusche&gt; Argon2 optimisations.

danielheltlt &lt;https://github.com/dheltlt&gt; Fixing encodings in unicode tests to allow a wider range of Java compilers to work. Tweak to inheritance in JceKeyAgreeRecipient.

Ugochukwu Mmaduekwe &lt;https://github.com/Xor-el&gt; Fix for initially bugged legacy Integers.numberOfLeadingZeros method.

Gsealy &lt;https://github.com/Gsealy&gt; addition of PBKDF2withHmacSM3 to the provider.

aphuang2013 &lt;https://github.com/aphuang2013&gt; update to path validation in EST service for ClearPath EST.

Kevin Herron &lt;https://github.com/kevinherron&gt; Initial ChaCha20Poly1305 prototype.

vkreml &lt;https://github.com/svkreml&gt; GOST compliance change for DefaultCMSSignatureEncryptionAlgorithmFinder.

Tobias Ospelt &lt;https://github.com/tobias&amp;#064pentagrid.ch&gt; Identification of 1.63 regression in ASN.1 parsing.

1.166 charset-normalizer 2.0.12

1.166.1 Available under license:

Included and Redistributed Files

17 files are included in the source distribution tar. They are used to verify the standard functions of this library. They are mandatory to run `pytest` but not required to make the lib usable after install. They DO NOT guarantee that the detection-coverage will not regress.
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contains portions of the Library), rather than a "work that uses the
library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file
that is part of the Library, the object code for the work may be a
derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
file is unrestricted, regardless of whether it is legally a derivative
work. (Executables containing this object code plus portions of the
Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

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1.170 itsdangerous 1.1.0

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.. rst-class:: hide-header

itsdangerous

============

.. image:: _static/itsdangerous-logo.png
   :align: center
   :target: https://palletsprojects.com/p/itsdangerous/

Sometimes you just want to send some data to untrusted environments. But how to do this safely? The trick involves signing. Given a key only you know, you can cryptographically sign your data and hand it over to someone else. When you get the data back you can easily ensure that nobody tampered with it.

Granted, the receiver can decode the contents and look into the package, but they can not modify the contents unless they also have your secret key. So if you keep the key secret and complex, you will be fine.
Internally, itsdangerous uses HMAC and SHA-512 for signing by default. The initial implementation was inspired by Django's signing module <https://docs.djangoproject.com/en/dev/topics/signing/>_. It also supports JSON Web Signatures (JWS). The library is BSD licensed.

Installing
----------

Install and update using `pip`_:

.. code-block:: text

    pip install -U itsdangerous


Example Use Cases
-----------------

- You can serialize and sign a user ID in a URL and email it to them to unsubscribe from a newsletter. This way you don't need to generate one-time tokens and store them in the database. Same thing with any kind of activation link for accounts and similar things.
- Signed objects can be stored in cookies or other untrusted sources which means you don't need to have sessions stored on the server, which reduces the number of necessary database queries.
- Signed information can safely do a roundtrip between server and client in general which makes them useful for passing server-side state to a client and then back.

Table of Contents
-----------------

.. toctree::

    signer
    serializer
    exceptions
    timed
    url_safe
    jws
    encoding
    license
    changes
Found in path(s):
* /opt/cola/permits/1160881332_1620412835.08/0/pallets-itsdangerous-1-1-0-0-g6e63598-1-tar-gz/pallets-itsdangerous-6e63598/docs/index.rst

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import io
import re

from setuptools import find_packages
from setuptools import setup

with io.open("README.rst", "rt", encoding="utf8") as f:
    readme = f.read()

with io.open("src/itsdangerous/__init__.py", "rt", encoding="utf8") as f:
    version = re.search(r"__version__ = "(.*?)"", f.read()).group(1)

setup(
    name="itsdangerous",
    version=version,
    url="https://palletsprojects.com/p/itsdangerous/",
    project_urls={
        "Documentation": "https://itsdangerous.palletsprojects.com/",
        "Code": "https://github.com/pallets/itsdangerous",
        "Issue tracker": "https://github.com/pallets/itsdangerous/issues",
    },
    license="BSD",
    author="Armin Ronacher",
    author_email="armin.ronacher@active-4.com",
    maintainer="Pallets Team",
    maintainer_email="contact@palletsprojects.com",
    description="Various helpers to pass data to untrusted environments and back.",
    long_description=readme,
    packages=find_packages("src"),
    package_dir={"": "src"},
    include_package_data=True,
python_requires=">=2.7, !=3.0.*, !=3.1.*, !=3.2.*, !=3.3.*",
classifiers=[
    "Development Status :: 5 - Production/Stable",
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    "License :: OSI Approved :: BSD License",
    "Operating System :: OS Independent",
    "Programming Language :: Python",
    "Programming Language :: Python :: 2",
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    "Programming Language :: Python :: 3.4",
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1.171 virtualenv 15.1.0

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## Source Code
The project maintains the following source code repositories:

* https://github.com/eclipse-ee4j/jersey

## Third-party Content
Hibernate Validator CDI, 6.1.2.Final
* License: Apache License, 2.0
* Project: https://beanvalidation.org/
* Repackaged in org.glassfish.jersey.server.validation.internal.hibernate
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Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548100_1591379813.5/0/perl-Pod-Simple-3.35-395.el8.src.rpm-cosi-expand-archive-dyJZwBE/Pod-Simple-3.35.tar.gz-cosi-expand-archive-HgAXY2Rt/Pod-Simple-3.35/ChangeLog

No license file was found, but licenses were detected in source scan.

sub dump { '[', __esc( @{$_[0]} ), ']' }

# JUNK:

sub __esc { return '' unless @_; my @out; foreach my $in (@_) { push @out, '\"' . $in . '\"'; $out[-1] =~ s/([`^\-\:\:\\\\\`\~\!\#\$\%\^\&\*\(\)])/sprintf( (ord($1) < 256) ? '\x%02X' : '\x{%X}', ord($1)) /eg; } return join ',', @out; }

__END__

=head1 NAME

Pod::Simple::PullParserToken -- tokens from Pod::Simple::PullParser

=head1 SYNOPSIS

Given a $parser that's an object of class Pod::Simple::PullParser (or a subclass)...

while(my $token = $parser->get_token) {
  $DEBUG and print STDERR "Token: ", $token->dump, "\n";
  if($token->is_start) {
    ...access $token->tagname, $token->attr, etc...
  } elsif($token->is_text) {
    ...access $token->text, $token->text_r, etc...
  } elsif($token->is_end) {
    ...access $token->tagname...
=head1 DESCRIPTION

When you do $parser->get_token on a L<Pod::Simple::PullParser>, you should get an object of a subclass of Pod::Simple::PullParserToken.

Subclasses will add methods, and will also inherit these methods:

=item $token->type

This returns the type of the token. This will be either the string "start", the string "text", or the string "end".

Once you know what the type of an object is, you then know what subclass it belongs to, and therefore what methods it supports.

Yes, you could probably do the same thing with code like $token->isa('Pod::Simple::PullParserEndToken'), but that's not so pretty as using just $token->type, or even the following shortcuts:

=item $token->is_start

This is a shortcut for C<< $token->type() eq "start" >>

=item $token->is_text

This is a shortcut for C<< $token->type() eq "text" >>

=item $token->is_end

This is a shortcut for C<< $token->type() eq "end" >>

=item $token->dump

This returns a handy stringified value of this object. This is useful for debugging, as in:

while(my $token = $parser->get_token) {
    $DEBUG and print STDERR "Token: ", $token->dump, "\n";
    ...
}
SEE ALSO

My subclasses:
L<Pod::Simple::PullParserStartToken>,
L<Pod::Simple::PullParserTextToken>, and
L<Pod::Simple::PullParserEndToken>.

L<Pod::Simple::PullParser> and L<Pod::Simple>

SUPPORT

Questions or discussion about POD and Pod::Simple should be sent to the
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This module is managed in an open GitHub repository,
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AUTHOR

Pod::Simple was created by Sean M. Burke <sburke@cpan.org>.
But don't bother him, he's retired.

Pod::Simple is maintained by:

over

item * Allison Randal C<allison@perl.org>

item * Hans Dieter Pearcey C<hdp@cpan.org>
NAME
Pod::Simple::Search - find POD documents in directory trees

SYNOPSIS
use Pod::Simple::Search;
my $name2path = Pod::Simple::Search->new->limit_glob('LWP::*')->survey;
print "Looky see what I found: ",
    join(' ', sort keys %$name2path), "\n";

print "LWPUA docs = ",
    Pod::Simple::Search->new->find('LWP::UserAgent') || "?",
    "\n";

DESCRIPTION

Pod::Simple::Search is a class that you use for running searches
for Pod files. An object of this class has several attributes
(mostly options for controlling search options), and some methods
for searching based on those attributes.

The way to use this class is to make a new object of this class,
set any options, and then call one of the search options
(probably C<survey> or C<find>). The sections below discuss the
syntaxes for doing all that.

CONSTRUCTOR

This class provides the one constructor, called C<new>.
It takes no parameters:

use Pod::Simple::Search;
my $search = Pod::Simple::Search->new;
**ACCESSORS**

This class defines several methods for setting (and, occasionally, reading) the contents of an object. With two exceptions (discussed at the end of this section), these attributes are just for controlling the way searches are carried out.

Note that each of these return `$self` when you call them as `<< $self->I<whatever(value)> >>`. That’s so that you can chain together set-attribute calls like this:

```perl
my $name2path =
    Pod::Simple::Search->new
    -> inc(0) -> verbose(1) -> callback(&blab)
    ->survey(@there);
```

...which works exactly as if you'd done this:

```perl
my $search = Pod::Simple::Search->new;
$search->inc(0);
$search->verbose(1);
$search->callback(&blab);
my $name2path = $search->survey(@there);
```

**over**

This attribute, if set to a true value, means that searches should implicitly add perl's `@INC` paths. This automatically considers paths specified in the `<PERL5LIB>` environment as this is prepended to `@INC` by the Perl interpreter itself.

This attribute's default value is `TRUE`. If you want to search only specific directories, set `$self->inc(0)` before calling `$inc->survey` or `$inc->find`.

**verbose**

This attribute, if set to a nonzero positive value, will make searches output (via `warn`) notes about what they're doing as they do it.

This option may be useful for debugging a pod-related module.

This attribute's default value is zero, meaning that no `warn` messages are produced. (Setting verbose to 1 turns on some messages, and setting it to 2 turns on even more messages, i.e., makes the following search(es) even more verbose than 1 would make them.)
=item $search->limit_glb( I<some-glob-string> );

This option means that you want to limit the results just to items whose podnames match the given glob/wildcard expression. For example, you might limit your search to just "LWP::*", to search only for modules starting with "LWP::*" (but not including the module "LWP" itself); or you might limit your search to "LW*" to see only modules whose (full) names begin with "LW"; or you might search for "*Find*" to search for all modules with "Find" somewhere in their full name. (You can also use "?" in a glob expression; so "DB?" will match "DBI" and "DBD".)

=item $search->callback( I<\&some_routine> );

This attribute means that every time this search sees a matching Pod file, it should call this callback routine. The routine is called with two parameters: the current file's filespec, and its pod name. (For example: C<("/etc/perljunk/File/Crunk.pm", "File::Crunk")> would be in C<@_>.)

The callback routine's return value is not used for anything.

This attribute's default value is false, meaning that no callback is called.

=item $search->laborious( I<true-or-false> );

Unless you set this attribute to a true value, Pod::Search will apply Perl-specific heuristics to find the correct module PODs quickly. This attribute's default value is false. You won't normally need to set this to true.

Specifically: Turning on this option will disable the heuristics for seeing only files with Perl-like extensions, omitting subdirectories that are numeric but do I<not> match the current Perl interpreter's version ID, suppressing F<site_perl> as a module hierarchy name, etc.

=item $search->recurse( I<true-or-false> );

Unless you set this attribute to a false value, Pod::Search will recurse into subdirectories of the search directories.

=item $search->shadows( I<true-or-false> );

Unless you set this attribute to a true value, Pod::Simple::Search will consider only the first file of a given modulename as it looks thru the specified directories; that is, with this option off, if Pod::Simple::Search has seen a C<somepathdir/Foo/Bar.pm> already in this
search, then it won't bother looking at a `somelaterpathdir/Foo/Bar.pm`
later on in that search, because that file is merely a "shadow". But if
you turn on `<< $self->shadows(1) >>`, then these "shadow" files are
inspected too, and are noted in the pathname2podname return hash.

This attribute's default value is false; and normally you won't
need to turn it on.

=item $search->limit_re( I<some-regexp> );

Setting this attribute (to a value that's a regexp) means that you want
to limit the results just to items whose podnames match the given
regexp. Normally this option is not needed, and the more efficient
C<limit_glob> attribute is used instead.

=item $search->dir_prefix( I<some-string-value> );

Setting this attribute to a string value means that the searches should
begin in the specified subdirectory name (like "Pod" or "File::Find",
also expressible as "File/Find"). For example, the search option
`<< $search->limit_glob("File::Find::R*") >>`
is the same as the combination of the search options
`<< $search->limit_re("^File::Find::R") -> dir_prefix("File::Find") >>`.

Normally you don't need to know about the C<dir_prefix> option, but I
include it in case it might prove useful for someone somewhere.

(Implementationally, searching with limit_glob ends up setting limit_re
and usually dir_prefix.)

=item $search->progress( I<some-progress-object> );

If you set a value for this attribute, the value is expected
to be an object (probably of a class that you define) that has a
C<reach> method and a C<done> method. This is meant for reporting
progress during the search, if you don't want to use a simple
callback.

Normally you don't need to know about the C<progress> option, but I
include it in case it might prove useful for someone somewhere.

While a search is in progress, the progress object's C<reach> and
C<done> methods are called like this:

# Every time a file is being scanned for pod:
$progress->reach($count, "$Scanning $file");  ++$count;

# And then at the end of the search:
$progress->done("Noted $count Pod files total");

Internally, we often set this to an object of class
Pod::Simple::Progress. That class is probably undocumented,
but you may wish to look at its source.

=item $name2path = $self->name2path;

This attribute is not a search parameter, but is used to report the
result of C<survey> method, as discussed in the next section.

=item $path2name = $self->path2name;

This attribute is not a search parameter, but is used to report the
result of C<survey> method, as discussed in the next section.

=back

=head1 MAIN SEARCH METHODS

Once you've actually set any options you want (if any), you can go
ahead and use the following methods to search for Pod files
in particular ways.

=head2 C<< $search->survey( @directories ) >>

The method C<survey> searches for POD documents in a given set of
files and/or directories. This runs the search according to the various
options set by the accessors above. (For example, if the C<inc> attribute
is on, as it is by default, then the perl @INC directories are implicitly
added to the list of directories (if any) that you specify.)

The return value of C<survey> is two hashes:

=over

=item C<name2path>

A hash that maps from each pod-name to the filespec (like
"Stuff::Thing" => "/whatever/plib/Stuff/Thing.pm")

=item C<path2name>

A hash that maps from each Pod filespec to its pod-name (like "/whatever/plib/Stuff/Thing.pm" => "Stuff::Thing")

=back

Besides saving these hashes as the hashref attributes C<name2path> and C<path2name>, calling this function also returns these hashrefs. In list context, the return value of C<< $search->survey >> is the list C<(%name2path, %path2name)>.
In scalar context, the return value is C<%name2path>.
Or you can just call this in void context.

Regardless of calling context, calling C<survey> saves its results in its C<name2path> and C<path2name> attributes.

E.g., when searching in F<$HOME/perl5lib>, the file F<$HOME/perl5lib/MyModule.pm> would get the POD name I<MyModule>, whereas F<$HOME/perl5lib/Myclass/Subclass.pm> would be I<Myclass::Subclass>. The name information can be used for POD translators.

Only text files containing at least one valid POD command are found.

In verbose mode, a warning is printed if shadows are found (i.e., more than one POD file with the same POD name is found, e.g. F<CPAN.pm> in different directories). This usually indicates duplicate occurrences of modules in the I<@INC> search path, which is occasionally inadvertent (but is often simply a case of a user's path dir having a more recent version than the system's general path dirs in general.)

The options to this argument is a list of either directories that are searched recursively, or files. (Usually you wouldn't specify files, but just dirs.) Or you can just specify an empty-list, as in $name2path; with the C<inc> option on, as it is by default.

The POD names of files are the plain basenames with any Perl-like extension (.pm, .pl, .pod) stripped, and path separators replaced by C<::>'s.

Calling Pod::Simple::Search->search(...) is short for Pod::Simple::Search->new->search(...). That is, a throwaway object with default attribute values is used.

=head2 C<< $search->simplify_name( $str ) >>

The method B<simplify_name> is equivalent to B<basename>, but also strips Perl-like extensions (.pm, .pl, .pod) and extensions like
F<.bat>, F<.cmd> on Win32 and OS/2, or F<.com> on VMS, respectively.

=head2 C<< $search->find( $pod ) >>

=head2 C<< $search->find( $pod, @search_dirs ) >>

Returns the location of a Pod file, given a Pod/module/script name (like "Foo::Bar" or "perlvar" or "perldoc"), and an idea of what files/directories to look in.
It searches according to the various options set by the accessors above.
(For example, if the C<inc> attribute is on, as it is by default, then the perl @INC directories are implicitly added to the list of directories (if any) that you specify.)

This returns the full path of the first occurrence to the file.
Package names (eg 'A::B') are automatically converted to directory names in the selected directory. Additionally, '.pm', '.pl' and '.pod' are automatically appended to the search as required.
(So, for example, under Unix, "A::B" is converted to "somedir/A/B.pm", "somedir/A/B.pod", or "somedir/A/B.pl", as appropriate.)

If no such Pod file is found, this method returns undef.

If any of the given search directories contains a F<pod/> subdirectory, then it is searched. (That's how we manage to find F<perlfunc>, for example, which is usually in F<pod/perlfunc> in most Perl dists.)

The C<verbose> and C<inc> attributes influence the behavior of this search; notably, C<inc>, if true, adds @INC I<and also $Config::Config{'scriptdir'}> to the list of directories to search.

It is common to simply say C<< $filename = Pod::Simple::Search-> new
->find("perlvar") >> so that just the @INC (well, and scriptdir) directories are searched. (This happens because the C<inc> attribute is true by default.)

Calling Pod::Simple::Search->find(...) is short for
Pod::Simple::Search->new->find(...). That is, a throwaway object with default attribute values is used.

=head2 C<< $self->contains_pod( $file ) >>

Returns true if the supplied filename (not POD module) contains some Pod documentation.

=head1 SUPPORT
Questions or discussion about POD and Pod::Simple should be sent to the pod-people@perl.org mail list. Send an empty email to pod-people-subscribe@perl.org to subscribe.

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=head1 AUTHOR

Pod::Simple was created by Sean M. Burke <sburke@cpan.org> with code borrowed from Marek Rouchal's L<Pod::Find>, which in turn heavily borrowed code from Nick Ing-Simmons' C<PodToHtml>.

But don't bother him, he's retired.

Pod::Simple is maintained by:

=over

=item * Allison Randal C<allison@perl.org>

=item * Hans Dieter Pearcey C<hdp@cpan.org>

=item * David E. Wheeler C<dwheeler@cpan.org>

=back

=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548100_1591379813.5/0/perl-Pod-Simple-3.35-395.el8.src.rpm-cosi-expand-archive-dyJZxwBE/Pod-Simple-3.35.tar.gz-cosi-expand-archive-HgAXY2Rt/Pod-Simple-
3.35/lib/Pod/Simple/Search.pm
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=head1 NAME
Pod::Simple::XMLOutStream -- turn Pod into XML

=head1 SYNOPSIS
perl -MPod::Simple::XMLOutStream -e \n  "exit Pod::Simple::XMLOutStream->filter(shift)->any_errata_seen" \n  thingy.pod

=head1 DESCRIPTION
Pod::Simple::XMLOutStream is a subclass of L<Pod::Simple> that parses
Pod and turns it into XML.

Pod::Simple::XMLOutStream inherits methods from
L<Pod::Simple>.

=head1 SEE ALSO
L<Pod::Simple::DumpAsXML> is rather like this class; see its
documentation for a discussion of the differences.

L<Pod::Simple>, L<Pod::Simple::DumpAsXML>, L<Pod::SAX>
L<Pod::Simple::Subclassing>

The older (and possibly obsolete) libraries L<Pod::PXML>, L<Pod::XML>

=head1 ABOUT EXTENDING POD
TODO: An example or two of =extend, then point to Pod::Simple::Subclassing

=head1 SEE ALSO
L<Pod::Simple>, L<Pod::Simple::Text>, L<Pod::Spell>

=head1 SUPPORT
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pod-people@perl.org mail list. Send an empty email to
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=item * Hans Dieter Pearcey <hdp@cpan.org>

=item * David E. Wheeler <dwheeler@cpan.org>

=back

=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548100_1591379813.5/0/perl-Pod-Simple-3.35-395.el8.src.rpm-cosi-expand-archive-dyJZxwBE/Pod-Simple-3.35.tar.gz-cosi-expand-archive-HgAXY2Rt/Pod-Simple-3.35/lib/Pod/Simple/XMLOutStream.pm

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=head1 NAME

Pod::Simple::PullParserTextToken -- text-tokens from Pod::Simple::PullParser

=head1 SYNOPSIS
(See L<Pod::Simple::PullParser>)

=head1 DESCRIPTION

When you do $parser->get_token on a L<Pod::Simple::PullParser>, you might get an object of this class.

This is a subclass of L<Pod::Simple::PullParserToken> and inherits all its methods, and adds these methods:

=over

=item $token->text

This returns the text that this token holds. For example, parsing Czug<<foo> will return a C start-token, a text-token, and a C end-token. And if you want to get the "foo" out of the text-token, call Czug $token->text >>

=item $token->text(I<somestring>)

This changes the string that this token holds. You probably won't need to do this.

=item $token->text_r()

This returns a scalar reference to the string that this token holds. This can be useful if you don't want to memory-copy the potentially large text value (well, as large as a paragraph or a verbatim block) as calling $token->text would do.

Or, if you want to alter the value, you can even do things like this:

for ( ${  $token->text_r  } ) {  #Aliases it with $_ !!

    s/ The / the /g; # just for example

    if( 'A' eq chr(65) ) {  # if in an ASCII world
        tr/\xA0//;
        tr/\xAD//d;
    }

...or however you want to alter the value...
(Note that starting with Perl v5.8, you can use, e.g.,

    my $nbsp = chr utf8::unicode_to_native(0xA0);
    s/$nbsp/ /g;
to handle the above regardless if it's an ASCII world or not)

=back

You're unlikely to ever need to construct an object of this class for yourself, but if you want to, call
C<<
Pod::Simple::PullParserTextToken->new( I<text> )
>>

=head1 SEE ALSO

L<Pod::Simple::PullParserToken>, L<Pod::Simple>, L<Pod::Simple::Subclassing>

=head1 SUPPORT

Questions or discussion about POD and Pod::Simple should be sent to the pod-people@perl.org mail list. Send an empty email to pod-people-subscribe@perl.org to subscribe.

This module is managed in an open GitHub repository, L<https://github.com/perl-pod/pod-simple/>. Feel free to fork and contribute, or to clone L<git://github.com/perl-pod/pod-simple.git> and send patches!

Patches against Pod::Simple are welcome. Please send bug reports to <bug-pod-simple@rt.cpan.org>.

=head1 COPYRIGHT AND DISCLAIMERS

Copyright (c) 2002 Sean M. Burke.

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

This program is distributed in the hope that it will be useful, but without any warranty; without even the implied warranty of merchantability or fitness for a particular purpose.

=head1 AUTHOR

Pod::Simple was created by Sean M. Burke <sburke@cpan.org>. But don't bother him, he's retired.

Pod::Simple is maintained by:

=over
NAME
perlfaq3 - Programming Tools ($Revision: 1.38 $, $Date: 1999/05/23 16:08:30 $)

DESCRIPTION
This section of the FAQ answers questions related to programmer tools and programming support.

How do I do (anything)?
Have you looked at CPAN (see perlfaq2)? The chances are that someone has already written a module that can solve your problem. Have you read the appropriate man pages? Here's a brief index:

- Basics perldata, perlvar, perlsyn, perlop, perlsub
- Execution perlrun, perldebug
- Functions perlfnc
- Objects perlref, perlmod, perlobj, perlite
- Data Structures perlref, perllol, perldsc
- Modules perlmod, perlmodlib, perlsub
- Regexes perlre, perlfunc, perlop, perllocale
- Moving to perl5 perltrp, perl
- Linking w/C perlxsut, perlx, perlcall, perlguts, perlembed

A crude table of contents for the Perl man page set is found in perltoc.

How can I use Perl interactively?
The typical approach uses the Perl debugger, described in the perldump(1) man page, on an `empty" program, like this:

perl -de 42

Now just type in any legal Perl code, and it will be immediately evaluated. You can also examine the symbol table, get stack backtraces, check variable values, set breakpoints, and other operations typically found in symbolic debuggers.

Is there a Perl shell?
In general, no. The Shell.pm module (distributed with Perl) makes Perl try commands which aren't part of the Perl language as shell commands. perlsh from the source distribution is simplistic and uninteresting, but may still be what you want.

How do I debug my Perl programs?
Have you tried use warnings or used -w? They enable warnings to detect dubious practices.
Have you tried use strict? It prevents you from using symbolic references, makes you predeclare any subroutines that you call as bare words, and (probably most importantly) forces you to predeclare your variables with my, our, or use vars.

Did you check the return values of each and every system call? The operating system (and thus Perl) tells you whether they worked, and if not why.

```perl
open(FH, "> /etc/cantwrite")
or die "Couldn't write to /etc/cantwrite: $!
";
```

Did you read perltut? It's full of gotchas for old and new Perl programmers and even has sections for those of you who are upgrading from languages like awk and C.

Have you tried the Perl debugger, described in perldbg? You can step through your program and see what it's doing and thus work out why what it's doing isn't what it should be doing.

How do I profile my Perl programs?

You should get the Devel::DProf module from the standard distribution (or separately on CPAN) and also use Benchmark.pm from the standard distribution. The Benchmark module lets you time specific portions of your code, while Devel::DProf gives detailed breakdowns of where your code spends its time.

Here's a sample use of Benchmark:

```perl
use Benchmark;
@junk = `cat /etc/motd`;
$count = 10_000;
timethese($count, {
    'map' => sub { my @a = @junk;
        map { s/a/b/ } @a;
        return @a
    },
    'for' => sub { my @a = @junk;
        local $_;
        for (@a) { s/a/b/ };
        return @a
    }
});
```

This is what it prints (on one machine--your results will be dependent on your hardware, operating system, and the load on your machine):

```
Benchmark: timing 10000 iterations of for, map...
    for: 4 secs (3.97 usr 0.01 sys = 3.98 cpu)
    map: 6 secs (4.97 usr 0.00 sys = 4.97 cpu)
```

Be aware that a good benchmark is very hard to write. It only tests the data you give it and proves little about the differing complexities of contrasting algorithms.

How do I cross-reference my Perl programs?

The B::Xref module, shipped with the new, alpha-release Perl compiler (not the general distribution prior to the 5.005 release), can be used to generate cross-reference reports for Perl programs.

```perl
perl -MO=Xref[,OPTIONS] scriptname.plx
```

Is there a pretty-printer (formatter) for Perl?

There is no program that will reformat Perl as much as indent(1) does for C. The complex feedback between the scanner and the parser (this feedback is what confuses the vgrind and emacs programs) makes it challenging at best to write a stand-alone Perl parser.

Of course, if you simply follow the guidelines in perlstyle, you shouldn't need to reformat. The habit of formatting your code as you write it will help prevent bugs. Your editor can and should help you with this. The perl-mode or newer cperl-mode for emacs can provide remarkable amounts of help with most (but not all) code, and even less programmable editors can provide significant assistance. Tom swears by the following settings in vi and its clones:
set ai sw=4
map! O {^M}^[O^T
Now put that in your .exrc file (replacing the caret characters with control characters) and away you go. In insert mode, ^T is for indenting, ^D is for undenting, and ^O is for blockdenting-- as it were. If you haven't used the last one, you're missing a lot. A more complete example, with comments, can be found at http://www.perl.com/CPAN-local/authors/id/TOMC/scripts/toms.exrc.gz
If you are used to using the vgrind program for printing out nice code to a laser printer, you can take a stab at this using http://www.perl.com/CPAN/doc/misc/tips/working.vgrind.entry, but the results are not particularly satisfying for sophisticated code.
The a2ps at http://www.infres.enst.fr/~demaille/a2ps/ does lots of things related to generating nicely printed output of documents.
Is there a ctags for Perl?
There's a simple one at http://www.perl.com/CPAN/authors/id/TOMC/scripts/ptags.gz which may do the trick. And if not, it's easy to hack into what you want.
Is there an IDE or Windows Perl Editor?
Perl programs are just plain text, so any editor will do.
If you're on Unix, you already have an IDE--Unix itself. The UNIX philosophy is the philosophy of several small tools that each do one thing and do it well. It's like a carpenter's toolbox.
If you want a Windows IDE, check the following:
  CodeMagicCD
  http://www.codemagiccd.com/
  Komodo
  ActiveState's cross-platform, multi-language IDE has Perl support, including a regular expression debugger and remote debugging (http://www.ActiveState.com/Products/Komodo/index.html). (Visual Perl, a Visual Studio.NET plug-in is currently (early 2001) in beta (http://www.ActiveState.com/Products/VisualPerl/index.html)).
  The Object System
  (http://www.castlelink.co.uk/object_system/) is a Perl web applications development IDE.
  PerlBuilder
  (http://www.solutionsoft.com/perl.htm) is an integrated development environment for Windows that supports Perl development.
  Perl code magic
  (http://www.petes-place.com/codemagic.html).
  visiPerl+
  http://helpconsulting.net/visiperl/, from Help Consulting.
  For editors: if you're on Unix you probably have vi or a vi clone already, and possibly an emacs too, so you may not need to download anything. In any emacs the cperl-mode (M-x cperl-mode) gives you perhaps the best available Perl editing mode in any editor.
  For Windows editors: you can download an Emacs
  GNU Emacs
  http://www.gnu.org/software/emacs/windows/ntemacs.html
  MicroEMACS
  http://members.nbci.com/uemacs/
  XEmacs
  http://www.xemacs.org/Download/index.html
  or a vi clone such as
  Elvis
nvi (http://www.bostic.com/vi/, available from CPAN in src/misc/) is yet another vi clone, unfortunately not available for Windows, but in UNIX platforms you might be interested in trying it out, firstly because strictly speaking it is not a vi clone, it is the real vi, or the new incarnation of it, and secondly because you can embed Perl inside it to use Perl as the scripting language. nvi is not alone in this, though: at least also vim and vile offer an embedded Perl.
The following are Win32 multilanguage editor/IDESs that support Perl:
Codewright
http://www.starbase.com/
MultiEdit
SlickEdit
http://www.slickedit.com/

There is also a toyedit Text widget based editor written in Perl that is distributed with the Tk module on CPAN. The ptkdb (http://world.std.com/~aep/ptkdb/) is a Perl/tk based debugger that acts as a development environment of sorts. Perl Composer (http://perlcomposer.sourceforge.net/vperl.html) is an IDE for Perl/Tk GUI creation.
In addition to an editor/IDE you might be interested in a more powerful shell environment for Win32. Your options include
Bash
from the Cygwin package (http://sources.redhat.com/cygwin/)
Ksh
from the MKS Toolkit (http://www.mks.com/), or the Bourne shell of the U/WIN environment (http://www.research.att.com/sw/tools/uwin/)
Tcsh
Zsh
ftp://ftp.blarg.net/users/amol/zsh/, see also http://www.zsh.org/
MKS and U/WIN are commercial (U/WIN is free for educational and research purposes). Cygwin is covered by the GNU Public License (but that shouldn't matter for Perl use). The Cygwin, MKS, and U/WIN all contain (in addition to the shells) a comprehensive set of standard UNIX toolkit utilities.

If you're transferring text files between Unix and Windows using FTP be sure to transfer them in ASCII mode so the ends of lines are appropriately converted.

On Mac OS the MacPerl Application comes with a simple 32k text editor that behaves like a rudimentary IDE. In contrast to the MacPerl Application the MPW Perl tool can make use of the MPW Shell itself as an editor (with no 32k limit).

BBEdit and BBEdit Lite
are text editors for Mac OS that have a Perl sensitivity mode (http://web.barebones.com/).

Alpha
is an editor, written and extensible in Tcl, that nonetheless has built in support for several popular markup and programming languages including Perl and HTML (http://alpha.olm.net/).
Pepper and Pe are programming language sensitive text editors for Mac OS X and BeOS respectively (http://www.hekkelman.com/).

Where can I get Perl macros for vi?
For a complete version of Tom Christiansen's vi configuration file, see
http://www.perl.com/CPAN/authors/Tom_Christiansen/scripts/toms.exrc.gz, the standard benchmark file for vi emulators. The file runs best with vni, the current version of vi out of Berkeley, which incidentally can be built with an embedded Perl interpreter—see http://www.perl.com/CPAN/src/misc.

Where can I get perl-mode for emacs?

Since Emacs version 19 patchlevel 22 or so, there have been both a perl-mode.el and support for the Perl debugger built in. These should come with the standard Emacs 19 distribution.

In the Perl source directory, you'll find a directory called "emacs", which contains a cperl-mode that color-codes keywords, provides context-sensitive help, and other nifty things.

Note that the perl-mode of emacs will have fits with "main'foo" (single quote), and mess up the indentation and highlighting. You are probably using "main::foo" in new Perl code anyway, so this shouldn't be an issue.

How can I use curses with Perl?

The Curses module from CPAN provides a dynamically loadable object module interface to a curses library. A small demo can be found at the directory http://www.perl.com/CPAN/authors/Tom_Christiansen/scripts/rep; this program repeats a command and updates the screen as needed, rendering rep ps axu similar to top.

How can I use X or Tk with Perl?

Tk is a completely Perl-based, object-oriented interface to the Tk toolkit that doesn't force you to use Tcl just to get at Tk. Sx is an interface to the Athena Widget set. Both are available from CPAN. See the directory http://www.perl.com/CPAN/modules/by-category/08_User_Interfaces/


How can I generate simple menus without using CGI or Tk?

The http://www.perl.com/CPAN/authors/id/SKUNZ/perlmenu.v4.0.tar.gz module, which is curses-based, can help with this.

What is undump?

See the next question on "How can I make my Perl program run faster?"

How can I make my Perl program run faster?

The best way to do this is to come up with a better algorithm. This can often make a dramatic difference. Jon Bentley's book "Programming Pearls" (that's not a misspelling!) has some good tips on optimization, too. Advice on benchmarking boils down to: benchmark and profile to make sure you're optimizing the right part, look for better algorithms instead of microtuning your code, and when all else fails consider just buying faster hardware.

A different approach is to autoload seldom-used Perl code. See the AutoSplit and AutoLoader modules in the standard distribution for that. Or you could locate the bottleneck and think about writing just that part in C, the way we used to take bottlenecks in C code and write them in assembler. Similar to rewriting in C, modules that have critical sections can be written in C (for instance, the PDL module from CPAN).

In some cases, it may be worth it to use the backend compiler to produce byte code (saving compilation time) or compile into C, which will certainly save compilation time and sometimes a small amount (but not much) execution time. See the question about compiling your Perl programs for more on the compiler—the wins aren't as obvious as you'd hope.

If you're currently linking your perl executable to a shared libc.so, you can often gain a 10-25% performance benefit by rebuilding it to link with a static libc.a instead. This will make a bigger perl executable, but your Perl programs (and programmers) may thank you for it. See the INSTALL file in the source distribution for more information.

Unsubstantiated reports allege that Perl interpreters that use sfio outperform those that don't (for I/O intensive applications). To try this, see the INSTALL file in the source distribution, especially the "Selecting File I/O mechanisms" section.

The undump program was an old attempt to speed up your Perl program by storing the already-compiled form to disk. This is no longer a viable option, as it only worked on a few architectures, and wasn't a good solution anyway.

How can I make my Perl program take less memory?
When it comes to time-space tradeoffs, Perl nearly always prefers to throw memory at a problem. Scalars in Perl use more memory than strings in C, arrays take more than that, and hashes use even more. While there's still a lot to be done, recent releases have been addressing these issues. For example, as of 5.004, duplicate hash keys are shared amongst all hashes using them, so require no reallocation.

In some cases, using substr() or vec() to simulate arrays can be highly beneficial. For example, an array of a thousand booleans will take at least 20,000 bytes of space, but it can be turned into one 125-byte bit vector--a considerable memory savings. The standard Tie::SubstrHash module can also help for certain types of data structure. If you're working with specialist data structures (matrices, for instance) modules that implement these in C may use less memory than equivalent Perl modules.

Another thing to try is learning whether your Perl was compiled with the system malloc or with Perl's builtin malloc. Whichever one it is, try using the other one and see whether this makes a difference. Information about malloc is in the INSTALL file in the source distribution. You can find out whether you are using perl's malloc by typing perl -V:usemymalloc.

Is it unsafe to return a pointer to local data?
No, Perl's garbage collection system takes care of this.

```perl
sub makeone {
    my @a = ( 1 .. 10 );
    return \@a;
}
for $i ( 1 .. 10 ) {
    push @many, makeone();
}
print $many[4][5], "\n";
print "@many\n";
```

How can I free an array or hash so my program shrinks?
You can't. On most operating systems, memory allocated to a program can never be returned to the system. That's why long-running programs sometimes re-execute themselves. Some operating systems (notably, FreeBSD and Linux) allegedly reclaim large chunks of memory that is no longer used, but it doesn't appear to happen with Perl (yet). The Mac appears to be the only platform that will reliably (albeit, slowly) return memory to the OS.

We've had reports that on Linux (Redhat 5.1) on Intel, undef $scalar will return memory to the system, while on Solaris 2.6 it won't. In general, try it yourself and see.

However, judicious use of my() on your variables will help make sure that they go out of scope so that Perl can free up that space for use in other parts of your program. A global variable, of course, never goes out of scope, so you can't get its space automatically reclaimed, although undef()ing and/or delete()ing it will achieve the same effect. In general, memory allocation and de-allocation isn't something you can or should be worrying about much in Perl, but even this capability (preallocation of data types) is in the works.

How can I make my CGI script more efficient?
Beyond the normal measures described to make general Perl programs faster or smaller, a CGI program has additional issues. It may be run several times per second. Given that each time it runs it will need to be re-compiled and will often allocate a megabyte or more of system memory, this can be a killer. Compiling into C isn't going to help you because the process start-up overhead is where the bottleneck is.

There are two popular ways to avoid this overhead. One solution involves running the Apache HTTP server (available from http://www.apache.org/) with either of the mod_perl or mod_fastcgi plugin modules. With mod_perl and the Apache:registry module (distributed with mod_perl), httpd will run with an embedded Perl interpreter which pre-compiles your script and then executes it within the same address space without forking. The Apache extension also gives Perl access to the internal server API, so modules written in Perl can do just about anything a module written in C can. For more on mod_perl, see http://perl.apache.org/

With the FCGI module (from CPAN) and the mod_fastcgi module (available from http://www.fastcgi.com/) each of
your Perl programs becomes a permanent CGI daemon process. Both of these solutions can have far-reaching effects on your system and on the way you write your CGI programs, so investigate them with care.

See http://www.perl.com/CPAN/modules/by-category/15_World_Wide_Web_HTML_HTTP_CGI/ . A non-free, commercial product, "The Velocity Engine for Perl", (http://www.binevolve.com/ or http://www.binevolve.com/velocigen/ ) might also be worth looking at. It will allow you to increase the performance of your Perl programs, running programs up to 25 times faster than normal CGI Perl when running in persistent Perl mode or 4 to 5 times faster without any modification to your existing CGI programs. Fully functional evaluation copies are available from the web site.

How can I hide the source for my Perl program?
Delete it. :-) Seriously, there are a number of (mostly unsatisfactory) solutions with varying levels of "security". First of all, however, you can't take away read permission, because the source code has to be readable in order to be compiled and interpreted. (That doesn't mean that a CGI script's source is readable by people on the web, though--only by people with access to the filesystem.) So you have to leave the permissions at the socially friendly 0755 level.

Some people regard this as a security problem. If your program does insecure things and relies on people not knowing how to exploit those insecurities, it is not secure. It is often possible for someone to determine the insecure things and exploit them without viewing the source. Security through obscurity, the name for hiding your bugs instead of fixing them, is little security indeed.

You can try using encryption via source filters (Filter::* from CPAN), but any decent programmer will be able to decrypt it. You can try using the byte code compiler and interpreter described below, but the curious might still be able to de-compile it. You can try using the native-code compiler described below, but crackers might be able to disassemble it. These pose varying degrees of difficulty to people wanting to get at your code, but none can definitively conceal it (true of every language, not just Perl).

If you're concerned about people profiting from your code, then the bottom line is that nothing but a restrictive license will give you legal security. License your software and pepper it with threatening statements like "This is unpublished proprietary software of XYZ Corp. Your access to it does not give you permission to use it blah blah blah." We are not lawyers, of course, so you should see a lawyer if you want to be sure your license's wording will stand up in court.

How can I compile my Perl program into byte code or C?
Malcolm Beattie has written a multifunction backend compiler, available from CPAN, that can do both these things. It is included in the perl5.005 release, but is still considered experimental. This means it's fun to play with if you're a programmer but not really for people looking for turn-key solutions.

Merely compiling into C does not in and of itself guarantee that your code will run very much faster. That's because except for lucky cases where a lot of native type inferencing is possible, the normal Perl run-time system is still present and so your program will take just as long to run and be just as big. Most programs save little more than compilation time, leaving execution no more than 10-30% faster. A few rare programs actually benefit significantly (even running several times faster), but this takes some tweaking of your code.

You'll probably be astonished to learn that the current version of the compiler generates a compiled form of your script whose executable is just as big as the original perl executable, and then some. That's because as currently written, all programs are prepared for a full eval() statement. You can tremendously reduce this cost by building a shared libperl.so library and linking against that. See the INSTALL podfile in the Perl source distribution for details.

If you link your main perl binary with this, it will make it minuscule. For example, on one author's system, /usr/bin/perl is only 11k in size!

In general, the compiler will do nothing to make a Perl program smaller, faster, more portable, or more secure. In fact, it can make your situation worse. The executable will be bigger, your VM system may take longer to load the whole thing, the binary is fragile and hard to fix, and compilation never stopped software piracy in the form of crackers, viruses, or bootleggers. The real advantage of the compiler is merely packaging, and once you see the size
of what it makes (well, unless you use a shared libperl.so), you'll probably want a complete Perl install anyway.
How can I compile Perl into Java?
You can also integrate Java and Perl with the Perl Resource Kit from O'Reilly and Associates. See
Perl 5.6 comes with Java Perl Lingo, or JPL. JPL, still in development, allows Perl code to be called from Java. See
jpl/README in the Perl source tree.
How can I get #!perl to work on [MS-DOS,NT,...]?
For OS/2 just use
extproc perl -S -your_switches
as the first line in *.cmd file (-S due to a bug in cmd.exe's `extproc' handling). For DOS one should first invent a
corresponding batch file and codify it in ALTERNATIVE_SHEBANG (see the INSTALL file in the source
distribution for more information).
The Win95/NT installation, when using the ActiveState port of Perl, will modify the Registry to associate the .pl
extension with the perl interpreter. If you install another port, perhaps even building your own Win95/NT Perl from
the standard sources by using a Windows port of gcc (e.g., with cygwin or mingw32), then you'll have to modify the
Registry yourself. In addition to associating .pl with the interpreter, NT people can use: SET
PATHEXT=%PATHEXT%;.PL to let them run the program install-linux.pl merely by typing install-linux.
Macintosh Perl programs will have the appropriate Creator and Type, so that double-clicking them will invoke the
Perl application.
IMPORTANT!: Whatever you do, PLEASE don't get frustrated, and just throw the perl interpreter into your cgi-bin
directory, in order to get your programs working for a web server. This is an EXTREMELY big security risk. Take
the time to figure out how to do it correctly.
Can I write useful Perl programs on the command line?
Yes. Read perlrun for more information. Some examples follow. (These assume standard Unix shell quoting rules.)
# sum first and last fields
perl -lane 'print $F[0] + $F[-1]' *
# identify text files
perl -le 'for(@ARGV) {print if -f && -T _}' *
# remove (most) comments from C program
perl -0777 -pe 's{/\*.*?\*/}{}gs' foo.c
# make file a month younger than today, defeating reaper daemons
perl -e '$X=24*60*60; utime(time(),time() + 30 * $X,@ARGV)' *
# find first unused uid
perl -le '$i++ while getpwuid($i); print $i'
# display reasonable manpath
echo $PATH | perl -nl -072 -e '
s![^/+]*$!man!&&-d&&!$s{$_}++&&push@m,$_;END{print"@m"}'
OK, the last one was actually an Obfuscated Perl Contest entry. :-)
Why don't Perl one-liners work on my DOS/Mac/VMS system?
The problem is usually that the command interpreters on those systems have rather different ideas about quoting
than the Unix shells under which the one-liners were created. On some systems, you may have to change singlequotes to double ones, which you must NOT do on Unix or Plan9 systems. You might also have to change a single
% to a %%.
For example:
# Unix
perl -e 'print "Hello world\n"'
# DOS, etc.
perl -e "print \"Hello world\n\""

Open Source Used In BGP TE Controller Version 4.3.0 2696


The problem is that none of these examples are reliable: they depend on the command interpreter. Under Unix, the first two often work. Under DOS, it's entirely possible that neither works. If 4DOS was the command shell, you'd probably have better luck like this:

```
perl -e "print <Ctrl-x>"Hello world\n<Ctrl-x>"
```

Under the Mac, it depends which environment you are using. The MacPerl shell, or MPW, is much like Unix shells in its support for several quoting variants, except that it makes free use of the Mac's non-ASCII characters as control characters.

Using qq(), q(), and qx(), instead of "double quotes", 'single quotes', and `backticks`, may make one-liners easier to write.

There is no general solution to all of this. It is a mess, pure and simple. Sucks to be away from Unix, huh? :-)

[Some of this answer was contributed by Kenneth Albanowski.]

Where can I learn about CGI or Web programming in Perl?

For modules, get the CGI or LWP modules from CPAN. For textbooks, see the two especially dedicated to web stuff in the question on books. For problems and questions related to the web, like "Why do I get 500 Errors" or "Why doesn't it run from the browser right when it runs fine on the command line", see these sources:

- **WWW Security FAQ**
  - [http://www.w3.org/Security/Faq/](http://www.w3.org/Security/Faq/)
- **Web FAQ**
- **CGI FAQ**
- **HTTP Spec**
  - [http://www.w3.org/pub/WWW/Protocols/HTTP/](http://www.w3.org/pub/WWW/Protocols/HTTP/)
- **HTML Spec**
  - [http://www.w3.org/TR/REC-html40/](http://www.w3.org/TR/REC-html40/)
  - [http://www.w3.org/pub/WWW/MarkUp/](http://www.w3.org/pub/WWW/MarkUp/)
- **CGI Spec**
  - [http://www.w3.org/CGI/](http://www.w3.org/CGI/)
- **CGI Security FAQ**

Where can I learn about object-oriented Perl programming?

A good place to start is perltoot, and you can use perlobj, perlboot, and perlbot for reference. Perltoot didn't come out until the 5.004 release; you can get a copy (in pod, html, or postscript) from [http://www.perl.com/CPAN/doc/FMTEYEWTK/](http://www.perl.com/CPAN/doc/FMTEYEWTK/).

Where can I learn about linking C with Perl? [h2xs, xsubpp]

If you want to call C from Perl, start with perlxstut, moving on to perlxx, xsubpp, and perl guts. If you want to call Perl from C, then read perleveland, percall, and perl guts. Don't forget that you can learn a lot from looking at how the authors of existing extension modules wrote their code and solved their problems.

I've read perleveland, perl guts, etc., but I can't embed perl in my C program; what am I doing wrong?

Download the ExtUtils::Embed kit from CPAN and run `make test`. If the tests pass, read the pods again and again and again. If they fail, see perlbug and send a bug report with the output of make test TEST_VERBOSE=1 along with perl -V.

When I tried to run my script, I got this message. What does it mean?
A complete list of Perl's error messages and warnings with explanatory text can be found in perldiag. You can also use the splain program (distributed with Perl) to explain the error messages:

```
perl program 2>diag.out
splain [-v] [-p] diag.out
```

or change your program to explain the messages for you:

```perl
use diagnostics;
```

or

```perl
use diagnostics -verbose;
```

What's MakeMaker?

This module (part of the standard Perl distribution) is designed to write a Makefile for an extension module from a Makefile.PL. For more information, see ExtUtils::MakeMaker.

AUTHOR AND COPYRIGHT

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Found in path(s):

```
* /opt/ws_local/PERMITS_SQL/1009548100_1591379813.5/0/perl-Pod-Simple-3.35-395.el8.src.rpm-cosi-expand-archive-dyJzwBE/Pod-Simple-3.35.tar.gz-cosi-expand-archive-HgAXY2Rt/Pod-Simple-3.35/t/perfaqo.txt
```

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=head1 NAME

Pod::Simple::PullParserStartToken -- start-tokens from Pod::Simple::PullParser

=head1 SYNOPSIS

(See L<Pod::Simple::PullParser>)

=head1 DESCRIPTION

When you do $parser->get_token on a L<Pod::Simple::PullParser> object, you might get an object of this class.

This is a subclass of L<Pod::Simple::PullParserToken> and inherits all its methods, and adds these methods:

=over

=item $token->tagname

This returns the tagname for this start-token object.

For example, parsing a "=head1 ..." line will give you a start-token with the tagname of "head1", token(s) for its
content, and then an end-token with the tagname of "head1".

=item $token->tagname(I<somestring>)

This changes the tagname for this start-token object.
You probably won't need
to do this.

=item $token->tag(...)

A shortcut for $token->tagname(...)

=item $token->is_tag(I<somestring>) or $token->is_tagname(I<somestring>)

These are shortcuts for C<< $token->tag() eq I<somestring> >>

=item $token->attr(I<attrname>)

This returns the value of the I<attrname> attribute for this start-token
object, or undef.

For example, parsing a LZ<>Foo/"Bar"> link will produce a start-token
with a "to" attribute with the value "Foo", a "type" attribute with the
value "pod", and a "section" attribute with the value "Bar".

=item $token->attr(I<attrname>, I<newvalue>)

This sets the I<attrname> attribute for this start-token object to
I<newvalue>. You probably won't need to do this.

=item $token->attr_hash

This returns the hashref that is the attribute set for this start-token.
This is useful if (for example) you want to ask what all the attributes
are -- you can just do C<< keys %{$token->attr_hash} >>

=back

You're unlikely to ever need to construct an object of this class for
yourself, but if you want to, call
C<<
Pod::Simple::PullParserStartToken->new( I<tagname>, I<attrhash> )
>>

=head1 SEE ALSO

L<Pod::Simple::PullParserToken>, L<Pod::Simple>, L<Pod::Simple::Subellassing>
=head1 SEE ALSO

L<Pod::Simple::PullParserToken>, L<Pod::Simple>, L<Pod::Simple::Subclassing>

=head1 SUPPORT

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=head1 AUTHOR

Pod::Simple was created by Sean M. Burke <sburke@cpan.org>. But don't bother him, he's retired.

Pod::Simple is maintained by:

=over

=item * Allison Randal <allison@perl.org>

=item * Hans Dieter Pearcey <hdp@cpan.org>

=item * David E. Wheeler <dwheeler@cpan.org>

=back

=cut
Pod::Simple is a Perl library for parsing text in the Pod ("plain old documentation") markup language that is typically used for writing documentation for Perl and for Perl modules. The Pod format is explained in L<perlpod>; the most common formatter is called C<perldoc>.

Be sure to read L</ENCODING> if your Pod contains non-ASCII characters.

Pod formatters can use Pod::Simple to parse Pod documents and render them into plain text, HTML, or any number of other formats. Typically, such formatters will be subclasses of Pod::Simple, and so they will inherit its methods, like C<parsed_file>.

If you're reading this document just because you have a Pod-processing subclass that you want to use, this document (plus the documentation for the subclass) is probably all you need to read.

If you're reading this document because you want to write a formatter subclass, continue reading it and then read L<Pod::Simple::Subclassing>, and then possibly even read L<perlpodsdoc> (some of which is for parser-writers, but much of which is notes to formatter-writers).

=head1 MAIN METHODS

=over

=item C<< $parser = I<SomeClass>::new(); >>

This returns a new parser object, where I<C<SomeClass>> is a subclass of Pod::Simple.

=item C<< $parser->output_fh( *OUT ); >>
This sets the filehandle that C<$parser'>s output will be written to.
You can pass C<*>STDOUT> or C<*>STDERR>, otherwise you should probably do
something like this:

    my $outfile = "output.txt";
    open TXTOUT, ">$outfile" or die "Can't write to $outfile: $!";
    $parser->output_fh(TXTOUT);

...before you call one of the C<< $parser->parse_I<whatever> >> methods.

=item C<< $parser->output_string( \$somestring ); >>

This sets the string that C<$parser'>s output will be sent to,
 instead of any filehandle.

=item C<< $parser->parse_file( I<$some_filename> ); >>
=item C<< $parser->parse_file( *INPUT_FH ); >>

This reads the Pod content of the file (or filehandle) that you specify,
and processes it with that C<$parser> object, according to however
C<$parser>'s class works, and according to whatever parser options you
have set up for this C<$parser> object.

=item C<< $parser->parse_string_document( I<$all_content> ); >>

This works just like C<parse_file> except that it reads the Pod
content not from a file, but from a string that you have already
in memory.

=item C<< $parser->parse_lines( I<...@lines...>, undef ); >>

This processes the lines in C<@lines> (where each list item must be a
defined value, and must contain exactly one line of content -- so no
items like C<"foo
bar"> are allowed). The final C<undef> is used to
indicate the end of document being parsed.

The other C<parser_I<whatever>> methods are meant to be called only once
per C<$parser> object; but C<parse_lines> can be called as many times per
C<$parser> object as you want, as long as the last call (and only
the last call) ends with an C<undef> value.

=item C<< $parser->content_seen >>

This returns true only if there has been any real content seen for this
document. Returns false in cases where the document contains content,
but does not make use of any Pod markup.

=item C<< I<SomeClass>->filter( I<$filename> ); >>

=item C<< I<SomeClass>->filter( I<*INPUT_FH> ); >>

=item C<< I<SomeClass>->filter( I<$document_content> ); >>

This is a shortcut method for creating a new parser object, setting the output handle to STDOUT, and then processing the specified file (or filehandle, or in-memory document). This is handy for one-liners like this:

perl -MPod::Simple::Text -e "Pod::Simple::Text->filter('thingy.pod')"

=back

=head1 SECONDARY METHODS

Some of these methods might be of interest to general users, as well as of interest to formatter-writers.

Note that the general pattern here is that the accessor-methods read the attribute's value with C<< $value = $parser->I<attribute> >> and set the attribute's value with C<< $parser->I<attribute>(I<newvalue>) >>. For each accessor, I typically only mention one syntax or another, based on which I think you are actually most likely to use.

=over

=item C<< $parser->parse_characters( I<SOMEVALUE> ) >>

The Pod parser normally expects to read octets and to convert those octets to characters based on the C<<encoding> declaration in the Pod source. Set this option to a true value to indicate that the Pod source is already a Perl character stream. This tells the parser to ignore any C<<encoding> command and to skip all the code paths involving decoding octets.

=item C<< $parser->no_whining( I<SOMEVALUE> ) >>

If you set this attribute to a true value, you will suppress the parser's complaints about irregularities in the Pod coding. By default, this attribute's value is false, meaning that irregularities will be reported.
Note that turning this attribute to true won't suppress one or two kinds of complaints about rarely occurring unrecoverable errors.

=item C<< $parser->no_errata_section( I<SOMEVALUE> ) >>

If you set this attribute to a true value, you will stop the parser from generating a "POD ERRORS" section at the end of the document. By default, this attribute's value is false, meaning that an errata section will be generated, as necessary.

=item C<< $parser->complain_stderr( I<SOMEVALUE> ) >>

If you set this attribute to a true value, it will send reports of parsing errors to STDERR. By default, this attribute's value is false, meaning that no output is sent to STDERR.

Setting C<complain_stderr> also sets C<no_errata_section>.

=item C<< $parser->source_filename >>

This returns the filename that this parser object was set to read from.

=item C<< $parser->doc_has_started >>

This returns true if C<$parser> has read from a source, and has seen Pod content in it.

=item C<< $parser->source_dead >>

This returns true if C<$parser> has read from a source, and come to the end of that source.

=item C<< $parser->strip_verbatim_indent( I<SOMEVALUE> ) >>

The perlpod spec for a Verbatim paragraph is "It should be reproduced exactly...", which means that the whitespace you've used to indent your verbatim blocks will be preserved in the output. This can be annoying for outputs such as HTML, where that whitespace will remain in front of every line. It's an unfortunate case where syntax is turned into semantics.

If the POD you're parsing adheres to a consistent indentation policy, you can have such indentation stripped from the beginning of every line of your
verbatim blocks. This method tells Pod::Simple what to strip. For two-space
indents, you'd use:

$parser->strip_verbatim_indent('  ');

For tab indents, you'd use a tab character:

$parser->strip_verbatim_indent("\t");

If the POD is inconsistent about the indentation of verbatim blocks, but you
have figured out a heuristic to determine how much a particular verbatim block
is indented, you can pass a code reference instead. The code reference will be
executed with one argument, an array reference of all the lines in the
verbatim block, and should return the value to be stripped from each line. For
example, if you decide that you're fine to use the first line of the verbatim
block to set the standard for indentation of the rest of the block, you can
look at the first line and return the appropriate value, like so:

$new->strip_verbatim_indent(sub {
  my $lines = shift;
  (my $indent = $lines->[0]) =~ s/\S.*//;
  return $indent;
});

If you'd rather treat each line individually, you can do that, too, by just
transforming them in-place in the code reference and returning C<undef>. Say
that you don't want I<any> lines indented. You can do something like this:

$new->strip_verbatim_indent(sub {
  my $lines = shift;
  sub { s/^\s+// for @ { $lines },
    return undef;
  });

=back
=head1 TERTIARY METHODS

=over
=item C<< $parser->abandon_output_fh() >>X<abandon_output fh>
Cancel output to the file handle. Any POD read by the C<$parser> is not
effected.

=item C<< $parser->abandon_output_string() >>X<abandon_output string>
Cancel output to the output string. Any POD read by the C<$parser> is not
effected.

=item C<< $parser->accept_code( @codes ) >>

Alias for L<< accept_codes >>.

=item C<< $parser->accept_codes( @codes ) >>

Allows C<$parser> to accept a list of L<perlpod/Formatting Codes>. This can be used to implement user-defined codes.

=item C<< $parser->accept_directive_as_data( @directives ) >>

Allows C<$parser> to accept a list of directives for data paragraphs. A directive is the label of a L<perlpod/Command Paragraph>. A data paragraph is one delimited by C<< =begin/=for/=end >> directives. This can be used to implement user-defined directives.

=item C<< $parser->accept_directive_as_processed( @directives ) >>

Allows C<$parser> to accept a list of directives for processed paragraphs. A directive is the label of a L<perlpod/Command Paragraph>. A processed paragraph is also known as L<perlpod/Ordinary Paragraph>. This can be used to implement user-defined directives.

=item C<< $parser->accept_directive_as_verbatim( @directives ) >>

Allows C<$parser> to accept a list of directives for L<perlpod/Verbatim Paragraph>. A directive is the label of a L<perlpod/Command Paragraph>. This can be used to implement user-defined directives.

=item C<< $parser->accept_target( @targets ) >>

Alias for L<< accept_targets >>.

=item C<< $parser->accept_target_as_text( @targets ) >>

Alias for L<< accept_targets_as_text >>.

=item C<< $parser->accept_targets( @targets ) >>

Accepts targets for C<< =begin/=for/=end >> sections of the POD.

=item C<< $parser->accept_targets_as_text( @targets ) >>

Accepts targets for C<< =begin/=for/=end >> sections that should be parsed as POD. For details, see L<< perlpodspec/About Data Paragraphs >>.
Used to check if any errata was seen.

**Example:**

```perl
die "too many errors\n" if $parser->any_errata_seen();
```

Returns a hash reference of all errata seen, both whines and screams. The hash reference's keys are the line number and the value is an array reference of the errors for that line.

**Example:**

```perl
if ( $parser->any_errata_seen() ) {
    $logger->log( $parser->errata_seen() );
}
```

Return the encoding corresponding to `encoding`, but only if the encoding was recognized and handled.

**Example:**

```perl
$encoding = $parser->encoding();
```

Return encoding of the document, even if the encoding is not correctly handled.

**Example:**

```perl
$parser->parse_from_file( $source, $to );
```

Parses from `$source` file to `$to` file. Similar to `Pod::Parser/parse_from_file`.

**Example:**

```perl
scream( @error_messages );
```

Log an error that can't be ignored.

**Example:**

```perl
unaccept_code( @codes );
```

Alias for `unaccept_codes`.

**Example:**

```perl
unaccept_codes( @codes );
```

Removes `@codes` as valid codes for the parse.

**Example:**

```perl
unaccept_directive( @directives );
```
Alias for L<< unaccept_directives >>.

=item C<< $parser->unaccept_directives( @directives ) >>X<unaccept_directives>

Removes C<< @directives >> as valid directives for the parse.

=item C<< $parser->unaccept_target( @targets ) >>X<unaccept_target>

Alias for L<< unaccept_targets >>.

=item C<< $parser->unaccept_targets( @targets ) >>X<unaccept_targets>

Removes C<< @targets >> as valid targets for the parse.

=item C<< $parser->version_report() >>X<version_report>

Returns a string describing the version.

=item C<< $parser->whine( @error_messages ) >>X<whine>

Log an error unless C<< $parser->no_whining( TRUE ); >>.

=head1 ENCODING

The Pod::Simple parser expects to read B<octets>. The parser will decode the octets into Perl's internal character string representation using the value of the C<=encoding> declaration in the POD source.

If the POD source does not include an C<=encoding> declaration, the parser will attempt to guess the encoding (selecting one of UTF-8 or CP 1252) by examining the first non-ASCII bytes and applying the heuristic described in L<perlpodspec>. (If the POD source contains only ASCII bytes, the encoding is assumed to be ASCII.)

If you set the C<parse_characters> option to a true value the parser will expect characters rather than octets; will ignore any C<=encoding>; and will make no attempt to decode the input.

=head1 SEE ALSO

L<Pod::Simple::Subclassing>

L<perlpod|perlpod>

L<perlpodspec|perlpodspec>
=head1 SUPPORT

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---

abstract: 'framework for parsing Pod'
author:
  - 'Allison Randal <allison@perl.org>'
built_requires:
  ExtUtils::MakeMaker: '0'
configure_requires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.0401, CPAN::Meta::Converter version 2.150005'
license: perl
meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
name: Pod-Simple
no_index:
directory:
  - t
  - inc
recommends:
  Encode: '2.78'
requires:
Carp: '0'
Config: '0'
Cwd: '0'
File::Basename: '0'
File::Find: '0'
File::Spec: '0'
Pod::Escapes: '1.04'
Symbol: '0'
Test: '1.25'
Test::More: '0'
Text::Wrap: '98.112902'
integer: '0'
overload: '0'
strict: '0'
resources:
  bugtracker: https://github.com/perl-pod/pod-simple/issues
  homepage: http://search.cpan.org/dist/Pod-Simple/
  license: http://dev.perl.org/licenses/
  repository: git://github.com/perl-pod/pod-simple.git
  version: '3.35'
x_serialization_backend: 'CPAN::Meta::YAML version 0.012'

Found in path(s):
  * /opt/ws_local/PERMITS_SQL/1009548100_1591379813.5/0/perl-Pod-Simple-3.35-395.el8.src.rpm-cosi-expand-archive-dyJZxwBE/Pod-Simple-3.35.tar.gz-cosi-expand-archive-HgAXY2Rt/Pod-Simple-3.35/META.yml
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=head1 NAME

Pod::Simple::DumpAsText -- dump Pod-parsing events as text

=head1 SYNOPSIS

perl -MPod::Simple::DumpAsText -e \
"exit Pod::Simple::DumpAsText->filter(shift)->any_errata_seen" \
thingy.pod

=head1 DESCRIPTION

This class is for dumping, as text, the events gotten from parsing a Pod document. This class is of interest to people writing Pod formatters based on Pod::Simple. It is useful for seeing exactly what events you get out of some Pod that you feed in.

This is a subclass of L<Pod::Simple> and inherits all its methods.

=head1 SEE ALSO
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=back

=cut

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=head1 SEE ALSO

L<Pod::Simple>, L<Pod::Simple::Text>, L<Pod::Spell>

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=head1 ACKNOWLEDGEMENTS

Thanks to L<Hurricane Electric|http://he.net/> for permission to use its L/Linux man pages online|http://man.he.net/> site for man page links.

Thanks to L<search.cpan.org|http://search.cpan.org/> for permission to use the site for Perl module links.

=head1 AUTHOR

Pod::Simple::XHTML was created by Allison Randal <allison@perl.org>.

Pod::Simple was created by Sean M. Burke <sburke@cpan.org>.

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=head1 NAME
Pod::Simple::HTMLBatch - convert several Pod files to several HTML files

=head1 SYNOPSIS
perl -MPod::Simple::HTMLBatch -e 'Pod::Simple::HTMLBatch::go' in out

=head1 DESCRIPTION
This module is used for running batch-conversions of a lot of HTML documents

This class is NOT a subclass of Pod::Simple::HTML (nor of bad old Pod::Html) -- although it uses Pod::Simple::HTML for doing the conversion of each document.

The normal use of this class is like so:

use Pod::Simple::HTMLBatch;
my $batchconv = Pod::Simple::HTMLBatch->new;
$batchconv->some_option( some_value );
$batchconv->some_other_option( some_other_value );
$batchconv->batch_convert( \@search_dirs, $output_dir );

=head2 FROM THE COMMAND LINE
Note that this class also provides (but does not export) the function Pod::Simple::HTMLBatch::go. This is basically just a shortcut for C<<
Pod::Simple::HTMLBatch->batch_convert(@ARGV) >>.
It's meant to be handy for calling from the command line.

However, the shortcut requires that you specify exactly two command-line arguments, C<indirs> and C<outdir>.

Example:

% mkdir out_html
% perl -MPod::Simple::HTMLBatch -e Pod::Simple::HTMLBatch::go @INC out_html
(to convert the pod from Perl's @INC files under the directory ./out_html)

(Note that the command line there contains a literal atsign-I-N-C. This is handled as a special case by batch_convert, in order to save you having to enter the odd-looking "" as the first command-line parameter when you mean "just use whatever's in @INC".)

Example:

% mkdir ./seekrut
% chmod og-rx ./seekrut
% perl -MPod::Simple::HTMLBatch -e Pod::Simple::HTMLBatch::go ./seekrut
(to convert the pod under the current dir into HTML files under the directory ./seekrut)

Example:

% perl -MPod::Simple::HTMLBatch -e Pod::Simple::HTMLBatch::go happydocs .
(to convert all pod from happydocs into the current directory)

=head1 MAIN METHODS

=over

=item $batchconv = Pod::Simple::HTMLBatch->new;

This TODO

=item $batchconv->batch_convert( I<indirs>, I<outdir> );

this TODO
These two values for $indirs specify that the normal Perl @INC

This specifies that the input directories are the items in
the arrayref C<[@dirs]>.

This specifies that the director "somedir" is the input.
(This can be an absolute or relative path, it doesn't matter.)

A common value you might want would be just "." for the current
directory:

    $batchconv->batch_convert( ".", ...);

This specifies that you want the dirs "somedir", "someother", and "also"
scanned, just as if you'd passed the arrayref
C<&{qw( somedir someother also)}>.  Note that a ";"-separator is normal
under Unix, but Under MSWin, you'll need C<somedir;someother;also>
instead, since the pathsep on MSWin is ";" instead of ";:;".  (And
I<that> is because ";;" often comes up in paths, like
C<"c:/perl/lib">.)

(Exactly what separator character should be used, is gotten from
C<$Config::Config{'path_sep'}>, via the L<Config> module.)

This specifies that you want the HTML output to go into the current
directory.

(Note that a missing or undefined value means a different thing in
the first slot than in the second.  That's so that C<batch_convert()> with no arguments (or undef arguments) means "go from @INC, into
the current directory.)

    $batchconv->batch_convert( ... , 'somedir');
This specifies that you want the HTML output to go into the directory 'somedir'.
(This can be an absolute or relative path, it doesn't matter.)

Note that you can also call C<batch_convert> as a class method, like so:

Pod::Simple::HTMLBatch->batch_convert( ... );

That is just short for this:

Pod::Simple::HTMLBatch-> new-> batch_convert(...);

That is, it runs a conversion with default options, for whatever inputdirs and output dir you specify.

=head2 ACCESSOR METHODS

The following are all accessor methods -- that is, they don't do anything on their own, but just alter the contents of the conversion object, which comprises the options for this particular batch conversion.

We show the "put" form of the accessors below (i.e., the syntax you use for setting the accessor to a specific value). But you can also call each method with no parameters to get its current value. For example, C<< $self->contents_file() >> returns the current value of the contents_file attribute.

=item $batchconv->verbose( I<nonnegative_integer> );

This controls how verbose to be during batch conversion, as far as notes to STDOUT (or whatever is C<select>'d) about how the conversion is going. If 0, no progress information is printed. If 1 (the default value), some progress information is printed. Higher values print more information.

=item $batchconv->index( I<true-or-false> );

This controls whether or not each HTML page is liable to have a little table of contents at the top (which we call an "index" for historical
reasons). This is true by default.

=item $batchconv->contents_file( $filename );

If set, should be the name of a file (in the output directory) to write the HTML index to. The default value is "index.html". If you set this to a false value, no contents file will be written.

=item $batchconv->contents_page_start( $HTML_string );

This specifies what string should be put at the beginning of the contents page. The default is a string more or less like this:

<html><head><title>Perl Documentation</title></head>
<body class='contentspage'>
<h1>Perl Documentation</h1>

=item $batchconv->contents_page_end( $HTML_string );

This specifies what string should be put at the end of the contents page. The default is a string more or less like this:

<p class='contentsfooty'>Generated by Pod::Simple::HTMLBatch v3.01 under Perl v5.008
At Fri May 14 22:26:42 2004 GMT,
which is Fri May 14 14:26:42 2004 local time.</p>

=item $batchconv->add_css( $url );

TODO

=item $batchconv->add_javascript( $url );

TODO

=item $batchconv->css_flurry( $true-or-false );

If true (the default value), we autogenerate some CSS files in the output directory, and set our HTML files to use those. TODO: continue

=item $batchconv->javascript_flurry( $true-or-false );
If true (the default value), we autogenerate a JavaScript in the output directory, and set our HTML files to use it. Currently, the JavaScript is used only to get the browser to remember what stylesheet it prefers.

TODO: continue

=item $batchconv->no_contents_links( I<true-or-false> );

TODO

=item $batchconv->html_render_class( I<classname> );

This sets what class is used for rendering the files.
The default is "Pod::Simple::HTML". If you set it to something else, it should probably be a subclass of Pod::Simple::HTML, and you should C<require> or C<use> that class so that it's loaded before Pod::Simple::HTMLBatch tries loading it.

=item $batchconv->search_class( I<classname> );

This sets what class is used for searching for the files.
The default is "Pod::Simple::Search". If you set it to something else, it should probably be a subclass of Pod::Simple::Search, and you should C<require> or C<use> that class so that it's loaded before Pod::Simple::HTMLBatch tries loading it.

=back

=head1 NOTES ON CUSTOMIZATION

 TODO

call add_css($someurl) to add stylesheet as alternate
call add_css($someurl,1) to add as primary stylesheet

call add_javascript

subclass Pod::Simple::HTML and set $batchconv->html_render_class to that classname
and maybe override
$page->batch_mode_page_object_init($self, $module, $infile, $outfile, $depth)
or maybe override
$batchconv->batch_mode_page_object_init($page, $module, $infile, $outfile, $depth)
subclass Pod::Simple::Search and set $batchconv->search_class to that classname

SEE ALSO

L<Pod::Simple>, L<Pod::Simple::HTMLBatch>, L<perlpod>, L<perlpodspec>

SUPPORT

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over

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* Hans Dieter Pearcey <hdp@cpan.org>

* David E. Wheeler <dwheeler@cpan.org>

back
cut
No license file was found, but licenses were detected in source scan.

=head1 NAME

Pod::Simple::Checker -- check the Pod syntax of a document

=head1 SYNOPSIS

perl -MPod::Simple::Checker -e \
"exit Pod::Simple::Checker->filter(shift)->any_errata_seen" \
thingy.pod

=head1 DESCRIPTION

This class is for checking the syntactic validity of Pod. It works by basically acting like a simple-minded version of L<Pod::Simple::Text> that formats only the "Pod Errors" section (if Pod::Simple even generates one for the given document).

This is a subclass of L<Pod::Simple> and inherits all its methods.

=head1 SEE ALSO

L<Pod::Simple>, L<Pod::Simple::Text>, L<Pod::Checker>

=head1 SUPPORT

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=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548100_1591379813.5/0/perl-Pod-Simple-3.35-395.el8.src.rpm-cosi-expand-archive-dyJZxwBE/Pod-Simple-3.35.tar.gz-cosi-expand-archive-HgAXY2Rt/Pod-Simple-3.35/lib/Pod/Simple/Checker.pm

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=head1 NAME

Pod::Simple::PullParser -- a pull-parser interface to parsing Pod

=head1 SYNOPSIS

my $parser = SomePodProcessor->new;$parser->set_source( "whatever.pod" );$parser->run;

Or:

my $parser = SomePodProcessor->new;$parser->set_source( $some_filehandle_object );$parser->run;

Or:
my $parser = SomePodProcessor->new;
$parser->set_source( \$document_source );
$parser->run;

Or:

my $parser = SomePodProcessor->new;
$parser->set_source( \@document_lines );
$parser->run;

And elsewhere:

require 5;
package SomePodProcessor;
use strict;
use base qw(Pod::Simple::PullParser);

sub run {
    my $self = shift;
    Token:
    while(my $token = $self->get_token) {
        ...process each token...
    } } 

=head1 DESCRIPTION

This class is for using Pod::Simple to build a Pod processor -- but
one that uses an interface based on a stream of token objects,
instead of based on events.

This is a subclass of L<Pod::Simple> and inherits all its methods.

A subclass of Pod::Simple::PullParser should define a C<run> method
that calls C<<< $token = $parser->get_token >>> to pull tokens.

See the source for Pod::Simple::RTF for an example of a formatter
that uses Pod::Simple::PullParser.

=head1 METHODS

=over

=item my $token = $parser->get_token

This returns the next token object (which will be of a subclass of
L<Pod::Simple::PullParserToken>), or undef if the parser-stream has hit
the end of the document.

=item $parser->unget_token( $token )

=item $parser->unget_token( $token1, $token2, ... )

This restores the token object(s) to the front of the parser stream.

=back

The source has to be set before you can parse anything. The lowest-level way is to call C<set_source>:

=over

=item $parser->set_source( $filename )

=item $parser->set_source( $filehandle_object )

=item $parser->set_source( $document_source )

=item $parser->set_source( @document_lines )

=back

Or you can call these methods, which Pod::Simple::PullParser has defined to work just like Pod::Simple's same-named methods:

=over

=item $parser->parse_file(...)  

=item $parser->parse_string_document(...)  

=item $parser->filter(...)  

=item $parser->parse_from_file(...)  

=back

For those to work, the Pod-processing subclass of Pod::Simple::PullParser has to have defined a $parser->run method -- so it is advised that all Pod::Simple::PullParser subclasses do so. See the Synopsis above, or the source for Pod::Simple::RTF.

Authors of formatter subclasses might find these methods useful to call on a parser object that you haven't started pulling tokens from yet:
This tries to get the title string out of $parser, by getting some tokens, and scanning them for the title, and then ungetting them so that you can process the token-stream from the beginning.

For example, suppose you have a document that starts out:

=head1 NAME

Hoo::Boy::Wowza -- Stuff B<wow> yeah!

$parser->get_title on that document will return "Hoo::Boy::Wowza -- Stuff wow yeah!"). If the document starts with:

=head1 Name

Hoo::Boy::W00t -- Stuff B<w00t> yeah!

Then you'll need to pass the C<nocase> option in order to recognize "Name":

$parser->get_title(nocase => 1);

In cases where get_title can't find the title, it will return empty-string ("").

This is just like get_title, except that it returns just the modulename, if the title seems to be of the form "SomeModuleName -- description".

For example, suppose you have a document that starts out:

=head1 NAME

Hoo::Boy::Wowza -- Stuff B<wow> yeah!

then $parser->get_short_title on that document will return "Hoo::Boy::Wowza".

But if the document starts out:

=head1 NAME

Hooboy, stuff B<wow> yeah!
then $parser->get_short_title on that document will return "Hooboy, stuff wow yeah!". If the document starts with:

=head1 Name

Hoo::Boy::W00t -- Stuff B<w00t> yeah!

Then you'll need to pass the C<nocase> option in order to recognize "Name":

$parser->get_short_title(nocase => 1);

If the title can't be found, then get_short_title returns empty-string ("").

=item $author_name = $parser->get_author

This works like get_title except that it returns the contents of the "=head1 AUTHOR\n\nParagraph...\n" section, assuming that that section isn't terribly long. To recognize a "=head1 Author\n\nParagraph\n" section, pass the C<nocase> option:

$parser->get_author(nocase => 1);

(This method tolerates "AUTHORS" instead of "AUTHOR" too.)

=item $description_name = $parser->get_description

This works like get_title except that it returns the contents of the "=head1 DESCRIPTION\n\nParagraph...\n" section, assuming that that section isn't terribly long. To recognize a "=head1 Description\n\nParagraph\n" section, pass the C<nocase> option:

$parser->get_description(nocase => 1);

=item $version_block = $parser->get_version

This works like get_title except that it returns the contents of the "=head1 VERSION\n\n[BIG BLOCK]\n" block. Note that this does NOT return the module's C<$VERSION>!! To recognize a "=head1 Version\n\n[BIG BLOCK]\n" section, pass the C<nocase> option:

$parser->get_version(nocase => 1);

=back

=head1 NOTE
You don't actually have to define a `run` method. If you're writing a Pod-formatter class, you should define a `run` just so that users can call `parse_file` etc, but you don't have to.

And if you're not writing a formatter class, but are instead just writing a program that does something simple with a Pod::PullParser object (and not an object of a subclass), then there's no reason to bother subclassing to add a `run` method.

=head1 SEE ALSO

L<Pod::Simple>

L<Pod::Simple::PullParserToken> -- and its subclasses
L<Pod::Simple::PullParserStartToken>,
L<Pod::Simple::PullParserTextToken>, and
L<Pod::Simple::PullParserEndToken>.

L<HTML::TokeParser>, which inspired this.

=head1 SUPPORT

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=item * David E. Wheeler C<dwheeler@cpan.org>

=cut

JUNK:

sub _old_get_title {  # some witchery in here
  my $self = $_[0];
  my $title;
  my @to_unget;

  while(1) {
    push @to_unget, $self->get_token;
    unless(defined $to_unget[-1]) { # whoops, short doc!
      pop @to_unget;
      last;
    }
  }

  DEBUG and print STDERR "-Got token ", $to_unget[-1]-&gt;dump, ".n";

  (DEBUG and print STDERR "Too much in the buffer:\n"),
  last if @to_unget &gt; 25; # sanity

  my $pattern = ";
  if ($to_unget[-1]-&gt;type eq 'end'
    #and $to_unget[-1]-&gt;tagname eq 'Para'
    #and
    ($pattern = join ",
      map {
        ($-&gt;type eq 'start') ? ("&lt;" . $-&gt;tagname . ">")
        : ($-&gt;type eq 'end' ) ? ("&lt;/" . $-&gt;tagname . ">")
        : ($-&gt;type eq 'text' ) ? ($-&gt;text =~ m/^([A-Z]+)$s \$1 : 'X')
        : "BLORP"
      } @to_unget
    )->=~ m\s?\$1: 'X')
  ) {$head1&gt;NAME&lt;/head1&gt;&lt;Para&gt;(X|</Subhead1>&gt;)+&lt;/Para&gt;$s
    )
    # Whee, it fits the pattern
DEBUG and print STDERR "Seems to match =head1 NAME pattern.\n";
$title = "; 
foreach my $t (reverse @to_unget) {
    last if $t->{'type'} eq 'start' and $t->{'tagname'} eq 'Para';
    $title .= $t->{'text'} . $title if $t->{'type'} eq 'text';
}
undef $title if $title =~ m<\s*$>; # make sure it's contentful!
last;

} elsif ($pattern =~ m{<head(\d)>(.+)</head\d>$} and !( $1 eq '1' and $2 eq 'NAME' ) ) {
    # Well, it fits a fallback pattern
    DEBUG and print STDERR "Seems to match NAMEless pattern.\n";
    $title = "; 
    foreach my $t (reverse @to_unget) {
        last if $t->{'type'} eq 'start' and $t->{'tagname'} =~ m/^head\d$/s;
        $title .= $t->{'text'} . $title if $t->{'type'} eq 'text';
    }
    undef $title if $title =~ m<\s*$>; # make sure it's contentful!
    last;
} else {
    DEBUG and $pattern and print STDERR "Leading pattern: $pattern\n";
}

# Put it all back:
$self->{'unget_token'}(@to_unget);

if(DEBUG) {
    if(defined $title) { print STDERR "Returning title <$title>\n" } 
    else { print STDERR "Returning title <>\n" }
}

return " unless defined $title;
return $title;
}

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548100_1591379813.5/0/perl-Pod-Simple-3.35-395.el8.src.rpm-cosi-expand-archive-dyJZxwBE/Pod-Simple-3.35.tar.gz-cosi-expand-archive-HgAXY2Rt/Pod-Simple-3.35/lib/Pod/Simple/PullParser.pm
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=head1 NAME

Pod::Simple::DumpAsXML -- turn Pod into XML
SYNOPSIS

perl -MPod::Simple::DumpAsXML -e \\
"exit Pod::Simple::DumpAsXML->filter(shift)->any_errata_seen" \\
thinky.pod

DESCRIPTION

Pod::Simple::DumpAsXML is a subclass of L<Pod::Simple> that parses Pod
and turns it into indented and wrapped XML. This class is of
interest to people writing Pod formatters based on Pod::Simple.

Pod::Simple::DumpAsXML inherits methods from
L<Pod::Simple>.

SEE ALSO

L<Pod::Simple::XMLOutStream> is rather like this class.
Pod::Simple::XMLOutStream's output is space-padded in a way
that's better for sending to an XML processor (that is, it has
no ignorable whitespace). But
Pod::Simple::DumpAsXML's output is much more human-readable, being
(more-or-less) one token per line, with line-wrapping.

L<Pod::Simple::DumpAsText> is rather like this class,
except that it doesn't dump with XML syntax. Try them and see
which one you like best!

L<Pod::Simple>, L<Pod::Simple::DumpAsXML>

The older libraries L<Pod::PXML>, L<Pod::XML>, L<Pod::SAX>

SUPPORT

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Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548100_1591379813.50/perl-Pod-Simple-3.35-395.el8.src.rpm-cosi-expand-archive-dyjZxwBE/Pod-Simple-3.35.tar.gz-cosi-expand-archive-HgAXY2Rt/Pod-Simple-3.35/lib/Pod/Simple/DumpAsXML.pm
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=head1 NAME

Pod::Simple::Text -- format Pod as plaintext

=head1 SYNOPSIS

perl -MPod::Simple::Text -e \
"exit Pod::Simple::Text->filter(shift)->any_errata_seen" \
thingy.pod

=head1 DESCRIPTION

This class is a formatter that takes Pod and renders it as
wrapped plaintext.

Its wrapping is done by L<Text::Wrap>, so you can change C<$Text::Wrap::columns> as you like.

This is a subclass of L<Pod::Simple> and inherits all its methods.

=head1 SEE ALSO

L<Pod::Simple>, L<Pod::Simple::TextContent>, L<Pod::Text>

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=head1 NAME

Pod::Simple::PullParserEndToken -- end-tokens from Pod::Simple::PullParser

=head1 SYNOPSIS

(See L<Pod::Simple::PullParser>)

=head1 DESCRIPTION

When you do $parser->get_token on a L<Pod::Simple::PullParser>, you might get an object of this class.

This is a subclass of L<Pod::Simple::PullParserToken> and inherits all its methods, and adds these methods:

=over

=item $token->tagname

This returns the tagname for this end-token object.
For example, parsing a "=head1 ..." line will give you a start-token with the tagname of "head1", token(s) for its content, and then an end-token with the tagname of "head1".

=item $token->tagname(I<somestring>)

This changes the tagname for this end-token object.
You probably won't need to do this.

=item $token->tag(...)  
A shortcut for $token->tagname(...)

=item $token->is_tag(I<somestring>) or $token->is_tagname(I<somestring>)
These are shortcuts for C<< $token->tag() eq I<somestring> >>

=back

You're unlikely to ever need to construct an object of this class for yourself, but if you want to, call
C<<
Pod::Simple::PullParserEndElement->new( I<tagname> )
>>

=head1 SEE ALSO

L<Pod::Simple::PullParserToken>, L<Pod::Simple>, L<Pod::Simple::Subclassing>

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# TODO: let it be an option whether a given subclass even wants little treelets?

__END__

=head1 NAME

Pod::Simple::LinkSection -- represent "section" attributes of L codes

=head1 SYNOPSIS

# a long story

=head1 DESCRIPTION

This class is not of interest to general users.

Pod::Simple uses this class for representing the value of the
"section" attribute of "L" start-element events. Most applications
can just use the normal stringification of objects of this class;
they stringify to just the text content of the section,
such as "foo" for
C<< LZ<> <Stuff/foo> >>, and "bar" for
C<< LZ<> <Stuff/bIZ<> <ar> >>.

However, anyone particularly interested in getting the full value of
the treelet, can just traverse the content of the treelel
@$treelet_object. To wit:

% perl -MD::Data::Dumper -e
 "use base qw(Pod::Simple::Methody);
 sub start_L { print Dumper($_[1]["section"]) }"
__PACKAGE__->new->parse_string_document('=head1 L<foo/bar>baz>'))

Output:
$VAR1 = bless( [
  '',
  {},
  'b',
  bless( [
    T,
    {},
    'ar'
  ], 'Pod::Simple::LinkSection' ),
  'baz'
], 'Pod::Simple::LinkSection' );

But stringify it and you get just the text content:

% perl -MData::Dumper -e
  "use base qw(Pod::Simple::Methody);
  sub start_L { print Dumper( " . $_[1]{'section'} ) } 
  __PACKAGE__->new->parse_string_document('=head1 L<foo/bar>baz>'))
  "

Output:
$VAR1 = 'barbaz';

=head1 SEE ALSO

L<Pod::Simple>

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=head1 AUTHOR

Pod::Simple was created by Sean M. Burke <sburke@cpan.org>.
But don't bother him, he's retired.

Pod::Simple is maintained by:

=over

=item * Allison Randal <allison@perl.org>

=item * Hans Dieter Pearcey <hdp@cpan.org>

=item * David E. Wheeler <dwheeler@cpan.org>

=back

=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548100_1591379813.5/0/perl-Pod-Simple-3.35-395.el8.src.rpm-cosi-expand-archive-dyJZxwBE/Pod-Simple-3.35.tar.gz-cosi-expand-archive-HgAXY2Rt/Pod-Simple-3.35/lib/Pod/Simple/LinkSection.pm
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=head1 NAME

Pod::Simple::SimpleTree -- parse Pod into a simple parse tree

=head1 SYNOPSIS

% cat ptest.pod

=head1 PIE

I like B<pie>!

% perl -MPod::Simple::SimpleTree -MData::Dumper -e \n"print Dumper(Pod::Simple::SimpleTree->new->parse_file(shift)->root)" \nptest.pod

$VAR1 = [
=head1 DESCRIPTION

This class is of interest to people writing a Pod processor/formatter.

This class takes Pod and parses it, returning a parse tree made just
of arrayrefs, and hashrefs, and strings.

This is a subclass of L<Pod::Simple> and inherits all its methods.

This class is inspired by XML::Parser's "Tree" parsing-style, although
it doesn't use exactly the same LoL format.

=head1 METHODS

At the end of the parse, call C<< $parser->root >> to get the
tree's top node.

=head1 Tree Contents

Every element node in the parse tree is represented by an arrayref of
the form: C<[ I<elementname>, \%attributes, I<...subnodes...> ]>.  
See the example tree dump in the Synopsis, above.

Every text node in the tree is represented by a simple (non-ref)
string scalar.  So you can test C<ref($node)> to see whether you have
an element node or just a text node.

The top node in the tree is C<![ 'Document', \%attributes,}
**SEE ALSO**

L<Pod::Simple>

L<perllol>

L<The "Tree" subsubsection in XML::Parser|XML::Parser/"Tree">

**SUPPORT**

Questions or discussion about POD and Pod::Simple should be sent to the pod-people@perl.org mail list. Send an empty email to pod-people-subscribe@perl.org to subscribe.

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=over
NAME

Pod::Simple::Debug -- put Pod::Simple into trace/debug mode

SYNOPSIS

use Pod::Simple::Debug (5); # or some integer

Or:

my $debuglevel;
use Pod::Simple::Debug ($debuglevel, 0);
...some stuff that uses Pod::Simple to do stuff, but which
you don't want debug output from...

$debug_level = 4;
...some stuff that uses Pod::Simple to do stuff, but which
you DO want debug output from...

$debug_level = 0;

DESCRIPTION

This is an internal module for controlling the debug level (a.k.a. trace
level) of Pod::Simple. This is of interest only to Pod::Simple
developers.

CAVEATS

Note that you should load this module I<before> loading Pod::Simple (or
any Pod::Simple-based class). If you try loading Pod::Simple::Debug
after &Pod::Simple::DEBUG is already defined, Pod::Simple::Debug will
throw a fatal error to the effect that
"It's too late to call Pod::Simple::Debug".
Note that the `use Pod::Simple::Debug ($x, I<somenum>)` mode will make Pod::Simple (et al) run rather slower, since `&Pod::Simple::DEBUG` won't be a constant sub anymore, and so Pod::Simple (et al) won't compile with constant-folding.

=head1 GUTS

Doing this:

```
use Pod::Simple::Debug (5);  # or some integer
```

is basically equivalent to:

```
BEGIN { sub Pod::Simple::DEBUG () {5} }  # or some integer
use Pod::Simple ();
```

And this:

```
use Pod::Simple::Debug ($debug_level,0);  # or some integer
```

is basically equivalent to this:

```
my $debug_level;
BEGIN { $debug_level = 0 }
BEGIN { sub Pod::Simple::DEBUG () { $debug_level }
use Pod::Simple ();
```

=head1 SEE ALSO

L<Pod::Simple>


=head1 SUPPORT

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=head1 NAME

Pod::Simple::TextContent -- get the text content of Pod

=head1 SYNOPSIS

TODO

perl -MPod::Simple::TextContent -e \n  "exit Pod::Simple::TextContent-&gt;filter(shift)-&gt;any_errata_seen" \n  thingy.pod
DESCRIPTION

This class is that parses Pod and dumps just the text content. It is mainly meant for use by the Pod::Simple test suite, but you may find some other use for it.

This is a subclass of L<Pod::Simple> and inherits all its methods.

SEE ALSO

L<Pod::Simple>, L<Pod::Simple::Text>, L<Pod::Spell>

SUPPORT

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item * Allison Randal <allison@perl.org>

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=head1 NAME

Pod::Simple::RTF -- format Pod as RTF

=head1 SYNOPSIS

perl -MPod::Simple::RTF -e \n "exit Pod::Simple::RTF->filter(shift)->any_errata_seen" \n thingy.pod > thingy.rtf

=head1 DESCRIPTION

This class is a formatter that takes Pod and renders it as RTF, good for viewing/printing in MSWord, WordPad/write.exe, TextEdit, etc.

This is a subclass of L<Pod::Simple> and inherits all its methods.

=head1 FORMAT CONTROL ATTRIBUTES

You can set these attributes on the parser object before you call C<parse_file> (or a similar method) on it:

=over

=item $parser->head1_halfpoint_size( I<halfpoint_integer> );

=item $parser->head2_halfpoint_size( I<halfpoint_integer> );

=item $parser->head3_halfpoint_size( I<halfpoint_integer> );

=item $parser->head4_halfpoint_size( I<halfpoint_integer> );

These methods set the size (in half-points, like 52 for 26-point) that these heading levels will appear as.
=item $parser->codeblock_halfpoint_size( I<halfpoint_integer> );

This method sets the size (in half-points, like 21 for 10.5-point) that codeblocks ("verbatim sections") will appear as.

=item $parser->header_halfpoint_size( I<halfpoint_integer> );

This method sets the size (in half-points, like 15 for 7.5-point) that the header on each page will appear in. The header is usually just "I<modulename> p. I<pagenumber>".

=item $parser->normal_halfpoint_size( I<halfpoint_integer> );

This method sets the size (in half-points, like 26 for 13-point) that normal paragraphic text will appear in.

=item $parser->no_proofing_exemptions( I<true_or_false> );

Set this value to true if you don't want the formatter to try putting a hidden code on all Perl symbols (as best as it can notice them) that labels them as being not in English, and so not worth spellchecking.

=item $parser->doc_lang( I<microsoft_decimal_language_code> )

This sets the language code to tag this document as being in. By default, it is currently the value of the environment variable C<RTFDEFLANG>, or if that's not set, then the value 1033 (for US English).

Setting this appropriately is useful if you want to use the RTF to spellcheck, and/or if you want it to hyphenate right.

Here are some notable values:

1033  US English
2057  UK English
3081  Australia English
4105  Canada English
1034  Spain Spanish
2058  Mexico Spanish
1031  Germany German
1036  France French
3084  Canada French
1035  Finnish
1044  Norwegian (Bokmal)
2068  Norwegian (Nynorsk)
If you are particularly interested in customizing this module's output even more, see the source and/or write to me.

SEE ALSO

L<Pod::Simple>, L<RTF::Writer>, L<RTF::Cookbook>, L<RTF::Document>, L<RTF::Generator>

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=head1 NAME
Pod::Simple::Methody -- turn Pod::Simple events into method calls

=head1 SYNOPSIS

require 5;
use strict;
package SomePodFormatter;
use base qw(Pod::Simple::Methody);

sub handle_text {
  my($self, $text) = @_;
  ...
}

sub start_head1 {
  my($self, $attrs) = @_;
  ...
}

sub end_head1 {
  my($self) = @_;
  ...
}

...and start_/end_ methods for whatever other events you want to catch.

=head1 DESCRIPTION

This class is of
This class (which is very small -- read the source) overrides 
Pod::Simple's _handle_element_start, _handle_text, and 
_handle_element_end methods so that parser events are turned into method 
calls. (Otherwise, this is a subclass of L<Pod::Simple> and inherits all 
its methods.)

You can use this class as the base class for a Pod formatter/processor.

=head1 METHOD CALLING

When Pod::Simple sees a "=head1 Hi there", for example, it basically does this:

```
$parser->_handle_element_start( "head1", \%attributes );
$parser->_handle_text( "Hi there" );
$parser->_handle_element_end( "head1" );
```

But if you subclass Pod::Simple::Methody, it will instead do this 
when it sees a "=head1 Hi there":

```
$parser->start_head1( \%attributes ) if $parser->can('start_head1');
$parser->handle_text("Hi there") if $parser->can('handle_text');
$parser->end_head1() if $parser->can('end_head1');
```

If Pod::Simple sends an event where the element name has a dash, 
period, or colon, the corresponding method name will have a underscore 
in its place. For example, "foo.bar:baz" becomes start_foo_bar_baz 
and end_foo_bar_baz.

See the source for Pod::Simple::Text for an example of using this class.

=head1 SEE ALSO

L<Pod::Simple>, L<Pod::Simple::Subclassing>

=head1 SUPPORT

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pod-people@perl.org mail list. Send an empty email to 
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* David E. Wheeler <d wheeler@cpan.org>

NAME

Pod::Simple::HTML - convert Pod to HTML

SYNOPSIS

perl -M Pod::Simple::HTML -e Pod::Simple::HTML::go thingy.pod

DESCRIPTION
This class is for making an HTML rendering of a Pod document.

This is a subclass of L<Pod::Simple::PullParser> and inherits all its methods (and options).

Note that if you want to do a batch conversion of a lot of Pod documents to HTML, you should see the module L<Pod::Simple::HTMLBatch>.

=head1 CALLING FROM THE COMMAND LINE

TODO

perl -MPod::Simple::HTML -e Pod::Simple::HTML::go Thing.pod Thing.html

=head1 CALLING FROM PERL

=head2 Minimal code

use Pod::Simple::HTML;
my $p = Pod::Simple::HTML->new;
$p->output_string(my $html);
$p->parse_file('path/to/Module/Name.pm');
open my $out, '>', 'out.html' or die "Cannot open 'out.html': $!
";
print $out $html;

=head2 More detailed example

use Pod::Simple::HTML;

Set the content type:

$Pod::Simple::HTML::Content_decl = q{<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
};

my $p = Pod::Simple::HTML->new;

Include a single javascript source:

$p->html_javascript('http://abc.com/a.js');

Or insert multiple javascript source in the header
(or for that matter include anything, thought this is not recommended)
$p->html_javascript('  
  <script type="text/javascript" src="http://abc.com/b.js"></script>
  <script type="text/javascript" src="http://abc.com/c.js"></script>
');

Include a single css source in the header:

$p->html_css('/style.css');

or insert multiple css sources:

$p->html_css('  
  <link rel="stylesheet" type="text/css" title="pod_stylesheet" href="http://remote.server.com/jquery.css">
  <link rel="stylesheet" type="text/css" title="pod_stylesheet" href="/style.css">');

Tell the parser where should the output go. In this case it will be placed in the $html variable:

my $html;
$p->output_string($html);

Parse and process a file with pod in it:

$p->parse_file('path/to/Module/Name.pm');

=head1 METHODS

TODO
all (most?) accessorized methods

The following variables need to be set B<before> the call to the ->new constructor.

Set the string that is included before the opening <html> tag:

$Pod::Simple::HTML::Doctype_decl = qq{
  <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
  "http://www.w3.org/TR/html4/loose.dtd">
};

Set the content-type in the HTML head: (defaults to ISO-8859-1)

$Pod::Simple::HTML::Content_decl = q{
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
};

Set the value that will be embedded in the opening tags of F, C tags and verbatim text.
F maps to <em>, C maps to <code>, Verbatim text maps to <pre> (Computerese defaults to "")

$Pod::Simple::HTML::Computerese = ' class="some_class_name';

=head2 html_css
This includes everything before the <title> opening tag including the Document type and including the opening <title> tag. The following call will set it to be a simple HTML file:

```
$p->html_header_before_title('<html><head><title>');</n```

By default Pod::Simple::HTML adds a dummy anchor at the top of the HTML. You can change it by calling

```
$p->top_anchor('<a name="zz" >');</n```

Normally =head1 will become <h1>, =head2 will become <h2> etc. Using the html_h_level method will change these levels setting the h level of =head1 tags:

```
$p->html_h_level(3);
```

Will make sure that =head1 will become <h3> and =head2 will become <h4> etc...

Set it to some true value if you want to have an index (in reality a table of contents) to be added at the top of the generated HTML.

```
$p->index(1);
```

Includes the closing tag of </title> and through the rest of the head till the opening of the body

```
$p->html_header_after_title('</title>...</head><body id="my_id">');</n``
Can use any of the methods described above but for further customization one needs to override some of the methods:

package My::Pod;
use strict;
use warnings;

use base 'Pod::Simple::HTML';

# needs to return a URL string such
# http://some.other.com/page.html
# #anchor_in_the_same_file
# /internal/ref.html
sub do_pod_link {
    # My::Pod object and Pod::Simple::PullParserStartToken object
    my ($self, $link) = @_;;

    say $link->tagname;          # will be L for links
    say $link->attr('to');       #
    say $link->attr('type');     # will be 'pod' always
    say $link->attr('section');

    # Links local to our web site
    if ($link->tagname eq 'L' and $link->attr('type') eq 'pod') {
        my $to = $link->attr('to');
        if ($to =~ /^Padre:/) {
            $to =~ s{::}{/}g;
            return "/docs/Padre/$to.html";
        }
    }

    # all other links are generated by the parent class
    my $ret = $self->SUPER::do_pod_link($link);
    return $ret;
}

1;

Meanwhile in script.pl:

use My::Pod;
my $p = My::Pod->new;

my $html;
$p->output_string($html);
$p->parse_file('path/to/Module/Name.pm');
open my $out, '>', 'out.html' or die;
print $out $html;

TODO

maybe override do_beginning do_end

=head1 SEE ALSO

L<Pod::Simple>, L<Pod::Simple::HTMLBatch>

TODO: a corpus of sample Pod input and HTML output? Or common
idioms?

=head1 SUPPORT

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=head1 ACKNOWLEDGEMENTS

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L<Linux man pages online|http://man.he.net/> site for man page links.
Thanks to L.<http://search.cpan.org> for permission to use the site for Perl module links.

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=head1 Pod::Simple version 3.33

Pod::Simple is a Perl library for parsing text in the Pod ("plain old documentation") markup language that is typically used for writing documentation for Perl and for Perl modules. The Pod format is explained L<perlpod>; the most common formatter is called C<perldoc>.

Pod formatters can use Pod::Simple to parse Pod documents and render them into plain text, HTML, or any number of other formats.
Installation

To install this module, type the following:

perl Makefile.PL
make
make test
make install

Support

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* /opt/ws_local/PERMITS_SQL/1068497222_1594393092.07/0/netty-codec-http-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/http/cookie/ClientCookieEncoder.java
* /opt/ws_local/PERMITS_SQL/1068497222_1594393092.07/0/netty-codec-http-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/http/cookie/CookieUtil.java
* /opt/ws_local/PERMITS_SQL/1068497222_1594393092.07/0/netty-codec-http-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/http/HttpExpectationFailedEvent.java
* /opt/ws_local/PERMITS_SQL/1068497222_1594393092.07/0/netty-codec-http-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/http/HttpScheme.java
* /opt/ws_local/PERMITS_SQL/1068497222_1594393092.07/0/netty-codec-http-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/rtsp/RtspEncoder.java
* /opt/ws_local/PERMITS_SQL/1068497222_1594393092.07/0/netty-codec-http-4-1-49-final-sources-1-
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From network_io/unix/inet_ntop.c, network_io/unix/inet_ntop.c:

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From dso/aix/dso.c:

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From strings/apr_strnatcmp.c, include/apr_strings.h:

strnatcmp.c -- Perform 'natural order' comparisons of strings in C. 
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From strings/apr_snprintf.c:

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1.187 pybind11 2.2.4
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1.188 jopt-simple 5.0.2

1.189 zope-interface 5.4.0

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1.190 containerd-console 1.0.3

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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/Validator.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/metadata/CascadableDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/ConstraintTarget.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/constraints/FutureOrPresent.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/constraints/Null.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/ConstraintValidatorContext.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/metadata/ExecutableDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/groups/Default.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/MessageInterpolator.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/metadata/package-info.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/valueextraction/Unwrapping.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/valueextraction/ValueExtractor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/constraintvalidation/ValidationTarget.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/metadata/MethodDescriptor.java
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  jar/javax/validation/package-info.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/UnexpectedTypeException.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/metadata/BeanDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
  jar/javax/validation/constraints/Digits.java
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1.192 urllib3 1.22

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# Contributions to the urllib3 project

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## Contributors

In chronological order:

* victor.vde <http://code.google.com/u/victor.vde/>
* HTTPS patch (which inspired HTTPSConnectionPool)
* erikcederstrand <http://code.google.com/u/erikcederstrand/>
* NTLM-authenticated HTTPSConnectionPool
* Basic-authenticated HTTPSConnectionPool (merged into make_headers)

* niphlod <niphlod@gmail.com>
  * Client-verified SSL certificates for HTTPSConnectionPool
  * Response gzip and deflate encoding support
  * Better unicode support for filepost using StringIO buffers

* btoconnor <brian@btoconnor.net>
  * Non-multipart encoding for POST requests

* p.dobrogost <http://code.google.com/u/@WBRSRIBZDhBFXQB6/>
  * Code review, PEP8 compliance, benchmark fix

* kennethreitz <me@kennethreitz.com>
  * Bugfixes, suggestions, Requests integration

* georgemarshall <http://github.com/georgemarshall>
  * Bugfixes, Improvements and Test coverage

* Thomas Kluyver <thomas@kluyver.me.uk>
  * Python 3 support

* brandon-rhodes <http://rhodesmill.org/brandon>
  * Design review, bugfixes, test coverage.

* studer <theo.studer@gmail.com>
  * IPv6 url support and test coverage

* Shivaram Lingamneni <slingamn@cs.stanford.edu>
  * Support for explicitly closing pooled connections

* hartator <hartator@gmail.com>
  * Corrected multipart behavior for params

* Thomas Weischuh <thomas@t-8ch.de>
  * Support for TLS SNI
  * API unification of ssl_version/cert_reqs
  * SSL fingerprint and alternative hostname verification
  * Bugfixes in testsuite

* Sune Kirkeby <mig@ibofobi.dk>
  * Optional SNI-support for Python 2 via PyOpenSSL.

* Marc Schlaich <marc.schlaich@gmail.com>
  * Various bugfixes and test improvements.

* Bryce Boe <bbzbryce@gmail.com>
* Correct six.moves conflict
* Fixed pickle support of some exceptions

* Boris Figovsky <boris.figovsky@ravellosystems.com>
  * Allowed to skip SSL hostname verification

* Cory Benfield <http://lukasa.co.uk/about/>
  * Stream method for Response objects.
  * Return native strings in header values.
  * Generate 'Host' header when using proxies.

* Jason Robinson <jaywink@basshero.org>
  * Add missing WrappedSocket.fileno method in PyOpenSSL

* Audrius Butkevicius <audrius.butkevicius@elastichosts.com>
  * Fixed a race condition

* Stanislav Vitkovskiy <stas.vitkovsky@gmail.com>
  * Added HTTPS (CONNECT) proxy support

* Stephen Holsapple <sholsapp@gmail.com>
  * Added abstraction for granular control of request fields

* Martin von Gagern <Martin.vGagern@gmx.net>
  * Support for non-ASCII header parameters

* Kevin Burke <kev@inburke.com> and Pavel Kirichenko <juanych@yandex-team.ru>
  * Support for separate connect and request timeouts

* Peter Waller <p@pwaller.net>
  * HTTPResponse.tell() for determining amount received over the wire

* Nipunn Koorapati <nipunn1313@gmail.com>
  * Ignore default ports when comparing hosts for equality

* Danilo @dbrgn <http://dbrgn.ch/>
  * Disabled TLS compression by default on Python 3.2+
  * Disabled TLS compression in pyopenssl contrib module
  * Configurable cipher suites in pyopenssl contrib module

* Roman Bogorodskiy <roman.bogorodskiy@ericsson.com>
  * Account retries on proxy errors

* Nicolas Delaby <nicolas.delaby@ezeep.com>
  * Use the platform-specific CA certificate locations

* Josh Schneier <https://github.com/jschneier>
  * HTTPHeaderDict and associated tests and docs
* Bugfixes, docs, test coverage

* Tahia Khan <http://tahia.tk/>
  * Added Timeout examples in docs

* Arthur Grunseid <http://grunseid.com>
  * source_address support and tests (with https://github.com/bui)

* Ian Cordasco <graffatcolmingov@gmail.com>
  * PEP8 Compliance and Linting
  * Add ability to pass socket options to an HTTP Connection

* Erik Tollerud <erik.tollerud@gmail.com>
  * Support for standard library io module.

* Krishna Prasad <kprasad.iitd@gmail.com>
  * Google App Engine documentation

* Aaron Meurer <asmeurer@gmail.com>
  * Added Url.url, which unparses a Url

* Evgeny Kapun <abacabadabacaba@gmail.com>
  * Bugfixes

* Benjamen Meyer <bm_witness@yahoo.com>
  * Security Warning Documentation update for proper capture

* Shivan Sornarajah <github@sornars.com>
  * Support for using ConnectionPool and PoolManager as context managers.

* Alex Gaynor <alex.gaynor@gmail.com>
  * Updates to the default SSL configuration

* Tomas Tomecek <ttomecek@redhat.com>
  * Implemented generator for getting chunks from chunked responses.

* tlynn <https://github.com/tlynn>
  * Respect the warning preferences at import.

* David D. Riddle <ddriddle@illinois.edu>
  * IPv6 bugfixes in testsuite

* Jon Wayne Parrott <jonwayne@google.com>
  * App Engine environment tests.

* John Krauss <https://github.com/talos>
  * Clues to debugging problems with `cryptography` dependency in docs
* Disassem <https://github.com/Disassem>
  * Fix pool-default headers not applying for url-encoded requests like GET.

* James Atherfold <jlatherfold@hotmail.com>
  * Bugfixes relating to cleanup of connections during errors.

* Christian Pedersen <https://github.com/chripede>
  * IPv6 HTTPS proxy bugfix

* Jordan Moldow <https://github.com/jmoldow>
  * Fix low-level exceptions leaking from ``HTTPResponse.stream()``.
  * Bugfix for ``ConnectionPool.urlopen(release_conn=False)``.
  * Creation of ``HTTPConnectionPool.ResponseCls``.

* Predrag Gruevski <https://github.com/obi1kenobi>
  * Made cert digest comparison use a constant-time algorithm.

* Adam Talsma <https://github.com/a-tal>
  * Bugfix to ca_cert file paths.

* Evan Meagher <https://evanmeagher.net>
  * Bugfix related to `memoryview` usage in PyOpenSSL adapter

* John Vandenberg <jayvdb@gmail.com>
  * Python 2.6 fixes; pyflakes and pep8 compliance

* Andy Caldwell <andy.m.caldwell@googlemail.com>
  * Bugfix related to reusing connections in indeterminate states.

* Ville Skytt <ville.skytta@iki.fi>
  * Logging efficiency improvements, spelling fixes, Travis config.

* Shige Takeda <smtakeda@gmail.com>
  * Started Recipes documentation and added a recipe about handling concatenated gzip data in HTTP response

* Jesse Shapiro <jesse@jesseshapiro.net>
  * Various character-encoding fixes/tweaks
  * Disabling IPv6 DNS when IPv6 connections not supported

* David Foster <http://dafoster.net/>
  * Ensure order of request and response headers are preserved.

* Jeremy Cline <jeremy@jcline.org>
  * Added connection pool keys by scheme

* Aviv Palivoda <palaviv@gmail.com>
  * History list to Retry object.
  * HTTPResponse contains the last Retry object.
* Nate Prewitt <nate.prewitt@gmail.com>
  * Ensure timeouts are not booleans and greater than zero.
  * Fixed infinite loop in `stream` when amt=None.
  * Added length_remaining to determine remaining data to be read.
  * Added enforce_content_length to raise exception when incorrect content-length received.

* Seth Michael Larson <sethmichaellarson@protonmail.com>
  * Created selectors backport that supports PEP 475.

* Alexandre Dias <alex.dias@smarkets.com>
  * Don't retry on timeout if method not in whitelist

* Moinuddin Quadri <moin18@gmail.com>
  * Lazily load idna package

* Tom White <s6yg1ez3@mail2tor.com>
  * Made SOCKS handler differentiate socks5h from socks5 and socks4a from socks4.

* Tim Burke <tim.burke@gmail.com>
  * Stop buffering entire deflate-encoded responses.

* Tuukka Mustonen <tuukka.mustonen@gmail.com>
  * Add counter for status_forcelist retries.

* Erik Rose <erik@mozilla.com>
  * Bugfix to pyopenssl vendoring

* [Your name or handle] <[email or website]>
  * [Brief summary of your changes]

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    analysis/common/src/java/org/apache/lucene/analysis/pt/PortugueseLightStemmer.java
    analysis/common/src/java/org/apache/lucene/analysis/ru/RussianLightStemmer.java
    analysis/common/src/java/org/apache/lucene/analysis/sv/SwedishLightStemmer.java

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state the exclusion of warranty; and each file should have at least
the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
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* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-
jar/org/elasticsearch/painless/ir/InstanceofNode.java
* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-
jar/org/elasticsearch/painless/lookup/PainlessConstructor.java
* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-
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jar/org/elasticsearch/painless/action/PainlessContextMethodInfo.java
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jar/org/elasticsearch/painless/ir/LoadDotDefNode.java
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* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/ir/BlockNode.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/ScriptClassInfo.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/Operation.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/node/EEnumFunctionRef.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/node/ENewArrayFunctionRef.java

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* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/ir/ExpressionNode.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/node/EBooleanConstant.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/ir/LoadDotArrayLengthNode.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/node/SCallDefNode.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/node/SElectricMethod.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/ir/MethodWriter.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/action/PainlessExecuteAction.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/ir/BinaryNode.java

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* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/ir/LoadListShortcutNode.java

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* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/node/UnaryNode.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/ir/InvokeCallDefNode.java

* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/action/PainlessContextInfo.java

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jar/org/elasticsearch/painless/node/EBrace.java
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* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-jar/org/elasticsearch/painless/lookup/PainlessInstanceBinding.java
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*/
/**
* Painless invokedynamic bootstrap for the call site.
* 
* Has 11 flavors (passed as static bootstrap parameters): dynamic method call,
* dynamic field load (getter), and dynamic field store (setter), dynamic array load,
* dynamic array store, iterator, method reference, unary operator, binary operator,
* shift operator, and dynamic array index normalize.
* 
* When a new type is encountered at the call site, we lookup from the appropriate
* whitelist, and cache with a guard. If we encounter too many types, we stop caching.
* 
* Based on the cascaded inlining cache from the JSR 292 cookbook
* (https://code.google.com/archive/p/jsr292-cookbook/, BSD license)
*/

Found in path(s):
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  jar/org/elasticsearch/painless/DefBootstrap.java

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* /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-
  jar/org/elasticsearch/painless/ir/DefInterfaceReferenceNode.java
  /opt/cola/permits/1147228660_1616894460.77/0/lang-painless-7-10-2-sources-
1.199 lvm2 2.03.12-11.el8_5

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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1.202 libutempter 1.1.6 14.el8

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A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting
Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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If such an object file uses only numerical parameters, data
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1.213 pep517 0.2
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1.214 libxkbcommon 0.9.1 1.el8

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1.236 openssl 1.0.2k

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1.237 wget 1.19.5 10.el8

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## Commands to generate dependency files
GEN_DEPS.c=$(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc=$(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH =
LD_RPATH_PRE =-Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic

## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<

## Dependency rules
%.d: $(srcdir)/%.c
@echo "generating dependency information for $<"
1.239 libcomps 0.1.16-2.el8
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Galera replication - implementation of write set replication (wsrep) interface.

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Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#
This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:
It contains the certificates in PEM format and therefore
can be directly used with curl / libcurl / php_curl, or with
an Apache+mod_ssl webserver for SSL client authentication.
Just configure this file as the SSLCACertificateFile.#

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1.254 contrib-instrumentation-net-http-otelhttp 0.29.0

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1.255 contrib-instrumentation-net-http-trace-otelhttptrace 0.29.0

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_gaq.push(['_trackPageview']);
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 var ga = document.createElement('script'); ga.type = 'text/javascript'; ga.async = true;
 var s = document.getElementsByTagName('script')[0]; s.parentNode.insertBefore(ga, s);
})();
</script>
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<div id="pgContainerWrap">
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1.260 wheel 0.31.1

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1.261 go.etcd.io-bbolt 1.3.6
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1.262 python-decorator 4.2.1 2.el8

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1.263 cloud-google-com-go 0.93.3

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package compute

import (
    "bytes"
    "context"
    "fmt"
    "io/ioutil"
    "net/http"
    "net/url"

    gax "github.com/googleapis/gax-go/v2"
    "google.golang.org/api/googleapi"
    "google.golang.org/api/option"
    "google.golang.org/api/option/internaloption"
    httptransport "google.golang.org/api/transport/http"
    computepb "google.golang.org/genproto/googleapis/cloud/compute/v1"
    "google.golang.org/grpc"
    "google.golang.org/grpc/metadata"
    "google.golang.org/protobuf/encoding/protojson"
)

var newLicenseCodesClientHook clientHook
// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
    Get    []gax.CallOption
    TestIamPermissions []gax.CallOption
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
    Close() error
    setGoogleClientInfo(...string)
    Connection() *grpc.ClientConn
    Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
    TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
        (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
// The LicenseCodes API.
type LicenseCodesClient struct {
    // The internal transport-dependent client.
    internalClient internalLicenseCodesClient

    // The call options for this service.
    CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
    return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the ‘x-goog-api-client’ header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
    c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
// Deprecated.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
    return c.internalClient.Get(ctx, req, opts...)
}

func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
    return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
    // The http endpoint to connect to.
    endpoint string

    // The http client.
    httpClient *http.Client

    // The x-goog-* metadata to be sent with each request.
    xGoogMetadata metadata.MD
}

// NewLicenseCodesRESTClient creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
    httpClient, endpoint, err := httptransport.NewClient(ctx, opts...
    if err != nil {
        return nil, err
    }
    c := &licenseCodesRESTClient{
        endpoint: endpoint,
        httpClient: httpClient,
    }
    c.setGoogleClientInfo()
func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
    return []option.ClientOption{
        internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
        internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
        internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
        internaloption.WithDefaultScopes(DefaultAuthScopes()...),
    }
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
    kv := append([]string{"gl-go", versionGo()}, keyval...)
    kv = append(kv, "gapi", c.clientName, "gax", gax.Version, "rest", "UNKNOWN")
    c.xGoogMetadata = metadata.Pairs("x-goog-api-client", gax.XGoogHeader(kv...))
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
    // Replace httpClient with nil to force cleanup.
    c.httpClient = nil
    return nil
}

// Connection returns a connection to the API service.
// Deprecated.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
    return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...
gax.CallOption) (*computepb.LicenseCode, error) {
    baseUrl, _ := url.Parse(c.endpoint)
    if err := httpReq.Do(); err != nil {
        return nil, err
    }
    return &LicenseCodesClient{internalClient: c, CallOptions: &LicenseCodesCallOptions{}}, nil
}
httpReq = httpReq.WithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}

httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.LicenseCode{

if err := unm.Unmarshal(buf, rsp); err != nil {
    return nil, maybeUnknownEnum(err)
}
return rsp, nil

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
    m := protojson.MarshalOptions{AllowPartial: true}
    body := req.GetTestPermissionsRequestResource()
    jsonReq, err := m.Marshal(body)
    if err != nil {
        return nil, err
    }

    baseUrl, _ := url.Parse(c.endpoint)
    baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
        req.GetProject(), req.GetResource())

    baseUrl, _ := url.Parse(c.endpoint)
    baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
        req.GetProject(), req.GetResource())
if err != nil {
    return nil, err
}
httpReq = httpReqWithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
    httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}

httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.TestPermissionsResponse{
}

if err := unm.Unmarshal(buf, rsp); err != nil {
    return nil, maybeUnknownEnum(err)
}
return rsp, nil

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package compute_test

import {
    "context"

    compute "cloud.google.com/go/compute/apiv1"
    "google.golang.org/iterator"
    computepb "google.golang.org/genproto/googleapis/cloud/compute/v1"
}

func ExampleNewLicensesRESTClient() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    // TODO: Use client.
    _ = c
}

func ExampleLicensesClient_Delete() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.DeleteLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#DeleteLicenseRequest.
    }
    resp, err := c.Delete(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
}

func ExampleLicensesClient_Get() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    // TODO: Use client.
    _ = c
}
// TODO: Handle error.

// TODO: Fill request struct fields.
// See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetLicenseRequest.

req := &computepb.GetLicenseRequest{
    // TODO: Fill request struct fields.
    // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetLicenseRequest.
}

resp, err := c.Get(ctx, req)
if err != nil {
    // TODO: Handle error.
}
// TODO: Use resp.

func ExampleLicensesClient_GetIamPolicy() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.GetIamPolicyLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetIamPolicyLicenseRequest.
    }
    resp, err := c.GetIamPolicy(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
}

func ExampleLicensesClient_Insert() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.InsertLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#InsertLicenseRequest.
    }
func ExampleLicensesClient_List() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.ListLicensesRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#ListLicensesRequest.
    }
    it := c.List(ctx, req)
    for {
        resp, err := it.Next()
        if err == iterator.Done {
            break
        } else if err != nil {
            // TODO: Handle error.
        }
        // TODO: Use resp.
        _ = resp
    }
}

func ExampleLicensesClient_SetIamPolicy() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.SetIamPolicyLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#SetIamPolicyLicenseRequest.
    }
    resp, err := c.SetIamPolicy(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
}
func ExampleLicensesClient_TestIamPermissions() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.TestIamPermissionsLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#TestIamPermissionsLicenseRequest.
    }
    resp, err := c.TestIamPermissions(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
}

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package compute_test

import {
    "context"

    compute "cloud.google.com/go/compute/apiv1"
}
func ExampleNewLicenseCodesRESTClient() {
    ctx := context.Background()
    c, err := compute.NewLicenseCodesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    // TODO: Use client.
    _ = c
}

func ExampleLicenseCodesClient_Get() {
    ctx := context.Background()
    c, err := compute.NewLicenseCodesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.GetLicenseCodeRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetLicenseCodeRequest.
    }
    resp, err := c.Get(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
    ctx := context.Background()
    c, err := compute.NewLicenseCodesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.TestIamPermissionsLicenseCodeRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#TestIamPermissionsLicenseCodeRequest.
    }
BasicImport

c, err := c.TestIAMPermissions(ctx, req)
if err != nil {
    // TODO: Handle error.
}

resp, err := c.TestIAMPermissions(ctx, req)
if err != nil {
    // TODO: Handle error.
}

// TODO: Use resp.

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// limitations under the License.
package compute

import (
    "bytes"
    "context"
    "fmt"
    "io/ioutil"
    "math"
    "net/http"
    "net/url"

    gax "github.com/googleapis/gax-go/v2"
    "google.golang.org/api/googleapi"
    "google.golang.org/api/iterator"
    "google.golang.org/api/option"
    "google.golang.org/api/option/internaloption"
    httptransport "google.golang.org/api/transport/http"
    computepb "google.golang.org/genproto/googleapis/cloud/compute/v1"
    "google.golang.org/grpc"
    "google.golang.org/grpc/metadata"
    "google.golang.org/protobuf/encoding/protojson"
    "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
    Delete []gax.CallOption
    Get []gax.CallOption
    GetIamPolicy []gax.CallOption
    Insert []gax.CallOption
    List []gax.CallOption
    SetIamPolicy []gax.CallOption
    TestIamPermissions []gax.CallOption
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
    Close() error
    setGoogleClientInfo(...string)
    Connection() *grpc.ClientConn
    Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
    Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
    GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy, error)
    List(context.Context, *computepb.ListLicenseRequest, ...gax.CallOption) (*iterator.LicensePage, error)
    SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy, error)
    TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*compute.IamPolicyTestIamPermissionsResponse, error)
}

// LicensesClient is the client for the Google Compute Engine API service.
type LicensesClient struct {
    client internalLicensesClient
}
error
Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy, error)
TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The Licenses API.
type LicensesClient struct {
    // The internal transport-dependent client.
    internalClient internalLicensesClient

    // The call options for this service.
    CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
    return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
    c.internalClient.setGoogleClientInfo(keyval...)    
}

// Connection returns a connection to the API service.
//
// Deprecated.
func (c *LicensesClient) Connection() *grpc.ClientConn {
    return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
    return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
    return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
    return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
    return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
    return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
    return c.internalClient.TestIamPermissions(ctx, req, opts...)
}
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licensesRESTClient struct {
    // The http endpoint to connect to.
    endpoint string

    // The http client.
    httpClient *http.Client

    // The x-goog-* metadata to be sent with each request.
    xGoogMetadata metadata.MD
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
    clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
    httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
    if err != nil {
        return nil, err
    }
    c := &licensesRESTClient{
        endpoint:   endpoint,
        httpClient: httpClient,
        }
    c.setGoogleClientInfo()

    return &LicensesClient{internalClient: c, CallOptions: &LicensesCallOptions{}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
    return []option.ClientOption{
        internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
        internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
        internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
        internaloption.WithDefaultScopes(DefaultAuthScopes()...),
    }
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
    kv := append([]string{"gl-go", versionGo()}, keyval...)
    kv = append(kv, "gapic", versionClient, "gax", gax.Version, "rest", "UNKNOWN")
}
c.xGoogMetadata = metadata.Pairs("x-goog-api-client", gax.XGoogHeader(kv...))
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
return nil
}

// Connection returns a connection to the API service.
//
// Deprecated.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
baseUrl, _ := url.Parse(c.endpoint)
params := url.Values{}
if req != nil & req.RequestId != nil {
params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}
baseUrl.RawQuery = params.Encode()

if err != nil {
return nil, err
}
httpReq = httpReqWithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}

httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
return nil, err
}
defer httpRsp.Body.Close()
if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computeop.Operation{}

if err := unm.Unmarshal(buf, rsp); err != nil {
    return nil, maybeUnknownEnum(err)
}
op := &Operation{proto: rsp}
return op, err

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computeop.GetLicenseRequest, opts ...gax.CallOption) (*computeop.License, error) {
    baseUrl, _ := url.Parse(c.endpoint)
    if err != nil {
        return nil, err
    }
    httpReq = httpReq.WithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = []string{"application/json"}

    httpRsp, err := c.httpClient.Do(httpReq)
    if err != nil {
        return nil, err
    }
    defer httpRsp.Body.Close()

    if err = googleapi.CheckResponse(httpRsp); err != nil {
        return nil, err
    }
}
buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
return nil, err
}
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.License{}
if err := unm.Unmarshal(buf, rsp); err != nil {
return nil, maybeUnknownEnum(err)
}
return rsp, nil
}
// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
baseUrl, _ := url.Parse(c.endpoint)
req.GetResource())
params := url.Values{}
if req != nil && req.OptionsRequestedPolicyVersion != nil {
}
baseUrl.RawQuery = params.Encode()
if err != nil {
return nil, err
}
httpReq = httpReq.WithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}
httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
return nil, err
}
defer httpRsp.Body.Close()
if err = googleapi.CheckResponse(httpRsp); err != nil {
return nil, err

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buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
  return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &compute pb.Policy{

  if err := unm.Unmarshal(buf, rsp); err != nil {
    return nil, maybeUnknownEnum(err)
  }
  return rsp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *compute pb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
  m := protojson.MarshalOptions{AllowPartial: true}
  body := req.GetLicenseResource()
  jsonReq, err := m.Marshal(body)
  if err != nil {
    return nil, err
  }

  baseUrl, _ := url.Parse(c.endpoint)
  params := url.Values{
    if req != nil && req.RequestId != nil {
      params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
    }
  }
  baseUrl.RawQuery = params.Encode()

  if err != nil {
    return nil, err
  }
  httpReq = httpReqWithContext(ctx)
  // Set the headers
  for k, v := range c.xGoogMetadata {
    httpReq.Header[k] = v
  }
  httpReq.Header["Content-Type"] = []string{"application/json"}
httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.Operation{}

if err := unm.Unmarshal(buf, rsp); err != nil {
    return nil, maybeUnknownEnum(err)
}
op := &Operation{proto: rsp}
return op, err

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...
gax.CallOption) *LicenseIterator {
    it := &LicenseIterator{}
    req = proto.Clone(req).(*computepb.ListLicensesRequest)
    unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
        resp := &computepb.LicensesListResponse{}
        if pageToken != "" {
            req.PageToken = proto.String(pageToken)
        }
        if pageSize > math.MaxInt32 {
            req.MaxResults = proto.Uint32(math.MaxInt32)
        } else if pageSize != 0 {
            req.MaxResults = proto.Uint32(uint32(pageSize))
        }
        baseUrl, _ := url.Parse(c.endpoint)
params := url.Values{}  
if req != nil && req.Filter != nil {  
}  
if req != nil && req.MaxResults != nil {  
    params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))  
}  
if req != nil && req.OrderBy != nil {  
    params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))  
}  
if req != nil && req.PageToken != nil {  
}  
if req != nil && req.ReturnPartialSuccess != nil {  
}  

baseUrl.RawQuery = params.Encode()  

if err != nil {  
    return nil, "", err  
}  

// Set the headers  
for k, v := range c.xGoogMetadata {  
    httpReq.Header[k] = v  
}  

httpReq.Header["Content-Type"] = []string{"application/json"}  
httpRsp, err := c.httpClient.Do(httpReq)  
if err != nil {  
    return nil, "", err  
}  

defer httpRsp.Body.Close()  

if err = googleapi.CheckResponse(httpRsp); err != nil {  
    return nil, "", err  
}  

buf, err := ioutil.ReadAll(httpRsp.Body)  
if err != nil {  
    return nil, "", err  
}  

unm.Unmarshal(buf, resp)  
it.Response = resp  
return resp.GetItems(), resp.GetNextPageToken(), nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
if err != nil {
return "", err
}
it.items = append(it.items, items...)
return nextPageToken, nil
}
it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()
return it
}
// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
m := protojson.MarshalOptions{AllowPartial: true}
body := req.GetGlobalSetPolicyRequestResource()
jsonReq, err := m.Marshal(body)
if err != nil {
return nil, err
}
baseUrl, _ := url.Parse(c.endpoint)
req.GetResource())
if err != nil {
return nil, err
}
httpReq = httpReq.WithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}
httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
return nil, err
}

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defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.Policy{

if err := unm.Unmarshal(buf, rsp); err != nil {
    return nil, maybeUnknownEnum(err)
}
return rsp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images. func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
    m := protojson.MarshalOptions{AllowPartial: true}
    body := req.GetTestPermissionsRequestResource()
    jsonReq, err := m.Marshal(body)
    if err != nil {
        return nil, err
    }
    baseUrl, _ := url.Parse(c.endpoint)
    if err != nil {
        return nil, err
    }
    httpReq = httpReqWithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = []string{"application/json"}

    httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.TestPermissionsResponse{ }

if err := unm.Unmarshal(buf, rsp); err != nil {
    return nil, maybeUnknownEnum(err)
}
return rsp, nil

// LicenseIterator manages a stream of *computepb.License.
type LicenseIterator struct {
    items    []*computepb.License
    pageInfo *iterator.PageInfo
    nextFunc func() error

    // Response is the raw response for the current page.
    // It must be cast to the RPC response type.
    // Calling Next() or InternalFetch() updates this value.
    Response interface{}
}

// PageInfo supports pagination. See the google.golang.org/api/iterator package for details.
func (it *LicenseIterator) PageInfo() *iterator.PageInfo {
    return it.pageInfo
}
// Next returns the next result. Its second return value is iterator.Done if there are no more
// results. Once Next returns Done, all subsequent calls will return Done.
func (it *LicenseIterator) Next() (*computepb.License, error) {
    var item *computepb.License
    if err := it.nextFunc(); err != nil {
        return item, err
    }
    item = it.items[0]
    it.items = it.items[1:]
    return item, nil
}

func (it *LicenseIterator) bufLen() int {
    return len(it.items)
}

func (it *LicenseIterator) takeBuf() interface{} {
    b := it.items
    it.items = nil
    return b
}

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1.264 ingest-common 7.10.2

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*/

Found in path(s):
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/AbstractStringProcessor.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/DateFormat.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/RenameProcessor.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/Processors.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/DateProcessor.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/GrokProcessorGetAction.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/SplitProcessor.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/SetProcessor.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
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  jar/org/elasticsearch/ingest/common/GrokProcessor.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/LowercaseProcessor.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-
  jar/org/elasticsearch/ingest/common/JsonProcessor.java
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  jar/org/elasticsearch/ingest/common/FailProcessor.java
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  jar/org/elasticsearch/ingest/common/BytesProcessor.java
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  jar/org/elasticsearch/ingest/common/KeyValueProcessor.java
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  jar/org/elasticsearch/ingest/common/ForEachProcessor.java
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  jar/org/elasticsearch/ingest/common/JoinProcessor.java
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* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-jar/org/elasticsearch/ingest/common/ProcessorsWhitelistExtension.java
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* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-jar/org/elasticsearch/ingest/common/DateIndexNameProcessor.java
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* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-jar/org/elasticsearch/ingest/common/CsvParser.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-jar/org/elasticsearch/ingest/common/AppendProcessor.java
* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-jar/org/elasticsearch/ingest/common/CsvProcessor.java
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* /opt/cola/permits/1147228685_1616894401.21/0/ingest-common-7-10-2-sources-jar/org/elasticsearch/ingest/common/TrimProcessor.java

1.265 gir1.2-gdkpixbuf-2.0 2.36.12 5.el8

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1.267 urllib3 1.26.6-1.ph1

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1.270 pyparsing 2.3.0
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1.271 blackfriday 2.0.1

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1.272 ydk-models-openconfig 0.1.8

1.272.1 Available under license:

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module openconfig-aaa-types {

  yang-version "1";
}
// namespace
namespace "http://openconfig.net/yang/aaa/types";

prefix "oc-aaa-types";

// import some basic types
import openconfig-extensions { prefix oc-ext; }

// meta
organization "OpenConfig working group";

contact
 "OpenConfig working group
 www.openconfig.net";

description
 "This module defines shared types for data related to AAA
 (authentication, authorization, accounting).";

oc-ext:openconfig-version "0.4.0";

revision "2018-04-12" {
 description
  "Add when conditions, correct identities";
  reference "0.4.0";
}

revision "2017-09-18" {
 description
  "Updated to use OpenConfig types modules";
  reference "0.3.0";
}

revision "2017-07-06" {
 description
  "Move to oc-inet types, add IETF attribution, add RADIUS
  counters, changed password leaf names to indicate hashed";
  reference "0.2.0";
}

revision "2017-01-29" {
 description
  "Initial public release";
  reference "0.1.0";
}
// identity statements

identity AAA_SERVER_TYPE {
    description
        "Base identity for types of AAA servers";
}

identity SYSTEM_DEFINED_ROLES {
    description
        "Base identity for system_defined roles that can be assigned
to users.";
}

identity SYSTEM_ROLE_ADMIN {
    base SYSTEM_DEFINED_ROLES;
    description
        "Built-in role that allows the equivalent of superuser
permission for all configuration and operational commands
on the device.";
}

identity AAA_ACCOUNTING_EVENT_TYPE {
    description
        "Base identity for specifying events types that should be
sent to AAA server for accounting";
}

identity AAA_ACCOUNTING_EVENT_COMMAND {
    base AAA_ACCOUNTING_EVENT_TYPE;
    description
        "Specifies interactive command events for AAA accounting";
}

identity AAA_ACCOUNTING_EVENT_LOGIN {
    base AAA_ACCOUNTING_EVENT_TYPE;
    description
        "Specifies login events for AAA accounting";
}

identity AAA_AUTHORIZATION_EVENT_TYPE {
    description
        "Base identity for specifying activities that should be
sent to AAA server for authorization";
}

identity AAA_AUTHORIZATION_EVENT_COMMAND {
base AAA_AUTHORIZATION_EVENT_TYPE;

description
"Specifies interactive command events for AAA authorization";
}

identity AAA_AUTHORIZATION_EVENT_CONFIG {
    base AAA_AUTHORIZATION_EVENT_TYPE;

description
"Specifies configuration (e.g., EXEC) events for AAA authorization";
}

identity AAA_METHOD_TYPE {

description
"Base identity to define well-known methods for AAA operations";
}

identity TACACS_ALL {
    base AAA_METHOD_TYPE;

description
"The group of all TACACS+ servers.";
}

identity RADIUS_ALL {
    base AAA_METHOD_TYPE;

description
"The group of all RADIUS servers.";
}

identity LOCAL {
    base AAA_METHOD_TYPE;

description
"Locally configured method for AAA operations.";
}

// typedef statements

typedef crypt-password-type {
    type string;

description
"A password that is hashed based on the hash algorithm specified by the prefix in the string. The string takes the following form, based on the Unix crypt function:

$$id$$[<param>=<value>,<param>=<value>]*$$salt$$[<hash>]

"
Common hash functions include:

| id | hash function                      |
|----+-----------------------------------|
| 1  | MD5                               |
| 2a | Blowfish                          |
| 2y | Blowfish (correct handling of 8-bit chars) |
| 5  | SHA-256                           |
| 6  | SHA-512                           |

These may not all be supported by a target device.";

module ietf-netconf-notifications {

    namespace

    prefix ncn;

    import ietf-inet-types { prefix inet; }
    import ietf-netconf { prefix nc; }

    organization
        "IETF NETCONF (Network Configuration Protocol) Working Group";

    contact
        "WG Web:  <http://tools.ietf.org/wg/netconf/>
        WG List:  <mailto:netconf@ietf.org>

        WG Chair: Bert Wijnen
            <mailto:bertietf@bwijnen.net>

        WG Chair: Mehmet Ersue
            <mailto:mehmet.ersue@nsn.com>

        Editor:  Andy Bierman
            <mailto:andy@netconfcentral.org>";

    description
This module defines a YANG data model for use with the NETCONF protocol that allows the NETCONF client to receive common NETCONF base event notifications.

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This version of this YANG module is part of RFC 6470; see the RFC itself for full legal notices."

revision "2012-02-06" {
    description
    "Initial version.";
    reference
    "RFC 6470: NETCONF Base Notifications";
}

grouping common-session-parms {
    description
    "Common session parameters to identify a management session.";

    leaf username {
        type string;
        mandatory true;
        description
        "Name of the user for the session.";
    }

    leaf session-id {
        type nc:session-id-or-zero-type;
        mandatory true;
        description
        "Identifier of the session.
        A NETCONF session MUST be identified by a non-zero value.
        A non-NETCONF session MAY be identified by the value zero.";
    }

    leaf source-host {
        type inet:ip-address;
        description
        ""
"Address of the remote host for the session."
);
}
}

grouping changed-by-parms {
  description "Common parameters to identify the source of a change event, such as a configuration or capability change."
;
container changed-by {
  description "Indicates the source of the change. If caused by internal action, then the empty leaf 'server' will be present. If caused by a management session, then the name, remote host address, and session ID of the session that made the change will be reported."
;
choice server-or-user {
  mandatory true;
  leaf server {
    type empty;
    description "If present, the change was caused by the server."
;
  } // choice server-or-user
} // container changed-by-parms

notification netconf-config-change {
  description "Generated when the NETCONF server detects that the <running> or <startup> configuration datastore has been changed by a management session. The notification summarizes the edits that have been detected.

The server MAY choose to also generate this notification while loading a datastore during the boot process for the device."
;
  uses changed-by-parms;
}
leaf datastore {
  type enumeration {
    enum running {
      description "The <running> datastore has changed.";
    }
    enum startup {
      description "The <startup> datastore has changed";
    }
  }
  default "running";
  description "Indicates which configuration datastore has changed.";
}

list edit {
  description "An edit record SHOULD be present for each distinct edit operation that the server has detected on the target datastore. This list MAY be omitted if the detailed edit operations are not known. The server MAY report entries in this list for changes not made by a NETCONF session (e.g., CLI).";

  leaf target {
    type instance-identifier;
    description "Topmost node associated with the configuration change. A server SHOULD set this object to the node within the datastore that is being altered. A server MAY set this object to one of the ancestors of the actual node that was changed, or omit this object, if the exact node is not known.";
  }

  leaf operation {
    type nc:edit-operation-type;
    description "Type of edit operation performed. A server MUST set this object to the NETCONF edit operation performed on the target datastore.";
  }
} // list edit
} // notification netconf-config-change

notification netconf-capability-change {
  description "Generated when the NETCONF server detects that the server capabilities have changed.";
}
Indicates which capabilities have been added, deleted, and/or modified. The manner in which a server capability is changed is outside the scope of this document.

uses changed-by-parms;

leaf-list added-capability {
  type inet:uri;
  description
    "List of capabilities that have just been added.";
}

leaf-list deleted-capability {
  type inet:uri;
  description
    "List of capabilities that have just been deleted.";
}

leaf-list modified-capability {
  type inet:uri;
  description
    "List of capabilities that have just been modified.
   A capability is considered to be modified if the base URI for the capability has not changed, but one or more of the parameters encoded at the end of the capability URI have changed.
   The new modified value of the complete URI is returned.";
}
} // notification netconf-capability-change

notification netconf-session-start {
  description
    "Generated when a NETCONF server detects that a NETCONF session has started. A server MAY generate this event for non-NETCONF management sessions. Indicates the identity of the user that started the session.";
  uses common-session-parms;
} // notification netconf-session-start

notification netconf-session-end {
  description
    "Generated when a NETCONF server detects that a NETCONF session has terminated. A server MAY optionally generate this event for non-NETCONF management sessions. Indicates the identity of the user that owned the session,";
and why the session was terminated.

uses common-session-parms;

leaf killed-by {
  when "../termination-reason = 'killed'";
  type nc:session-id-type;
  description
    "The ID of the session that directly caused this session
     to be abnormally terminated. If this session was abnormally
     terminated by a non-NETCONF session unknown to the server,
     then this leaf will not be present."
}

leaf termination-reason {
  type enumeration {
    enum "closed" {
      description
        "The session was terminated by the client in normal
         fashion, e.g., by the NETCONF <close-session>
         protocol operation."
    }
    enum "killed" {
      description
        "The session was terminated in abnormal
         fashion, e.g., by the NETCONF <kill-session>
         protocol operation."
    }
    enum "dropped" {
      description
        "The session was terminated because the transport layer
         connection was unexpectedly closed."
    }
    enum "timeout" {
      description
        "The session was terminated because of inactivity,
         e.g., waiting for the <hello> message or <rpc>
         messages."
    }
    enum "bad-hello" {
      description
        "The client's <hello> message was invalid."
    }
    enum "other" {
      description
        "The session was terminated for some other reason."
    }
  }
}
mandatory true;
description
  "Reason the session was terminated."
;
}  // notification netconf-session-end

notification netconf-confirmed-commit {
description
  "Generated when a NETCONF server detects that a
  confirmed-commit event has occurred. Indicates the event
  and the current state of the confirmed-commit procedure
  in progress.";
reference
  "RFC 6241, Section 8.4";

uses common-session-parms {
  when "confirm-event != 'timeout'";
}

leaf confirm-event {
type enumeration {
  enum "start" {
    description
      "The confirmed-commit procedure has started.";
  }
  enum "cancel" {
    description
      "The confirmed-commit procedure has been canceled,
      e.g., due to the session being terminated, or an
      explicit <cancel-commit> operation.";
  }
  enum "timeout" {
    description
      "The confirmed-commit procedure has been canceled
      due to the confirm-timeout interval expiring.
      The common session parameters will not be present
      in this sub-mode.";
  }
  enum "extend" {
    description
      "The confirmed-commit timeout has been extended,
      e.g., by a new <confirmed-commit> operation.";
  }
  enum "complete" {
    description
      "The confirmed-commit procedure has been completed.";
  }
}
mandatory true;

description
"Indicates the event that caused the notification.";
}

leaf timeout {
when
"../confirm-event = 'start' or ../confirm-event = 'extend'";
type uint32;
units "seconds";
description
"The configured timeout value if the event type
is 'start' or 'extend'. This value represents
the approximate number of seconds from the event
time when the 'timeout' event might occur.";
}
} // notification netconf-confirmed-commit

module openconfig-system-terminal {

yang-version "1";

// namespace
namespace "http://openconfig.net/yang/system/terminal";

prefix "oc-sys-term";

// import some basic types
import openconfig-extensions { prefix oc-ext; }

// meta
organization "OpenConfig working group";

contact
"OpenConfig working group
www.openconfig.net";

description
"This module defines configuration and operational state data
related to remote terminal services such as ssh and telnet.";
oc-ext:openconfig-version "0.3.0";

revision "2017-09-18" {
    description
    "Updated to use OpenConfig types modules";
    reference "0.3.0";
}

revision "2017-07-06" {
    description
    "Move to oc-inet types, add IETF attribution, add RADIUS
counters, changed password leaf names to indicate hashed";
    reference "0.2.0";
}

revision "2017-01-29" {
    description
    "Initial public release";
    reference "0.1.0";
}

// identity statements

// typedef statements

// grouping statements

grouping system-terminal-common-config {
    description
    "Common configuration data for terminal services";

    leaf timeout {
        type uint16;
        units seconds;
        description
        "Set the idle timeout in seconds on terminal connections to
        the system for the protocol.";
    }

    leaf rate-limit {
        type uint16;
        units "conn/min";
        description
        "Set a limit on the number of connection attempts per
        minute to the system for the protocol.";
    }
}
leaf session-limit {
  type uint16;
  description "Set a limit on the number of simultaneous active terminal sessions to the system for the protocol (e.g., ssh, telnet,...)";
}
}

grouping system-terminal-common-state {
  description "Common operational state data for terminal services";
}

grouping system-terminal-common-top {
  description "Top-level grouping for common terminal service data";

  container terminal-servers {
    description "Top-level container for terminal services";

    container config {
      description "Configuration data for terminal services";

      uses system-terminal-common-config;
    }

    container state {
      config false;

      description "Operational state data ";

      uses system-terminal-common-config;
      uses system-terminal-common-state;
    }
  }
}

grouping system-ssh-server-config {
  description "Configuration data for system ssh configuration";

  leaf enable {

type boolean;
default true;
description
"Enables the ssh server. The ssh server is enabled by
default.";
}

leaf protocol-version {
type enumeration {
enum V2 {
description
"Use SSH v2 only";
}
enum V1 {
description
"Use SSH v1 only";
}
enum V1_V2 {
description
"Use either SSH v1 or v2";
}
}
default V2;
description
"Set the protocol version for SSH connections to the system";
}

uses system-terminal-common-config;
}

grouping system-ssh-server-state {
description
"Operational state data for ssh server";
}

grouping system-ssh-server-top {
description
"Top-level grouping for ssh server data";

container ssh-server {
description
"Top-level container for ssh server";

container config {
description
"Configuration data for the system ssh server";

uses system-ssh-server-config;
}
container state {
  config false;

  description
  "Operational state data for the system ssh server";

  uses system-ssh-server-config;
  uses system-ssh-server-state;
}
}
}

grouping system-telnet-server-config {
  description
  "Configuration data for telnet server";

  leaf enable {
    type boolean;
    default false;
    description
    "Enables the telnet server. Telnet is disabled by default";
  }
  uses system-terminal-common-config;
}

grouping system-telnet-server-state {
  description
  "Operational state data for telnet server";
}

grouping system-telnet-server-top {
  description
  "Top-level grouping for telnet server";

  container telnet-server {
    description
    "Top-level container for telnet terminal servers";

    container config {
      description
      "Configuration data for telnet";

      uses system-telnet-server-config;
    }
  }
}
container state {

    config false;

    description
    "Operational state data for telnet";

    uses system-telnet-server-config;
    uses system-telnet-server-state;
}
}
}

// data definition statements

// augment statements

// rpc statements

// notification statements


module ietf-yang-smiv2 {
    namespace "urn:ietf:params:xml:ns:yang:ietf-yang-smiv2";
    prefix smiv2;

    organization
    "IETF NETMOD (NETCONF Data Modeling Language) Working Group";
    contact
    "WG Web:  <http://tools.ietf.org/wg/netmod/>
    WG List:  <mailto:netmod@ietf.org>
    WG Chair: David Kessens
               <mailto:david.kessens@nsn.com>
    WG Chair: Juergen Schoenwaelder
               <mailto:j.schoenwaelder@jacobs-university.de>
    Editor:   Juergen Schoenwaelder
               <mailto:j.schoenwaelder@jacobs-university.de>";

    Found in path(s):
    * /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-
    0.1.8/ydk/models/openconfig/_yang/openconfig-system-terminal.yang

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description
"This module defines YANG extensions that are used to translate
SMIv2 concepts into YANG.

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the RFC itself for full legal notices."

revision 2012-06-22 {
  description
    "Initial revision.";
  reference
    "RFC 6643: Translation of Structure of Management Information
     Version 2 (SMIv2) MIB Modules to YANG Modules";
}

extension display-hint {
  argument format;
  description
    "The display-hint statement takes as an argument the DISPLAY-HINT
     assigned to an SMIv2 textual convention.";
  reference "RFC 2579: Textual Conventions for SMIv2";
}

extension max-access {
  argument access;
  description
    "The max-access statement takes as an argument the MAX-ACCESS
     assigned to an SMIv2 object definition.

     The MAX-ACCESS value is SMIv2 specific and has no impact on
     the access provided to YANG objects through protocols such
     as NETCONF.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

extension defval {
  argument value;
  description

"The defval statement takes as an argument a default value defined by an SMIv2 DEFVAL clause. Note that the value is in the SMIv2 value space defined by the SMIv2 syntax of the corresponding object and not in the YANG value space defined by the corresponding YANG data type.";
reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

extension implied {
  argument index;
  description
  "If an SMIv2 INDEX object is preceded by the IMPLIED keyword, then the implied statement is present in the YANG module and takes as an argument the name of the IMPLIED index object.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

extension alias {
  argument descriptor;
  description
  "The alias statement introduces an SMIv2 descriptor. The body of the alias statement is expected to contain an oid statement that provides the numeric OID associated with the descriptor.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

extension oid {
  argument value;
  description
  "The oid statement takes as an argument the object identifier assigned to an SMIv2 definition. The object identifier value is written in decimal dotted notation.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

extension subid {
  argument value;
  description
  "The subid statement takes as an argument the last sub-identifier of the object identifier assigned to an SMIv2 definition. The sub-identifier value is a single positive decimal natural number. The subid statement may not be used as a substatement to any top-level node in a YANG document. The subid substatement may be used only as a substatement to a node having a parent node defined with either an smiv2:oid or smiv2:subid substatement.";
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}
identity object-identity {
  description
  "Base identity for all SMIv2 OBJECT-IDENTITYs."
}

typedef opaque {
  type binary;
  description
  "The Opaque type supports the capability to pass arbitrary ASN.1 syntax. A value is encoded using the ASN.1 Basic Encoding Rules into a string of octets. This, in turn, is encoded as an OCTET STRING, in effect 'double-wrapping' the original ASN.1 value.

  In the value set and its semantics, this type is equivalent to the Opaque type of the SMIv2. This type exists in the SMIv2 solely for backward-compatibility reasons and this is also true for this YANG data type."
  reference "RFC 2578: Structure of Management Information Version 2 (SMIv2)";
}

module ietf-diffserv-classifier {
  yang-version 1;
  prefix classifier;

  import ietf-inet-types {
    prefix inet;
  }

  organization "IETF NETMOD (Netmod Working Group) Working Group";
  contact
  "WG Web: <http://tools.ietf.org/wg/netmod/>"
  "WG List: <mailto:netmod@ietf.org>"

  WG Chair: Juergen Schoenwaelder
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  <mailto:tnadeau@lucidvision.com>
description
"This module contains a collection of YANG definitions for configuring diffserv specification implementations.

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This version of this YANG module is part of RFC XXXX; see the RFC itself for full legal notices."

revision 2015-04-07 {
  description
  "Latest revision of diffserv based classifier";
  reference "RFC XXXX";
}

feature policy-inline-classifier-config {
  description
  "This feature allows classifier configuration directly under policy."
}

identity filter-type {
  description
  "This is identity of base filter-type"
}

identity dscp {
  base filter-type;
  description
  "DSCP filter-type"
}

identity source-ip-address {
  base filter-type;
  description
  "This is identity of base filter-type"
}
"source-ip-address filter-type";
}

identity destination-ip-address {
    base filter-type;
    description
    "destination-ip-address filter-type";
}

identity source-port {
    base filter-type;
    description
    "source-port filter-type";
}

identity destination-port {
    base filter-type;
    description
    "destination-port filter-type";
}

identity protocol {
    base filter-type;
    description
    "protocol filter-type";
}

identity classifier-entry-filter-operation-type {
    description
    "Classifier entry filter logical operation";
}

identity match-any-filter {
    base classifier-entry-filter-operation-type;
    description
    "Classifier entry filter logical OR operation";
}

identity match-all-filter {
    base classifier-entry-filter-operation-type;
    description
    "Classifier entry filter logical AND operation";
}

grouping filters {
    description
"Filters in a Classifier entry";
leaf filter-type {
  type identityref {
    base filter-type;
  }
  description
    "This leaf defines type of the filter";
}
leaf filter-logical-not {
  type boolean;
  description
    "This is logical-not operator for a filter. When true, it indicates filter looks for absence of a pattern defined by the filter";
}
choice filter-param {
  description
    "Choice of filter types";
  case dscp {
    list dscp-cfg {
      key "dscp-min dscp-max";
      description
        "list of dscp ranges";
      leaf dscp-min {
        type inet:dscp;
        description
          "Minimum value of dscp range";
      }
      leaf dscp-max {
        type inet:dscp;
        description
          "maximum value of dscp range";
      }
    }
    description
      "Filter containing list of dscp ranges";
  }
  case source-ip-address {
    list source-ip-address-cfg {
      key "source-ip-addr";
      description
        "list of source ip address";
      leaf source-ip-addr {
        type inet:ip-prefix;
      }
    }
    description
      "Filter containing list of source ip addresses";
  }
}
case source-ip-prefix {
    list source-ip-prefix-cfg {
        key "source-ip-prefix";
        description
        "source ip prefix";
    }
    description
    "Filter containing list of source ip addresses";
}

case destination-ip-address {
    list destination-ip-address-cfg {
        key "destination-ip-addr";
        description
        "list of destination ip address";
        leaf destination-ip-addr {
            type inet:ip-prefix;
            description
            "destination ip prefix";
        }
    }
    description
    "Filter containing list of destination ip address";
}

case source-port {
    list source-port-cfg {
        key "source-port-min source-port-max";
        description
        "list of ranges of source port";
        leaf source-port-min {
            type inet:port-number;
            description
            "minimum value of source port range";
        }
        leaf source-port-max {
            type inet:port-number;
            description
            "maximum value of source port range";
        }
    }
    description
    "Filter containing list of source-port ranges";
}

case destination-port {
    list destination-port-cfg {
        key "destination-port-min destination-port-max";
        description
        "list of ranges of destination port";
        leaf destination-port-min {
            type inet:port-number;
        }
        leaf destination-port-max {
            type inet:port-number;
        }
    }
    description
    "Filter containing list of destination-port ranges";
}
description
"minimum value of destination port range";
}
leaf destination-port-max {
  type inet:port-number;
  description
  "maximum value of destination port range";
}
}

typeuint8 {
  range "0..255";
}

description
"minimum value of protocol range";
}
leaf protocol-max {
  type uint8 {
    range "0..255";
  }
  description
  "maximum value of protocol range";
}

description
"Filter Type Protocol";
}
}

grouping classifier-entry-generic-attr {
  description
  "Classifier attributes";
  leaf classifier-entry-name {
    type string;
    description
    "Diffserv classifier name";
  }
  leaf classifier-entry-descr {
    type string;
  }
}
description
    "Description of the class template";
}
leaf classifier-entry-filter-operation {
type identityref {
    base classifier-entry-filter-operation-type;
}
default "match-any-filter";
description
    "Filters are applicable as any or all filters";
}


grouping classifier-entry-inline-attr {
description
    "Classifier inline attributes";
leaf classifier-entry-inline {
    type boolean;
default "false";
description
    "Indication of inline classifier entry";
}
leaf classifier-entry-filter-oper {
    type identityref {
        base classifier-entry-filter-operation-type;
    }
default "match-any-filter";
description
    "Filters are applicable as any or all filters";
}
list filter-entry {
    if-feature policy-inline-classifier-config;
must ".../classifier-entry-inline = 'true'" {
        description
        "For inline filter configuration, inline attribute must be true";
    }
    key "filter-type filter-logical-not";
    uses filters;
description
    "Filters configured inline in a policy";
}
}

container classifiers {
description
    "list of classifier entry";
list classifier-entry {

key "classifier-entry-name";
description
  "classifier entry template";
uses classifier-entry-generic-attr;
list filter-entry {
  key "filter-type filter-logical-not";
  uses filters;
  description
    "Filter configuration";
}
}
}
}
}
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-diffserv-classifier.yang

No license file was found, but licenses were detected in source scan.

submodule openconfig-aaa-radius {

  yang-version "1";

  belongs-to "openconfig-aaa" {
    prefix "oc-aaa";
  }

  // import some basic types
  import openconfig-inet-types { prefix oc-inet; }
  import openconfig-extensions { prefix oc-ext; }
  import openconfig-aaa-types { prefix oc-aaa-types; }
  import openconfig-types { prefix oc-types; }
  import openconfig-yang-types { prefix oc-yang; }

  // meta
  organization "OpenConfig working group";

  contact
    "OpenConfig working group
     www.openconfig.net";

  description
    "This module defines configuration and operational state data
     related to the RADIUS protocol for authentication,
     authorization, and accounting.";

  oc-ext:openconfig-version "0.3.0";
revision "2017-09-18" {
  description
  "Updated to use OpenConfig types modules";
  reference "0.3.0";
}

revision "2017-07-06" {
  description
  "Move to oc-inet types, add IETF attribution, add RADIUS counters, changed password leaf names to indicate hashed";
  reference "0.2.0";
}

revision "2017-01-29" {
  description
  "Initial public release";
  reference "0.1.0";
}

// extension statements

// feature statements

// identity statements

identity RADIUS {
  base oc-aaa-types:AAA_SERVER_TYPE;
  description
  "Remote Authentication Dial In User Service (RADIUS) AAA server";
  reference
  "RFC 2865 - Remote Authentication Dial In User Service (RADIUS)";
}

// typedef statements

// grouping statements

grouping aaa-radius-server-config {
  description
  "Configuration data for a RADIUS server";

  leaf auth-port {
    type oc-inet:port-number;
    default 1812;
    description
  }
leaf acct-port {
    type oc-inet:port-number;
    default 1813;
    description
        "Port number for accounting requests";
}

leaf secret-key {
    type oc-types:routing-password;
    description
        "The unencrypted shared key used between the authentication
        server and the device.";
}

leaf source-address {
    type oc-inet:ip-address;
    description
        "Source IP address to use in messages to the RADIUS server";
}

leaf retransmit-attempts {
    type uint8;
    description
        "Number of times the system may resend a request to the
        RADIUS server when it is unresponsive";
}

grouping aaa-radius-server-state {
    description
        "Operational state data for a RADIUS server";

    container counters {
        description
            "A collection of RADIUS related state objects.";

        leaf retried-access-requests {
            type oc-yang:counter64;
            description
                "Retransmitted Access-Request messages.";
        }

        leaf access-accepts {
            type oc-yang:counter64;
            description
                "";
        }
    }
}
"Received Access-Accept messages."
}

leaf access-rejects {
    type oc-yang:counter64;
    description
    "Received Access-Reject messages."
}

leaf timeout-access-requests {
    type oc-yang:counter64;
    description
    "Access-Request messages that have timed-out, requiring retransmission."
}

}
}

grouping aaa-radius-server-top {
    description
    "Top-level grouping for RADIUS server data"

    container radius {
        description
        "Top-level container for RADIUS server data"

        container config {
            description
            "Configuration data for RADIUS servers"

            uses aaa-radius-server-config;
        }

        container state {
            config false;

            description
            "Operational state data for RADIUS servers"

            uses aaa-radius-server-config;
            uses aaa-radius-server-state;
        }
    }
}

// data definition statements
// augment statements

// rpc statements

// notification statements

}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/openconfig-aaa-radius.yang

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```python
### openconfig_alarm_types

This module defines operational state data related to alarms
that the device is reporting.

This model reuses some data items defined in the draft IETF
YANG Alarm Module:

Portions of this code were derived from the draft IETF YANG Alarm
Module. Please reproduce this note if possible.

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to IETF Documents (http://trustee.ietf.org/license-info).

```
class OPENCONFIGALARMTYPEID(Identity):
    
    Base identity for alarm type ID profiles

    
    _prefix = 'oc-alarm-types'
    _revision = '2018-01-16'

    def __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:OPENCONFIG_ALARM_TYPE_ID"):
        if sys.version_info > (3,):
            super().__init__(ns, pref, tag)
        else:
            super(OPENCONFIGALARMTYPEID, self).__init__(ns, pref, tag)


class OPENCONFIGALARMSEVERITY(Identity):
    
    Base identity for alarm severity profiles. Derived identities are based on contents of the draft IETF YANG Alarm Module

    
    _prefix = 'oc-alarm-types'
    _revision = '2018-01-16'

    def __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:OPENCONFIG_ALARM_SEVERITY"):
        if sys.version_info > (3,):
            super().__init__(ns, pref, tag)
        else:
            super(OPENCONFIGALARMSEVERITY, self).__init__(ns, pref, tag)


class AIS(OPENCONFIGALARMTYPEID):
    

Defines an alarm indication signal type of alarm

```python
_def __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:AIS"):
    if sys.version_info > (3,):
        super().__init__(ns, pref, tag)
    else:
        super(AIS, self).__init__(ns, pref, tag)
```

class EQPT(OPENCONFIGALARMTYPEID):
    Defines an equipment related type of alarm that is specific to the physical hardware

```python
_def __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:EQPT"):
    if sys.version_info > (3,):
        super().__init__(ns, pref, tag)
    else:
        super(EQPT, self).__init__(ns, pref, tag)
```

class LOS(OPENCONFIGALARMTYPEID):
    Defines a loss of signal type of alarm

```python
_def __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:LOS"):
    if sys.version_info > (3,):
        super().__init__(ns, pref, tag)
    else:
        super(LOS, self).__init__(ns, pref, tag)
```
class OTS(OOPENCONFIGALARMTYPEID):
    ""
    Defines a optical transport signal type of alarm
    ""

    __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:OTS"):  
        if sys.version_info > (3,):
            super().__init__(ns, pref, tag)
        else:
            super(OTS, self).__init__(ns, pref, tag)

class UNKNOWN(OOPENCONFIGALARMSERVERITY):
    ""
    Indicates that the severity level could not be determined.
    This level SHOULD be avoided.
    ""

    __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:UNKNOWN"):  
        if sys.version_info > (3,):
            super().__init__(ns, pref, tag)
        else:
class MINOR(OPENCONFIGALARMSEVERITY):
    """
    Indicates the existence of a non-service affecting fault condition and that corrective action should be taken in order to prevent a more serious (for example, service affecting) fault. Such a severity can be reported, for example, when the detected alarm condition is not currently degrading the capacity of the resource
    """
    __prefix = 'oc-alarm-types'
    __revision = '2018-01-16'

    def __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:MINOR"):
        if sys.version_info > (3,):
            super().__init__(ns, pref, tag)
        else:
            super(MINOR, self).__init__(ns, pref, tag)

class WARNING(OPENCONFIGALARMSEVERITY):
    """
    Indicates the detection of a potential or impending service affecting fault, before any significant effects have been felt. Action should be taken to further diagnose (if necessary) and correct the problem in order to prevent it from becoming a more serious service affecting fault.
    """
    __prefix = 'oc-alarm-types'
    __revision = '2018-01-16'

    def __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:WARNING"):
        if sys.version_info > (3,):
            super().__init__(ns, pref, tag)
class MAJOR(OPENCONFIGALARMSEVERITY):
   
   Indicates that a service affecting condition has developed and an urgent corrective action is required. Such a severity can be reported, for example, when there is a severe degradation in the capability of the resource and its full capability must be restored.

   
   _prefix = 'oc-alarm-types'
   _revision = '2018-01-16'

   def __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:MAJOR"):
      if sys.version_info > (3,):
          super().__init__(ns, pref, tag)
      else:
          super(MAJOR, self).__init__(ns, pref, tag)


class CRITICAL(OPENCONFIGALARMSEVERITY):
   
   Indicates that a service affecting condition has occurred and an immediate corrective action is required. Such a severity can be reported, for example, when a resource becomes totally out of service and its capability must be restored.

   
   _prefix = 'oc-alarm-types'
   _revision = '2018-01-16'

   def __init__(self, ns="http://openconfig.net/yang/alarms/types", pref="openconfig-alarm-types", tag="openconfig-alarm-types:CRITICAL"):
      if sys.version_info > (3,):
          super().__init__(ns, pref, tag)
      else:
super(CRITICAL, self).__init__(ns, pref, tag)

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8.tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/openconfig_alarm_types.py
No license file was found, but licenses were detected in source scan.

```python
class IpVersion(Enum):
    """
    IpVersion (Enum Class)
    This value represents the version of the IP protocol.
    Note that integer representation of the enumerated values
```

This module contains a set of Internet address related types for use in OpenConfig modules.

Portions of this code were derived from IETF RFC 6021.
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```python
import sys
from collections import OrderedDict
from ydk.types import Entity as _Entity_
from ydk.types import EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error
```
are not specified, and are not required to follow the

InetVersion textual convention in SMIV2.

.. data:: UNKNOWN = 0

An unknown or unspecified version of the Internet

protocol.

.. data:: IPV4 = 4

The IPv4 protocol as defined in RFC 791.

.. data:: IPV6 = 6

The IPv6 protocol as defined in RFC 2460.

```python
UNKNOWN = Enum.YLeaf(0, "UNKNOWN")
IPV4 = Enum.YLeaf(4, "IPV4")
IPV6 = Enum.YLeaf(6, "IPV6")
```

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/openconfig_inet_types.py

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/*-----------------------------------------
 * policy-types.yang - C3PL type definition yang file
 *
 * Oct 2013, Aseem Choudhary - Nazanin Magharei
 *
 * Copyright (c) 2013 by Cisco Systems, Inc.
 * All rights reserved.
 */

module policy-types{
    yang-version 1;
    namespace "urn:ietf:params:xml:ns:yang:c3pl-types";

    prefix policy-types;

    import ietf-diffserv-classifier {
prefix classifier;
}

import ietf-inet-types {
    prefix inet;
}
organization "Cisco Systems, Inc.";
contact
"Cisco Systems, Inc.
Customer Service
Postal: 170 W Tasman Drive
San Jose, CA 95134
Tel: +1 1800 553-NETS
E-mail: cs-yang@cisco.com

Editor: Nazanin Magharei
        <mailto:nmaghare@cisco.com>

description
"This module contains a collection of YANG groupings in filter configurations for policy model.

revision "2013-10-07" {
    description "first revision"
    reference "TBD"
}
/* policy-type identity definitions */
identity policy-type {
    description "This is identity of base policy-type"
}

identity qos {
    base policy-type;
    description "Policy-type QOS (quality of service)"
}

identity pbr {
    base policy-type;
    description "Policy-type PBR (policy based routing)"
}

identity perf-mon {
    base policy-type;
}
description "
Policy-type PERF-MON (performance monitoring)");
}

identity access-control {
  base policy-type;
  description "
  Policy-type access-control specific policy-map";
}

identity appnav {
  base policy-type;
  description "
  Policy-type APPNAV Policy Map";
}

identity control {
  base policy-type;
  description "
  Policy-type control policy-map";
}

identity inspect {
  base policy-type;
  description "
  Policy-type Firewall Policy Map";
}

identity packet-service {
  base policy-type;
  description "
  Policy-type Packet Service Policy Map";
}

identity service {
  base policy-type;
  description "
  Policy-type policymap service configuration";
}

/* class-type identity definitions */
identity class-type {
  description "
  This is identity of base class-type";
}

identity qos-class {
  base class-type;
description "
QOS class-map";
}

identity access-control-class {
  base class-type;
  description "
  Access-control specific class-map";
}

identity appnav-class {
  base class-type;
  description "
  APPNAV Class Map";
}

identity control-class {
  base class-type;
  description "
  Control policy class-map";
}

identity inspect-class {
  base class-type;
  description "
  Firewall Class Map";
}

typedef metric {
  type enumeration {
    enum none;
    enum peta;
    enum tera;
    enum giga;
    enum mega;
    enum kilo;
    enum milli;
    enum nano;
  }
  description "metric";
}

typedef rate-unit {
  type enumeration {
    enum pps;
    enum cps;
    enum bps;
    enum perc;
    enum ratio;
  }
}
typedef direction {
  type enumeration {
    enum inbound;
    enum outbound;
  }
  description "This typedef defines directional enums used in c3pl."
  inbound: Incoming direction.
  outbound: Outgoing direction.
";
}

/* filter type identity definitions */

identity cos {
  base classifier: filter-type;
  description "Filter-type IEEE 802.1Q/ISL class of service/user priority values";
}

identity cos-inner {
  base classifier: filter-type;
  description "ATM VC configured as Access VC class of service/user priority values";
}

identity ipv4-acl-name {
  base classifier: filter-type;
  description "IPV4 access group list";
}

identity ipv6-acl-name {
  base classifier: filter-type;
  description "IPV6 access group list";
}

identity ipv4-acl {
  base classifier: filter-type;
  description "IPV4 access group Index";
}
identity ipv6-acl {
    base classifier:filter-type;
    description "IPV6 access group Index";
}

identity input-interface {
    base classifier:filter-type;
    description "Input interface";
}

identity src-mac {
    base classifier:filter-type;
    description "Source MAC address";
}

identity dst-mac {
    base classifier:filter-type;
    description "Destination MAC address";
}

identity mpls-exp-top {
    base classifier:filter-type;
    description "Multi Protocol Label Switching experimental topmost specific values";
}

identity mpls-exp-imp {
    base classifier:filter-type;
    description "Multi Protocol Label Switching experimental imposition specific values";
}

identity packet-length {
    base classifier:filter-type;
    description "Layer 3 packet length";
}

identity prec {
    base classifier:filter-type;
    description "IP precedence";
}

identity qos-group {
    base classifier:filter-type;
    description "QOS group";
}
identity vlan {
  base classifier:filter-type;
  description "Vlan";
}

identity vlan-inner {
  base classifier:filter-type;
  description "Vlan-inner";
}

identity atm-clp {
  base classifier:filter-type;
  description "ATM CLP bit";
}

identity atm-vci {
  base classifier:filter-type;
  description "ATM VCI number";
}

identity dei {
  base classifier:filter-type;
  description "Frame-relay DE bit";
}

identity dei-inner {
  base classifier:filter-type;
  description "Frame-relay inner DE bit";
}

identity flow-ip {
  base classifier:filter-type;
  description "Flow IP";
}

identity flow-record {
  base classifier:filter-type;
  description "Flow record";
}

identity flow-de {
  base classifier:filter-type;
  description "Flow DE";
}

identity flow-dlci {
  base classifier:filter-type;
  description "Frame-relay DLCI";
}
identity wlan-user-priority {
    base classifier:filter-type;
    description "WLAN user priority";
}

identity discard-class {
    base classifier:filter-type;
    description "Discard behavior identifier";
}

identity class-map {
    base classifier:filter-type;
    description "class-map";
}

identity metadata {
    base classifier:filter-type;
    description "metadata";
}

identity application {
    base classifier:filter-type;
    description "application";
}

identity security-group-name {
    base classifier:filter-type;
    description "security group name";
}

identity security-group-tag {
    base classifier:filter-type;
    description "security group tag";
}

identity ip-rtp {
    base classifier:filter-type;
    description "IP RTP port";
}

identity vpls {
    base classifier:filter-type;
    description "VPLS";
}

/* Feature capability definitions */
feature match-cos-support {
description "Match COS feature support";
}
feature match-cos-inner-support {
    description "Match COS-inner feature support";
}

feature match-ipv4-acl-name-support {
    description "Match IPV4 ACL list feature support";
}

feature match-ipv6-acl-name-support {
    description "Match IPV6 ACL list feature support";
}

feature match-ipv4-acl-support {
    description "Match IPV4 ACL number feature support";
}

feature match-ipv6-acl-support {
    description "Match IPV6 ACL number feature support";
}

feature match-input-interface-support {
    description "Match input interface support";
}

feature match-src-mac-support {
    description "Match source Mac address feature support";
}

feature match-dst-mac-support {
    description "Match destination Mac address feature support";
}

feature protocol-name-support{
    description "Match non-standard protocol feature support";
}

feature match-packet-length-support {
    description "Match packet length feature support";
}

feature match-discard-class-support {
    description "Match discard class feature support";
}

feature match-class-map-support {
    description "Match class-map feature support";
}

feature match-qos-group-support {
    description "Match QOS group feature support";
}

feature match-prec-support {
    description "Match IP precendence feature support";
}

feature match-mpls-exp-imp-support {
    description "Match MPLS experimental imposition feature support";
}
feature match-mpls-exp-top-support {
    description "Match MPLS experimental topmost feature support";
}

feature match-fr-de-support {
    description "Match Frame relay DE feature support";
}

feature match-fr-dlci-support {
    description "Match Frame relay DLCI feature support";
}

feature match-atm-clp-support {
    description "Match ATM CLP feature support";
}

feature match-atm-vci-support {
    description "Match ATM VCI feature support";
}

feature match-vlan-inner-support {
    description "Match Vlan-inner feature support";
}

feature match-vlan-support {
    description "Match VLAN feature support";
}

feature match-dei-support {
    description "Match Frame relay DEI feature support";
}

feature match-dei-inner-support {
    description "Match Frame relay DEI inner feature support";
}

feature match-flow-ip-support {
    description "Match Flow IP feature support";
}

feature match-flow-record-support {
    description "Match Flow record feature support";
}

feature match-wlan-user-priority-support {
    description "Match Wlan user priority feature support";
}

feature match-metadata-support {
    description "Match Metadata feature support";
}

feature match-application-support {
    description "Match Application feature support";
}

feature match-security-group-support {
    description "Match Security group feature support";
}

feature match-ip-rtp-support {
    description "Match IP RTP feature support";
}
feature match-vpls-support {
    description "Match VPLS feature support";
}

/* typedef definitions of filter configurations */
typedef pkt-len-type {
    type uint16 {
        range "1..9216";
    }
    description "Layer 3 packet length from 1 to 9216";
}
typedef dscp-type {
    type inet:dscp;
    description "Differentiated services codepoint."
}
typedef src-dst-ip-type {
    type inet:ip-prefix;
    description "Source/destination IP prefix.";
}
typedef src-dst-port-type {
    type inet:port-number;
    description "Source/destination port value";
}
typedef protocol-type {
    type string;
    description "Name of the protocol";
}
typedef protocol-name {
    type string;
    description "Name of the protocol";
}
typedef cos-type {
    type uint8 {
        range "0..7";
    }
    description "Class of service."
}
typedef ip-acl-name-type {
    type string {length "1..64";}
}
description "IPv4/6 access group."
}

typedef ip-acl-type {
    type uint32;
    description "IPv4/6 access group number."
}

typedef prec-val-type {
    type uint8 {
        range "0..7";
    }
    description "IP precedence value."
}

typedef prec-attr-type {
    type string;
    description "IP precedence attribute."
}

typedef mpls-exp-type {
    type uint8 {
        range "0..7";
    }
    description "MPLS Experimental bits."
}

typedef discard-class-type {
    type uint8 {
        range "0..7";
    }
    description "Discard behavior identifier."
}

typedef dei-type {
    type boolean;
    description "Frame relay DEI."
}

typedef flow-record-type{
    type string { length "1..255";}
    description "Flow record.";
typedef fr-de-type {
    type empty;
    description "Frame relay DE type definition.";
}

typedef wlan-user-priority-type {
    type uint8 { range "0..7"; }
    description "Wlan user priority value.";
}

typedef class-map-type {
    type string { length "1..64"; }
    description "Class-map name.";
}

typedef application-type {
    type string;
    description "Application name.";
}

typedef qos-group-type {
    type uint16 {
        range "0..99";
    }
    description "QoS Group value.";
}

typedef vlan-type {
    type uint16 {
        range "1..4095";
    }
    description "Vlan ID.";
}

module ietf-ip {

}
prefix ip;
import ietf-interfaces {
    prefix if;
}
import ietf-inet-types {
    prefix inet;
}
import ietf-yang-types {
    prefix yang;
}
organization
"IETF NETMOD (NETCONF Data Modeling Language) Working Group";
contact
"WG Web: <http://tools.ietf.org/wg/netmod/>
WG List: <mailto:netmod@ietf.org>
WG Chair: Thomas Nadeau
    <mailto:tnadeau@lucidvision.com>
WG Chair: Juergen Schoenwaelder
    <mailto:j.schoenwaelder@jacobs-university.de>
Editor: Martin Bjorklund
    <mailto:mbj@tail-f.com>";
description
"This module contains a collection of YANG definitions for configuring IP implementations.
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This version of this YANG module is part of RFC 7277; see the RFC itself for full legal notices."
revision 2014-06-16 {
    description
    "Initial revision.";
    reference
    "RFC 7277: A YANG Data Model for IP Management";
}
/*
* Features
*/
feature ipv4-non-contiguous-netmasks {
    description
    "Indicates support for configuring non-contiguous subnet masks.";
feature ipv6-privacy-autoconf {
    description
    "Indicates support for Privacy Extensions for Stateless Address
    Autoconfiguration in IPv6.";
    reference
    "RFC 4941: Privacy Extensions for Stateless Address
    Autoconfiguration in IPv6";
}

/*
 * Typedefs
 */
typedef ip-address-origin {
type enumeration {
enum other {
    description
    "None of the following.";
}
enum static {
    description
    "Indicates that the address has been statically
    configured - for example, using NETCONF or a Command Line
    Interface.";
}
enum dhcp {
    description
    "Indicates an address that has been assigned to this
    system by a DHCP server.";
}
enum link-layer {
    description
    "Indicates an address created by IPv6 stateless
    autoconfiguration that embeds a link-layer address in its
    interface identifier.";
}
enum random {
    description
    "Indicates an address chosen by the system at
    random, e.g., an IPv4 address within 169.254/16, an
    RFC 4941 temporary address, or an RFC 7217 semantically
    opaque address.";
    reference
    "RFC 4941: Privacy Extensions for Stateless Address
    Autoconfiguration in IPv6
    RFC 7217: A Method for Generating Semantically Opaque
    Interface Identifiers with IPv6 Stateless
    Address Autoconfiguration (SLAAC)";
}
typedef neighbor-origin {
type enumeration {
  enum other {
    description
    "None of the following.";
  }
  enum static {
    description
    "Indicates that the mapping has been statically
    configured - for example, using NETCONF or a Command Line
    Interface.";
  }
  enum dynamic {
    description
    "Indicates that the mapping has been dynamically resolved
    using, e.g., IPv4 ARP or the IPv6 Neighbor Discovery
    protocol.";
  }
}

description
  "The origin of a neighbor entry.";
}

/*
* Configuration data nodes
*/
augment "/if:interfaces/if:interface" {

description
  "Parameters for configuring IP on interfaces.
  If an interface is not capable of running IP, the server
  must not allow the client to configure these parameters.";

container ipv4 {
  presence
  "Enables IPv4 unless the 'enabled' leaf
  (which defaults to 'true') is set to 'false'";

description
  "Parameters for the IPv4 address family.";
  leaf enabled {
    type boolean;
    default true;
    description
    "Controls whether IPv4 is enabled or disabled on this
    interface. When IPv4 is enabled, this interface is
    connected to an IPv4 stack, and the interface can send
    and receive IPv4 packets.";
}
leaf forwarding {
    type boolean;
    default false;
    description
    "Controls IPv4 packet forwarding of datagrams received by,
    but not addressed to, this interface. IPv4 routers
    forward datagrams. IPv4 hosts do not (except those
    source-routed via the host).";
}

leaf mtu {
    type uint16 {
        range "68..max";
    }
    units octets;
    description
    "The size, in octets, of the largest IPv4 packet that the
    interface will send and receive.
    The server may restrict the allowed values for this leaf,
    depending on the interface's type.
    If this leaf is not configured, the operationally used MTU
    depends on the interface's type.";
    reference
    "RFC 791: Internet Protocol";
}

list address {
    key "ip";
    description
    "The list of configured IPv4 addresses on the interface.";
    leaf ip {
        type inet:ipv4-address-no-zone;
        description
        "The IPv4 address on the interface.";
    }
    choice subnet {
        mandatory true;
        description
        "The subnet can be specified as a prefix-length, or,
        if the server supports non-contiguous netmasks, as
        a netmask.";
        leaf prefix-length {
            type uint8 {
                range "0..32";
            }
            description
            "The length of the subnet prefix.";
        }
        leaf netmask {
if-feature ipv4-non-contiguous-netmasks;
  type yang:dotted-quad;
  description
    "The subnet specified as a netmask."
  }
}

list neighbor {
  key "ip";
  description
    "A list of mappings from IPv4 addresses to
    link-layer addresses. Entries in this list are used as static entries in the
    ARP Cache."
  reference
    "RFC 826: An Ethernet Address Resolution Protocol"
  leaf ip {
    type inet:ipv4-address-no-zone;
    description
      "The IPv4 address of the neighbor node."
  }
  leaf link-layer-address {
    type yang:phys-address;
    mandatory true;
    description
      "The link-layer address of the neighbor node."
  }
}

container ipv6 {
  presence
    "Enables IPv6 unless the 'enabled' leaf
    (which defaults to 'true') is set to 'false'"
  description
    "Parameters for the IPv6 address family."
  leaf enabled {
    type boolean;
    default true;
    description
      "Controls whether IPv6 is enabled or disabled on this
      interface. When IPv6 is enabled, this interface is
      connected to an IPv6 stack, and the interface can send
      and receive IPv6 packets."
  }
  leaf forwarding {
    type boolean;
    default false;
    description
"Controls IPv6 packet forwarding of datagrams received by, but not addressed to, this interface. IPv6 routers forward datagrams. IPv6 hosts do not (except those source-routed via the host).";

reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6)
Section 6.2.1, IsRouter";

leaf mtu {
    type uint32 {
        range "1280..max";
    }
    units octets;
    description
    "The size, in octets, of the largest IPv6 packet that the interface will send and receive. The server may restrict the allowed values for this leaf, depending on the interface's type. If this leaf is not configured, the operationally used MTU depends on the interface's type."
    reference
Section 5";
}

list address {
    key "ip";
    description
    "The list of configured IPv6 addresses on the interface.";
    leaf ip {
        type inet:ipv6-address-no-zone;
        description
        "The IPv6 address on the interface.";
    }
    leaf prefix-length {
        type uint8 {
            range "0..128";
        }
        mandatory true;
        description
        "The length of the subnet prefix."
    }
}

list neighbor {
    key "ip";
    description
    "A list of mappings from IPv6 addresses to link-layer addresses. Entries in this list are used as static entries in the
Neighbor Cache.
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6)"
leaf ip {
type inet:ipv6-address-no-zone;
description
"The IPv6 address of the neighbor node."
}
leaf link-layer-address {
type yang:phys-address;
mandatory true;
description
"The link-layer address of the neighbor node."
}
leaf dup-addr-detect-transmits {
type uint32;
default 1;
description
"The number of consecutive Neighbor Solicitation messages
sent while performing Duplicate Address Detection on a
tentative address. A value of zero indicates that
Duplicate Address Detection is not performed on
tentative addresses. A value of one indicates a single
transmission with no follow-up retransmissions."
reference
"RFC 4862: IPv6 Stateless Address Autoconfiguration"
}
container autoconf {
description
"Parameters to control the autoconfiguration of IPv6
addresses, as described in RFC 4862."
reference
"RFC 4862: IPv6 Stateless Address Autoconfiguration"
leaf create-global-addresses {
type boolean;
default true;
description
"If enabled, the host creates global addresses as
described in RFC 4862."
reference
"RFC 4862: IPv6 Stateless Address Autoconfiguration
    Section 5.5"
}
leaf create-temporary-addresses {
if-feature ipv6-privacy-autoconf;
type boolean;
default false;
description
"If enabled, the host creates temporary addresses as
described in RFC 4941.";
reference
"RFC 4941: Privacy Extensions for Stateless Address
Autoconfiguration in IPv6";
}
leaf temporary-valid-lifetime {
  if-feature ipv6-privacy-autoconf;
  type uint32;
  units "seconds";
  default 604800;
  description
  "The time period during which the temporary address
  is valid.";
  reference
  "RFC 4941: Privacy Extensions for Stateless Address
  Autoconfiguration in IPv6
  - TEMP_VALID_LIFETIME";
}
leaf temporary-preferred-lifetime {
  if-feature ipv6-privacy-autoconf;
  type uint32;
  units "seconds";
  default 86400;
  description
  "The time period during which the temporary address is
  preferred.";
  reference
  "RFC 4941: Privacy Extensions for Stateless Address
  Autoconfiguration in IPv6
  - TEMP_PREFERRED_LIFETIME";
}
/*
 * Operational state data nodes
 */
augment "/if:interfaces-state/if:interface" {
  description
  "Data nodes for the operational state of IP on interfaces.";
  container ipv4 {
    presence "Present if IPv4 is enabled on this interface";
    config false;
    description
    "Interface-specific parameters for the IPv4 address family.";
    leaf forwarding {
type boolean;
description
"Indicates whether IPv4 packet forwarding is enabled or
disabled on this interface."
);
leaf mtu {
type uint16 {
  range "68..max";
}
units octets;
description
"The size, in octets, of the largest IPv4 packet that the
interface will send and receive.";
reference
"RFC 791: Internet Protocol";
}
list address {
  key "ip";
description
"The list of IPv4 addresses on the interface.";
leaf ip {
  type inet:ipv4-address-no-zone;
description
"The IPv4 address on the interface.";
}
choice subnet {
description
"The subnet can be specified as a prefix-length, or,
if the server supports non-contiguous netmasks, as
a netmask.";
leaf prefix-length {
  type uint8 {
    range "0..32";
  }
description
"The length of the subnet prefix.";
}
leaf netmask {
  if-feature ipv4-non-contiguous-netmasks;
type yang:dotted-quad;
description
"The subnet specified as a netmask.";
}
}
leaf origin {
  type ip-address-origin;
description
"The origin of this address.";
list neighbor {
  key "ip";
  description "A list of mappings from IPv4 addresses to
    link-layer addresses.
    This list represents the ARP Cache."
  reference "RFC 826: An Ethernet Address Resolution Protocol"
  leaf ip {
    type inet:ipv4-address-no-zone;
    description "The IPv4 address of the neighbor node."
  }
  leaf link-layer-address {
    type yang:phys-address;
    description "The link-layer address of the neighbor node."
  }
  leaf origin {
    type neighbor-origin;
    description "The origin of this neighbor entry."
  }
}

container ipv6 {
  presence "Present if IPv6 is enabled on this interface"
  config false;
  description "Parameters for the IPv6 address family"
  leaf forwarding {
    type boolean;
    default false;
    description "Indicates whether IPv6 packet forwarding is enabled or
disabled on this interface."
    reference "RFC 4861: Neighbor Discovery for IP version 6 (IPv6)
      Section 6.2.1, IsRouter"
  }
  leaf mtu {
    type uint32 {
      range "1280..max"
    }
    units octets;
    description"
"The size, in octets, of the largest IPv6 packet that the interface will send and receive."

reference
Section 5"

}
list address {
  key "ip";
  description
  "The list of IPv6 addresses on the interface."

  leaf ip {
    type inet:ipv6-address-no-zone;
    description
    "The IPv6 address on the interface."
  }

  leaf prefix-length {
    type uint8 {
      range "0..128"
    }
    mandatory true;
    description
    "The length of the subnet prefix."
  }

  leaf origin {
    type ip-address-origin;
    description
    "The origin of this address."
  }

  leaf status {
    type enumeration {
      enum preferred {
        description
        "This is a valid address that can appear as the destination or source address of a packet."
      }
      enum deprecated {
        description
        "This is a valid but deprecated address that should no longer be used as a source address in new communications, but packets addressed to such an address are processed as expected."
      }
      enum invalid {
        description
        "This isn't a valid address, and it shouldn't appear as the destination or source address of a packet."
      }
    }
  }
}
description
"The address is not accessible because the interface
to which this address is assigned is not
operational.";
}
enum unknown {
  description
  "The status cannot be determined for some reason.";
}
enum tentative {
  description
  "The uniqueness of the address on the link is being
  verified. Addresses in this state should not be
  used for general communication and should only be
  used to determine the uniqueness of the address.";
}
enum duplicate {
  description
  "The address has been determined to be non-unique on
  the link and so must not be used.";
}
enum optimistic {
  description
  "The address is available for use, subject to
  restrictions, while its uniqueness on a link is
  being verified.";
}
}
}
description
"The status of an address. Most of the states correspond
to states from the IPv6 Stateless Address
Autoconfiguration protocol.";
reference
"RFC 4293: Management Information Base for the
  Internet Protocol (IP)
  - IpAddressStatusTC
RFC 4862: IPv6 Stateless Address Autoconfiguration";
}
}
list neighbor {
  key "ip";
  description
  "A list of mappings from IPv6 addresses to
  link-layer addresses. This list represents the Neighbor Cache.";
  reference
  "RFC 4861: Neighbor Discovery for IP version 6 (IPv6)"
}
type inet:ipv6-address-no-zone;
  description
    "The IPv6 address of the neighbor node."
};
}
leaf link-layer-address {
  type yang:phys-address;
  description
    "The link-layer address of the neighbor node."
};
leaf origin {
  type neighbor-origin;
  description
    "The origin of this neighbor entry."
};
leaf is-router {
  type empty;
  description
    "Indicates that the neighbor node acts as a router."
};
leaf state {
  type enumeration {
    enum incomplete {
      description
        "Address resolution is in progress, and the link-layer
        address of the neighbor has not yet been
determined.";
    }
    enum reachable {
      description
        "Roughly speaking, the neighbor is known to have been
        reachable recently (within tens of seconds ago)."
    }
    enum stale {
      description
        "The neighbor is no longer known to be reachable, but
        until traffic is sent to the neighbor no attempt
        should be made to verify its reachability.";
    }
    enum delay {
      description
        "The neighbor is no longer known to be reachable, and
        traffic has recently been sent to the neighbor.
        Rather than probe the neighbor immediately, however,
        delay sending probes for a short while in order to
        give upper-layer protocols a chance to provide
        reachability confirmation.";
    }
    enum probe {

description
"The neighbor is no longer known to be reachable, and
unicast Neighbor Solicitation probes are being sent
to verify reachability."
}

description
"The Neighbor Unreachability Detection state of this
entry.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6)
   Section 7.3.2";

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-
  0.1.8/ydk/models/openconfig/_yang/ietf-ip.yang
No license file was found, but licenses were detected in source scan.

Metadata-Version: 1.1
Name: ydk-models-openconfig
Version: 0.1.8
Summary: YDK bundle for Openconfig models
Home-page: https://github.com/CiscoDevNet/ydk-py
Author: Cisco Systems
Author-email: yang-dk@cisco.com
License: Apache 2.0
Description: This YANG Development Kit (YDK) bundle provides APIs for Openconfig YANG models. YDK
facilitates the use of YANG data models by expressing the model semantics in an API and abstracting
protocol/encoding details. YDK is composed of a core package that defines services and providers, plus one or
more module bundles. This YDK bundle for OpenConfig models uses the YDK core package and additional model
bundles. You can find the SDK documentation at http://ydk.cisco.com/py/docs You can find more details on YDK
at http://ydk.io
Keywords: yang,C++11,python bindings
Platform: UNKNOWN
Classifier: Development Status :: 3 - Alpha
Classifier: Intended Audience :: Developers
Classifier: Intended Audience :: Education
Classifier: Intended Audience :: Information Technology
Classifier: Intended Audience :: Science/Research
Classifier: Intended Audience :: System Administrators
Classifier: Topic :: Software Development :: Build Tools
Classifier: Topic :: Software Development :: Libraries
Classifier: License :: OSI Approved :: Apache Software License
module ietf-diffserv-target {

  yang-version 1;
  prefix target;

  import ietf-interfaces {
    prefix if;
  }

  organization "IETF NETMOD (Netmod Working Group) Working Group";
  contact
    "WG Web:  <http://tools.ietf.org/wg/netmod/>
    WG List:  <mailto:netmod@ietf.org>
    WG Chair: Juergen Schoenwaelder
      <mailto:j.schoenwaelder@jacobs-university.de>
    WG Chair: Tom Nadeau
      <mailto:tnadeau@lucidvision.com>
    Editor:  Aseem Choudhary
      <mailto:asechoud@cisco.com>
    Editor:  Shitanshu Shah
      <mailto:svshah@cisco.com>";
  description
    "This module contains a collection of YANG definitions for
    configuring diffserv specification implementations."

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  authors of the code. All rights reserved."
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This version of this YANG module is part of RFC XXXX; see the RFC itself for full legal notices.

revision 2015-04-07 {
  description
    "Latest revision diffserv based policy applied to a target";
  reference "RFC XXXX";
}

identity direction {
  description
    "This is identity of traffic direction";
}

identity inbound {
  base direction;
  description
    "Direction of traffic coming into the network entry";
}

identity outbound {
  base direction;
  description
    "Direction of traffic going out of the network entry";
}

feature target-inline-policy-config {
  description
    "This feature allows the policy configuration directly under a target.";
}

grouping wred-stats {
  description
    "WRED Counters";
  leaf early-drop-pkts {
    type uint64;
    description
      "Early drop packets";
  }
  leaf early-drop-bytes {

type uint64;
description "Early drop bytes ";
}
}

grouping classifier-entry-stats {
description "Classifier Counters";
container classifier-entry-statistics {
config false;
description "
This group defines the classifier filter statistics of each classifier entry 
",
leaf classified-pkts {
type uint64;
description " Number of total packets which filtered to the classifier-entry";
}
leaf classified-bytes {
type uint64;
description " Number of total bytes which filtered to the classifier-entry";
}
leaf classified-rate {
type uint64;
units "bits-per-second";
description " Rate of average data flow through the classifier-entry";
}
}
}

grouping queuing-stats {
description "Queuing Counters";
container queuing-statistics {
description "queue related statistics ";
leaf output-pkts {
type uint64;
description
"Number of packets transmitted from queue ";
} leaf output-bytes {
    type uint64;
    description
    "Number of bytes transmitted from queue ";
}
} leaf queue-size-pkts {
    type uint64;
    description
    "Number of packets currently buffered ";
}
} leaf queue-size-bytes {
    type uint64;
    description
    "Number of bytes currently buffered ";
}
} leaf drop-pkts {
    type uint64;
    description
    "Total number of packets dropped ";
}
} leaf drop-bytes {
    type uint64;
    description
    "Total number of bytes dropped ";
}
} container wred-stats {
    uses wred-stats;
    description
    "Container for WRED statistics";
}
}
}

grouping meter-stats {
    description
    "Metering Counters";
    list meter-statistics {
        key "meter-id";
        description
        "Meter statistics";
        leaf meter-id {
            type uint16;
            description
            "Meter Identifier";
        }
        leaf meter-succeed-pkts {
type uint64;
description
    "Number of packets which succeed the meter";
}
leaf meter-succeed-bytes {
    type uint64;
description
    "Bytes of packets which succeed the meter";
}
leaf meter-failed-pkts {
    type uint64;
description
    "Number of packets which failed the meter";
}
leaf meter-failed-bytes {
    type uint64;
description
    "Bytes of packets which failed the meter";
}

augment "/if:interfaces/if:interface" {
    description
    "Augments Diffserv Target Entry to Interface module";
    list diffserv-target-entry {
        key "direction policy-name";
description
        "policy target for inbound or outbound direction";
        leaf direction {
            type identityref {
                base direction;
            }
description
                "Direction for the traffic flow either inbound or outbound";
        }
        leaf policy-name {
            type string;
description
                "Policy entry name";
        }
    }
}

augment "/if:interfaces-state/if:interface" {
    description
    "Augments Diffserv Target Entry to Interface module";
    list diffserv-target-entry {
key "direction policy-name";
description
   "policy target for inbound or outbound direction";
leaf direction {
type identityref {
   base direction;
}
description
   "Direction fo the traffic flow either inbound or outbound";
}
leaf policy-name {
type string;
description
   "Policy entry name";
}
list diffserv-target-classifier-statistics {
key "classifier-entry-name parent-path";
description
   "Statistics for each Classifier Entry in a Policy";
leaf classifier-entry-name {
type string;
description
   "Classifier Entry Name";
}
leaf parent-path {
type string;
description
   "Path of the Classifier Entry in a hierarchial policy ";
}
uses classifier-entry-stats;
uses meter-stats;
uses queuing-stats;
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-diffserv-target.yang
No license file was found, but licenses were detected in source scan.

module iana-if-type {
namespace "urn:ietf:params:xml:ns:yang:iana-if-type";
prefix ianaift;

import ietf-interfaces {
prefix if;

organization "IANA";
contact
  " Internet Assigned Numbers Authority
Postal: ICANN
        4676 Admiralty Way, Suite 330
        Marina del Rey, CA 90292
Tel:    +1 310 823 9358
<mailto:iana@iana.org>";
description
"This YANG module defines YANG identities for IANA-registered
interface types.

This YANG module is maintained by IANA and reflects the
'ifType definitions' registry.

The latest revision of this YANG module can be obtained from
the IANA web site.

Requests for new values should be made to IANA via
e-mail (iana@iana.org).

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Relating to IETF Documents
(http://trustee.ietf.org/license-info).

The initial version of this YANG module is part of RFC 7224;
see the RFC itself for full legal notices.";
reference
"IANA 'ifType definitions' registry.
  <http://www.iana.org/assignments/smi-numbers>";
revision 2014-05-08 {
  description
    "Initial revision.";
  reference
    "RFC 7224: IANA Interface Type YANG Module";
}
identity iana-interface-type {
    base if:interface-type;
    description "This identity is used as a base for all interface types defined in the 'ifType definitions' registry."
}

identity other {
    base iana-interface-type;
}
identity regular1822 {
    base iana-interface-type;
}
identity hdh1822 {
    base iana-interface-type;
}
identity ddnX25 {
    base iana-interface-type;
}
identity rfc877x25 {
    base iana-interface-type;
    reference "RFC 1382 - SNMP MIB Extension for the X.25 Packet Layer";
}
identity ethernetCsmacd {
    base iana-interface-type;
    description "For all Ethernet-like interfaces, regardless of speed, as per RFC 3635.";
    reference "RFC 3635 - Definitions of Managed Objects for the Ethernet-like Interface Types";
}
identity iso88023Csmacd {
    base iana-interface-type;
    status deprecated;
    description "Deprecated via RFC 3635. Use ethernetCsmacd(6) instead.";
    reference "RFC 3635 - Definitions of Managed Objects for the Ethernet-like Interface Types";
}
identity iso88024TokenBus {
    base iana-interface-type;
}

identity iso88025TokenRing {
    base iana-interface-type;
}

identity iso88026Man {
    base iana-interface-type;
}

identity starLan {
    base iana-interface-type;
    status deprecated;
    description
    "Deprecated via RFC 3635. Use ethernetCsmacd(6) instead."
    reference
    "RFC 3635 - Definitions of Managed Objects for the Ethernet-like Interface Types";
}

identity proteon10Mbit {
    base iana-interface-type;
}

identity proteon80Mbit {
    base iana-interface-type;
}

identity hyperchannel {
    base iana-interface-type;
}

identity fddi {
    base iana-interface-type;
    reference
    "RFC 1512 - FDDI Management Information Base";
}

identity lapb {
    base iana-interface-type;
    reference
    "RFC 1381 - SNMP MIB Extension for X.25 LAPB";
}

identity sdlc {
    base iana-interface-type;
}

identity ds1 {
    base iana-interface-type;
    description
    "DS1-MIB."
    reference
    "RFC 4805 - Definitions of Managed Objects for the DS1, J1, E1, DS2, and E2 Interface Types";
identity e1 {
    base iana-interface-type;
    status obsolete;
    description
    "Obsolete; see DS1-MIB."
    reference
    "RFC 4805 - Definitions of Managed Objects for the
    DS1, J1, E1, DS2, and E2 Interface Types"
}

identity basicISDN {
    base iana-interface-type;
    description
    "No longer used. See also RFC 2127."
}

identity primaryISDN {
    base iana-interface-type;
    description
    "No longer used. See also RFC 2127."
}

identity propPointToPointSerial {
    base iana-interface-type;
    description
    "Proprietary serial."
}

identity ppp {
    base iana-interface-type;
}

identity softwareLoopback {
    base iana-interface-type;
}

identity eon {
    base iana-interface-type;
    description
    "CLNP over IP."
}

identity ethernet3Mbit {
    base iana-interface-type;
}

identity nsip {
    base iana-interface-type;
    description
    "XNS over IP."
}

identity slip {
    base iana-interface-type;
description
"Generic SLIP."
}
identity ultra {
    base iana-interface-type;
    description
    "Ultra Technologies."
}
identity ds3 {
    base iana-interface-type;
    description
    "DS3-MIB."
    reference
    "RFC 3896 - Definitions of Managed Objects for the
    DS3/E3 Interface Type";
}
identity sip {
    base iana-interface-type;
    description
    "SMDS, coffee."
    reference
    "RFC 1694 - Definitions of Managed Objects for SMDS
    Interfaces using SMIPv2";
}
identity frameRelay {
    base iana-interface-type;
    description
    "DTE only."
    reference
    "RFC 2115 - Management Information Base for Frame Relay
    DTEs Using SMIPv2";
}
identity rs232 {
    base iana-interface-type;
    reference
    "RFC 1659 - Definitions of Managed Objects for RS-232-like
    Hardware Devices using SMIPv2";
}
identity para {
    base iana-interface-type;
    reference
    "RFC 1660 - Definitions of Managed Objects for Parallel-printer-like Hardware Devices using
    SMIPv2";
}
identity arcnet {
identity arcnet { base iana-interface-type; description "ARCnet.";
}
identity arcnetPlus { base iana-interface-type; description "ARCnet Plus.";
}

identity atm { base iana-interface-type; description "ATM cells.";
}
identity miox25 { base iana-interface-type; reference "RFC 1461 - SNMP MIB extension for Multiprotocol Interconnect over X.25";
}
identity sonet { base iana-interface-type; description "SONET or SDH.";
}
identity x25ple { base iana-interface-type; reference "RFC 2127 - ISDN Management Information Base using SMIv2";
}
identity iso88022llc { base iana-interface-type;
}
identity localTalk { base iana-interface-type;
}
identity smdsDxi { base iana-interface-type;
}
identity frameRelayService { base iana-interface-type; description "FRNETSERV-MIB.";
reference "RFC 2954 - Definitions of Managed Objects for Frame
Relay Service";
}
identity v35 {
    base iana-interface-type;
}
identity hssi {
    base iana-interface-type;
}
identity hippi {
    base iana-interface-type;
}

identity modem {
    base iana-interface-type;
    description
        "Generic modem."
;
}
identity aal5 {
    base iana-interface-type;
    description
        "AAL5 over ATM."
;
}
identity sonetPath {
    base iana-interface-type;
}
identity sonetVT {
    base iana-interface-type;
}
identity smdsIcip {
    base iana-interface-type;
    description
        "SMDS InterCarrier Interface."
;
}
identity propVirtual {
    base iana-interface-type;
    description
        "Proprietary virtual/internal."
;
    reference
        "RFC 2863 - The Interfaces Group MIB"
;
}
identity propMultiplexor {
    base iana-interface-type;
    description
        "Proprietary multiplexing."
;
    reference
        "RFC 2863 - The Interfaces Group MIB"
;
}
identity ieee80212 {
identity fibreChannel {
    base iana-interface-type;
    description
    "Fibre Channel."
}

identity hippiInterface {
    base iana-interface-type;
    description
    "HIPPI interfaces."
}

identity frameRelayInterconnect {
    base iana-interface-type;
    status obsolete;
    description
    "Obsolete; use either
    frameRelay(32) or frameRelayService(44)."
}

identity aflane8023 {
    base iana-interface-type;
    description
    "ATM Emulated LAN for 802.3."
}

identity aflane8025 {
    base iana-interface-type;
    description
    "ATM Emulated LAN for 802.5."
}

identity cctEmul {
    base iana-interface-type;
    description
    "ATM Emulated circuit."
}

identity fastEther {
    base iana-interface-type;
    status deprecated;
    description
    "Obsoleted via RFC 3635.
    ethernetCsmacd(6) should be used instead.";
    reference
    "RFC 3635 - Definitions of Managed Objects for the
    Ethernet-like Interface Types";
identity isdn {
    base iana-interface-type;
    description "ISDN and X.25."
    reference "RFC 1356 - Multiprotocol Interconnect on X.25 and ISDN in the Packet Mode";
}

identity v11 {
    base iana-interface-type;
    description "CCITT V.11/X.21."
}

identity v36 {
    base iana-interface-type;
    description "CCITT V.36."
}

identity g703at64k {
    base iana-interface-type;
    description "CCITT G703 at 64Kbps."
}

identity g703at2mb {
    base iana-interface-type;
    status obsolete;
    description "Obsolete; see DS1-MIB."
}

identity qllc {
    base iana-interface-type;
    description "SNA QLLC."
}

identity fastEtherFX {
    base iana-interface-type;
    status deprecated;
    description "Obsoleted via RFC 3635. ethernetCsmacd(6) should be used instead."
    reference "RFC 3635 - Definitions of Managed Objects for the Ethernet-like Interface Types";
}
identity channel {
  base iana-interface-type;
  description
   "Channel.";
}
identity ieee80211 {
  base iana-interface-type;
  description
   "Radio spread spectrum.";
}
identity ibm370parChan {
  base iana-interface-type;
  description
   "IBM System 360/370 OEMI Channel.";
}
identity escon {
  base iana-interface-type;
  description
   "IBM Enterprise Systems Connection.";
}
identity dlsw {
  base iana-interface-type;
  description
   "Data Link Switching.";
}
identity isdns {
  base iana-interface-type;
  description
   "ISDN S/T interface.";
}
identity isdnu {
  base iana-interface-type;
  description
   "ISDN U interface.";
}
identity lapd {
  base iana-interface-type;
  description
   "Link Access Protocol D.";
}
identity ipSwitch {
  base iana-interface-type;
  description
   "IP Switching Objects.";
}
identity rsrb {
  base iana-interface-type;
  description
"Remote Source Route Bridging."
}
identity atmLogical {
    base iana-interface-type;
    description
        "ATM Logical Port."
    reference
        "RFC 3606 - Definitions of Supplemental Managed Objects for ATM Interface"
}
identity ds0 {
    base iana-interface-type;
    description
        "Digital Signal Level 0."
    reference
        "RFC 2494 - Definitions of Managed Objects for the DS0 and DS0 Bundle Interface Type"
}
identity ds0Bundle {
    base iana-interface-type;
    description
        "Group of ds0s on the same ds1"
    reference
        "RFC 2494 - Definitions of Managed Objects for the DS0 and DS0 Bundle Interface Type"
}
identity bsc {
    base iana-interface-type;
    description
        "Bisynchronous Protocol"
}
identity async {
    base iana-interface-type;
    description
        "Asynchronous Protocol"
}
identity cnr {
    base iana-interface-type;
    description
        "Combat Net Radio"
}
identity iso88025Dtr {
    base iana-interface-type;
    description
        "ISO 802.5r DTR"
}
identity eplrs {
description
"Ext Pos Loc Report Sys."
}
identity arap {
    base iana-interface-type;
    description
}
identity propCnls {
    base iana-interface-type;
    description
    "Proprietary Connectionless Protocol."
}
identity hostPad {
    base iana-interface-type;
    description
    "CCITT-ITU X.29 PAD Protocol."
}
identity termPad {
    base iana-interface-type;
    description
    "CCITT-ITU X.3 PAD Facility."
}
identity frameRelayMPI {
    base iana-interface-type;
    description
    "Multiprotocol Interconnect over FR."
}
identity x213 {
    base iana-interface-type;
    description
    "CCITT-ITU X213."
}
identity adsl {
    base iana-interface-type;
    description
    "Asymmetric Digital Subscriber Loop."
}
identity radsl {
    base iana-interface-type;
    description
    "Rate-Adapt. Digital Subscriber Loop."
}
identity sdsl {
    base iana-interface-type;
    description
    "Symmetric Digital Subscriber Loop."
}
identity vdsl {
  base iana-interface-type;
  description
  "Very H-Speed Digital Subcrib. Loop.";
}

identity iso88025CRFPInt {
  base iana-interface-type;
  description
  "ISO 802.5 CRFP.";
}

identity myrinet {
  base iana-interface-type;
  description
  "Myricom Myrinet.";
}

identity voiceEM {
  base iana-interface-type;
  description
  "Voice recEive and transMit.";
}

identity voiceFXO {
  base iana-interface-type;
  description
  "Voice Foreign Exchange Office.";
}

identity voiceFXS {
  base iana-interface-type;
  description
  "Voice Foreign Exchange Station.";
}

identity voiceEncap {
  base iana-interface-type;
  description
  "Voice encapsulation.";
}

identity voiceOverIp {
  base iana-interface-type;
  description
  "Voice over IP encapsulation.";
}

identity atmDxi {
  base iana-interface-type;
  description
  "ATM DXI.";
}

identity atmFuni {
"ATM FUNI."

} identity atmIma {
  base iana-interface-type;
  description
  "ATM IMA."
}

} identity pppMultilinkBundle {
  base iana-interface-type;
  description
  "PPP Multilink Bundle."
}

} identity ipOverCdlc {
  base iana-interface-type;
  description
  "IBM ipOverCdlc."
}

} identity ipOverClaw {
  base iana-interface-type;
  description
  "IBM Common Link Access to Workstn."
}

} identity stackToStack {
  base iana-interface-type;
  description
  "IBM stackToStack."
}

} identity virtualIpAddress {
  base iana-interface-type;
  description
  "IBM VIPA."
}

} identity mpc {
  base iana-interface-type;
  description
  "IBM multi-protocol channel support."
}

} identity ipOverAtm {
  base iana-interface-type;
  description
  "IBM ipOverAtm."
  reference
  "RFC 2320 - Definitions of Managed Objects for Classical IP
  and ARP Over ATM Using SMIv2 (IPOA-MIB)"
}

} identity iso88025Fiber {
  base iana-interface-type;
  description
"ISO 802.5] Fiber Token Ring."
}
identity tdlc {
  base iana-interface-type;
  description
  "IBM twinaxial data link control."
}
identity gigabitEthernet {
  base iana-interface-type;
  status deprecated;
  description
  "Obsoleted via RFC 3635.
   ethernetCsmacd(6) should be used instead."
  reference
  "RFC 3635 - Definitions of Managed Objects for the
   Ethernet-like Interface Types"
}
identity hdlc {
  base iana-interface-type;
  description
  "HDLC."
}
identity lapf {
  base iana-interface-type;
  description
  "LAP F."
}
identity v37 {
  base iana-interface-type;
  description
  "V.37."
}
identity x25mlp {
  base iana-interface-type;
  description
  "Multi-Link Protocol."
}
identity x25huntGroup {
  base iana-interface-type;
  description
  "X25 Hunt Group."
}
identity transpHdlc {
  base iana-interface-type;
  description
  "Transp HDLC."
identity interleaved {
    base iana-interface-type;
    description
    "Interleave channel.";
}

identity fast {
    base iana-interface-type;
    description
    "Fast channel.";
}

identity ip {
    base iana-interface-type;
    description
    "IP (for APPN HPR in IP networks)."
}

identity docsCableMaclayer {
    base iana-interface-type;
    description
    "CATV Mac Layer.";
}

identity docsCableDownstream {
    base iana-interface-type;
    description
    "CATV Downstream interface.";
}

identity docsCableUpstream {
    base iana-interface-type;
    description
    "CATV Upstream interface.";
}

identity a12MppSwitch {
    base iana-interface-type;
    description
    "Avalon Parallel Processor.";
}

identity tunnel {
    base iana-interface-type;
    description
    "Encapsulation interface.";
}

identity coffee {
    base iana-interface-type;
    description
    "Coffee pot.";
    reference
    "RFC 2325 - Coffee MIB";
identity ces {
    base iana-interface-type;
    description
    "Circuit Emulation Service.";
}
identity atmSubInterface {
    base iana-interface-type;
    description
    "ATM Sub Interface.";
}
identity l2vlan {
    base iana-interface-type;
    description
    "Layer 2 Virtual LAN using 802.1Q.";
}
identity l3ipvlan {
    base iana-interface-type;
    description
    "Layer 3 Virtual LAN using IP.";
}
identity l3ipxvlan {
    base iana-interface-type;
    description
    "Layer 3 Virtual LAN using IPX.";
}
identity digitalPowerline {
    base iana-interface-type;
    description
    "IP over Power Lines.";
}
identity mediaMailOverIp {
    base iana-interface-type;
    description
    "Multimedia Mail over IP.";
}
identity dtm {
    base iana-interface-type;
    description
    "Dynamic synchronous Transfer Mode.";
}
identity dcn {
    base iana-interface-type;
    description
    "Data Communications Network.";
}
identity ipForward {
}
base iana-interface-type;
description
"IP Forwarding Interface.";
}
identity msdsl {
base iana-interface-type;

description
"Multi-rate Symmetric DSL.";
}
identity iee1394 {
base iana-interface-type;

description
"IEEE1394 High Performance Serial Bus.";
}
identity if-gsn {
base iana-interface-type;

description
"HIPPI-6400.";
}
identity dvbRccMacLayer {
base iana-interface-type;

description
"DVB-RCC MAC Layer.";
}
identity dvbRccDownstream {
base iana-interface-type;

description
"DVB-RCC Downstream Channel.";
}
identity dvbRccUpstream {
base iana-interface-type;

description
"DVB-RCC Upstream Channel.";
}
identity atmVirtual {
base iana-interface-type;

description
"ATM Virtual Interface.";
}
identity mplsTunnel {
base iana-interface-type;

description
"MPLS Tunnel Virtual Interface.";
}
identity srp {
base iana-interface-type;

description
"Spatial Reuse Protocol."

} identity voiceOverAtm {
    base iana-interface-type;
    description
    "Voice over ATM."
}

} identity voiceOverFrameRelay {
    base iana-interface-type;
    description
    "Voice Over Frame Relay."
}

} identity idsl {
    base iana-interface-type;
    description
    "Digital Subscriber Loop over ISDN."
}

} identity compositeLink {
    base iana-interface-type;
    description
    "Avici Composite Link Interface."
}

} identity ss7SigLink {
    base iana-interface-type;
    description
    "SS7 Signaling Link."
}

} identity propWirelessP2P {
    base iana-interface-type;
    description
    "Prop. P2P wireless interface."
}

} identity frForward {
    base iana-interface-type;
    description
    "Frame Forward Interface."
}

} identity rfc1483 {
    base iana-interface-type;
    description
    "Multiprotocol over ATM AAL5."
    reference
    "RFC 1483 - Multiprotocol Encapsulation over ATM Adaptation Layer 5"
}

} identity usb {
    base iana-interface-type;
    description
"USB Interface."
}
identity ieee8023adLag {
    base iana-interface-type;
    description
        "IEEE 802.3ad Link Aggregate."
}
identity bgppolicyaccounting {
    base iana-interface-type;
    description
        "BGP Policy Accounting."
}
identity frf16MfrBundle {
    base iana-interface-type;
    description
        "FRF.16 Multilink Frame Relay."
}
identity h323Gatekeeper {
    base iana-interface-type;
    description
        "H323 Gatekeeper."
}
identity h323Proxy {
    base iana-interface-type;
    description
        "H323 Voice and Video Proxy."
}
identity mpls {
    base iana-interface-type;
    description
        "MPLS."
}
identity mfSigLink {
    base iana-interface-type;
    description
        "Multi-frequency signaling link."
}
identity hdsl2 {
    base iana-interface-type;
    description
        "High Bit-Rate DSL - 2nd generation."
}
identity shdsl {
    base iana-interface-type;
    description
        "Multirate HDSL2."
}
identity ds1FDL {
identity pos {
  base iana-interface-type;
  description
  "Packet over SONET/SDH Interface.";
}

identity dvbAsiIn {
  base iana-interface-type;
  description
  "DVB-ASI Input.";
}

identity dvbAsiOut {
  base iana-interface-type;
  description
  "DVB-ASI Output.";
}

identity plc {
  base iana-interface-type;
  description
  "Power Line Communications.";
}

identity nfas {
  base iana-interface-type;
  description
  "Non-Facility Associated Signaling.";
}

identity tr008 {
  base iana-interface-type;
  description
  "TR008.";
}

identity gr303RDT {
  base iana-interface-type;
  description
  "Remote Digital Terminal.";
}

identity gr303IDT {
  base iana-interface-type;
  description
  "Integrated Digital Terminal.";
}

identity isup {
base iana-interface-type;
description
"ISUP.";
}

identity propDocsWirelessMaclayer {
base iana-interface-type;
description
"Cisco proprietary Maclayer.";
}

identity propDocsWirelessDownstream {
base iana-interface-type;
description
"Cisco proprietary Downstream.";
}

identity propDocsWirelessUpstream {
base iana-interface-type;
description
"Cisco proprietary Upstream.";
}

identity hiperlan2 {
base iana-interface-type;
description
"HIPERLAN Type 2 Radio Interface.";
}

identity propBWAp2Mp {
base iana-interface-type;
description
"PropBroadbandWirelessAccesspt2Multipt (use of this value for IEEE 802.16 WMAN interfaces as per IEEE Std 802.16f is deprecated, and ieee80216WMAN(237) should be used instead).";
}

identity sonetOverheadChannel {
base iana-interface-type;
description
"SONET Overhead Channel.";
}

identity digitalWrapperOverheadChannel {
base iana-interface-type;
description
"Digital Wrapper.";
}

identity aal2 {
base iana-interface-type;
description
"ATM adaptation layer 2."
}
identity radioMAC {
    base iana-interface-type;
    description
    "MAC layer over radio links.";
}
identity atmRadio {
    base iana-interface-type;
    description
    "ATM over radio links.";
}
identity imt {
    base iana-interface-type;
    description
    "Inter-Machine Trunks.";
}
identity mvl {
    base iana-interface-type;
    description
    "Multiple Virtual Lines DSL.";
}
identity reachDSL {
    base iana-interface-type;
    description
    "Long Reach DSL.";
}
identity frDlciEndPt {
    base iana-interface-type;
    description
    "Frame Relay DLCI End Point.";
}
identity atmVciEndPt {
    base iana-interface-type;
    description
    "ATM VCI End Point.";
}
identity opticalChannel {
    base iana-interface-type;
    description
    "Optical Channel.";
}
identity opticalTransport {
    base iana-interface-type;
    description
    "Optical Transport.";
}
identity propAtm {
base iana-interface-type;
description
"Proprietary ATM."
}

identity voiceOverCable {
 base iana-interface-type;
description
"Voice Over Cable Interface."
}

identity infiniband {
 base iana-interface-type;
description
"Infiniband."
}

identity teLink {
 base iana-interface-type;
description
"TE Link."
}

identity q2931 {
 base iana-interface-type;
description
"Q.2931."
}

identity virtualTg {
 base iana-interface-type;
description
"Virtual Trunk Group."
}

identity sipTg {
 base iana-interface-type;
description
"SIP Trunk Group."
}

identity sipSig {
 base iana-interface-type;
description
"SIP Signaling."
}

identity docsCableUpstreamChannel {
 base iana-interface-type;
description
"CATV Upstream Channel."
}

identity econet {
identity pon155 {
  base iana-interface-type;
  description
    "FSAN 155Mb Symmetrical PON interface.";
}

identity pon622 {
  base iana-interface-type;
  description
    "FSAN 622Mb Symmetrical PON interface.";
}

identity bridge {
  base iana-interface-type;
  description
    "Transparent bridge interface.";
}

identity linegroup {
  base iana-interface-type;
  description
    "Interface common to multiple lines.";
}

identity voiceEMFGD {
  base iana-interface-type;
  description
    "Voice E&M Feature Group D.";
}

identity voiceFGDEANA {
  base iana-interface-type;
  description
    "Voice FGD Exchange Access North American.";
}

identity voiceDID {
  base iana-interface-type;
  description
    "Voice Direct Inward Dialing.";
}

identity mpegTransport {
  base iana-interface-type;
  description
    "MPEG transport interface.";
}

identity sixToFour {
  base iana-interface-type;
  description
    "Acorn Econet.";
}
identity gtp {
    base iana-interface-type;
    description
    "GTP (GPRS Tunneling Protocol).";
}
identity pdnEtherLoop1 {
    base iana-interface-type;
    description
    "Paradyne EtherLoop 1.";
}
identity pdnEtherLoop2 {
    base iana-interface-type;
    description
    "Paradyne EtherLoop 2.";
}
identity opticalChannelGroup {
    base iana-interface-type;
    description
    "Optical Channel Group.";
}
identity homepna {
    base iana-interface-type;
    description
    "HomePNA ITU-T G.989.";
}
identity gfp {
    base iana-interface-type;
    description
    "Generic Framing Procedure (GFP).";
}
identity ciscoISLvlan {
    base iana-interface-type;
    description
    "Layer 2 Virtual LAN using Cisco ISL.";
}
identity actelisMetaLOOP {
    base iana-interface-type;
    description
    "Acteleis proprietary MetaLOOP High Speed Link.";
}
identity fcipLink {
identity fcip {  
    base iana-interface-type;  
    description  
        "FCIP Link.";  
}

identity rpr {  
    base iana-interface-type;  
    description  
        "Resilient Packet Ring Interface Type.";  
}

identity qam {  
    base iana-interface-type;  
    description  
        "RF Qam Interface.";  
}

identity lmp {  
    base iana-interface-type;  
    description  
        "Link Management Protocol.";  
    reference  
        "RFC 4327 - Link Management Protocol (LMP) Management Information Base (MIB)";  
}

identity cblVectaStar {  
    base iana-interface-type;  
    description  
        "Cambridge Broadband Networks Limited VectaStar.";  
}

identity docsCableMCmtsDownstream {  
    base iana-interface-type;  
    description  
        "CATV Modular CMTS Downstream Interface.";  
}

identity adsl2 {  
    base iana-interface-type;  
    status deprecated;  
    description  
        "Asymmetric Digital Subscriber Loop Version 2 (DEPRECATED/OBSOLETE - please use adsl2plus(238) instead).";  
    reference  
        "RFC 4706 - Definitions of Managed Objects for Asymmetric Digital Subscriber Line 2 (ADSL2)";  
}

identity macSecControlledIF {  
    base iana-interface-type;  
}
description
"MACSecControlled.";
}
identity macSecUncontrolledIF {
    base iana-interface-type;
    description
"MACSecUncontrolled.";
}
identity aviciOpticalEther {
    base iana-interface-type;
    description
"Avici Optical Ethernet Aggregate.";
}
identity atmbond {
    base iana-interface-type;
    description
"atmbond.";
}
identity voiceFGDOS {
    base iana-interface-type;
    description
"Voice FGD Operator Services.";
}
identity mocaVersion1 {
    base iana-interface-type;
    description
"MultiMedia over Coax Alliance (MoCA) Interface
    as documented in information provided privately to IANA.";
}
identity iee80216WMAN {
    base iana-interface-type;
    description
"IEEE 802.16 WMAN interface.";
}
identity adsl2plus {
    base iana-interface-type;
    description
"Asymmetric Digital Subscriber Loop Version 2 -
    Version 2 Plus and all variants.";
}
identity dvbRcsMacLayer {
    base iana-interface-type;
    description
"DVB-RCS MAC Layer.";
    reference
"RFC 5728 - The SatLabs Group DVB-RCS MIB";
}
identity dvbTdm {
base iana-interface-type;
description
"DVB Satellite TDM.";
reference
"RFC 5728 - The SatLabs Group DVB-RCS MIB";
}
identity dvbRcsTdma {
base iana-interface-type;
description
"DVB-RCS TDMA.";
reference
"RFC 5728 - The SatLabs Group DVB-RCS MIB";
}
identity x86Laps {
base iana-interface-type;
description
"LAPS based on ITU-T X.86/Y.1323.";
}
identity wwanPP {
base iana-interface-type;
description
"3GPP WWAN.";
}
identity wwanPP2 {
base iana-interface-type;
description
"3GPP2 WWAN.";
}
identity voiceEBS {
base iana-interface-type;
description
"Voice P-phone EBS physical interface.";
}
identity iPwType {
base iana-interface-type;
description
"Pseudowire interface type.";
reference
"RFC 5601 - Pseudowire (PW) Management Information Base (MIB)";
}
identity ilan {
base iana-interface-type;
description
"Internal LAN on a bridge per IEEE 802.1ap.";
}
identity pip {
base iana-interface-type;
description
"Provider Instance Port on a bridge per IEEE 802.1ah PBB."

} identity aluELP {
  base iana-interface-type;
  description
  "Alcatel-Lucent Ethernet Link Protection."
}

} identity gpon {
  base iana-interface-type;
  description
  "Gigabit-capable passive optical networks (G-PON) as per
  ITU-T G.948."
}

} identity vdsl2 {
  base iana-interface-type;
  description
  "Very high speed digital subscriber line Version 2
  (as per ITU-T Recommendation G.993.2)."
  reference
  "RFC 5650 - Definitions of Managed Objects for Very High
  Speed Digital Subscriber Line 2 (VDSL2)"
}

} identity capwapDot11Profile {
  base iana-interface-type;
  description
  "WLAN Profile Interface."
  reference
  "RFC 5834 - Control and Provisioning of Wireless Access
  Points (CAPWAP) Protocol Binding MIB for
  IEEE 802.11"
}

} identity capwapDot11Bss {
  base iana-interface-type;
  description
  "WLAN BSS Interface."
  reference
  "RFC 5834 - Control and Provisioning of Wireless Access
  Points (CAPWAP) Protocol Binding MIB for
  IEEE 802.11"
}

} identity capwapWtpVirtualRadio {
  base iana-interface-type;
  description
  "WTP Virtual Radio Interface."
  reference
  "RFC 5833 - Control and Provisioning of Wireless Access
  Points (CAPWAP) Protocol Base MIB"
}
identity bits {
    base iana-interface-type;
    description "bitsport."
}

identity docsCableUpstreamRfPort {
    base iana-interface-type;
    description "DOCSIS CATV Upstream RF Port."
}

identity cableDownstreamRfPort {
    base iana-interface-type;
    description "CATV downstream RF Port."
}

identity vmwareVirtualNic {
    base iana-interface-type;
    description "VMware Virtual Network Interface."
}

identity ieee802154 {
    base iana-interface-type;
    description "IEEE 802.15.4 WPAN interface."
    reference "IEEE 802.15.4-2006"
}

identity otnOdu {
    base iana-interface-type;
    description "OTN Optical Data Unit."
}

identity otnOtuo {
    base iana-interface-type;
    description "OTN Optical channel Transport Unit."
}

identity ifVfiType {
    base iana-interface-type;
    description "VPLS Forwarding Instance Interface Type."
}

identity g9981 {
    base iana-interface-type;
    description "G.998.1 bonded interface."
}
identity g9982 {
    base iana-interface-type;
    description
    "G.998.2 bonded interface.";
}
identity g9983 {
    base iana-interface-type;
    description
    "G.998.3 bonded interface.";
}

identity aluEpon {
    base iana-interface-type;
    description
    "Ethernet Passive Optical Networks (E-PON).";
}
identity aluEponOnu {
    base iana-interface-type;
    description
    "EPON Optical Network Unit.";
}
identity aluEponPhysicalUni {
    base iana-interface-type;
    description
    "EPON physical User to Network interface.";
}
identity aluEponLogicalLink {
    base iana-interface-type;
    description
    "The emulation of a point-to-point link over the EPON layer.";
}
identity aluGponOnu {
    base iana-interface-type;
    description
    "GPON Optical Network Unit.";
    reference
    "ITU-T G.984.2";
}
identity aluGponPhysicalUni {
    base iana-interface-type;
    description
    "GPON physical User to Network interface.";
    reference
    "ITU-T G.984.2";
}
identity vmwareNicTeam {

base iana-interface-type;
description
"VMware NIC Team."
;
}
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/iana-if-type.yang
No license file was found, but licenses were detected in source scan.

module ietf-ipv6-unicast-routing {

    namespace "urn:ietf:params:xml:ns:yang:ietf-ipv6-unicast-routing";

    prefix "v6ur";

    import ietf-routing {
        prefix "rt";
    }

    import ietf-inet-types {
        prefix "inet";
    }

    import ietf-interfaces {
        prefix "if";
    }

    import ietf-ip {
        prefix "ip";
    }

    organization
"IETF NETMOD (NETCONF Data Modeling Language) Working Group";

    contact
"WG Web: <http://tools.ietf.org/wg/netmod/>
WG List: <mailto:netmod@ietf.org>

WG Chair: Thomas Nadeau
        <mailto:tnadeau@lucidvision.com>

WG Chair: Juergen Schoenwaelder
        <mailto:j.schoenwaelder@jacobs-university.de>

Editor: Ladislav Lhotka
        <mailto:lhotka@nic.cz>";
description
"This YANG module augments the 'ietf-routing' module with basic configuration and state data for IPv6 unicast routing.

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The key words 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in the module text are to be interpreted as described in RFC 2119 (http://tools.ietf.org/html/rfc2119).

This version of this YANG module is part of RFC XXXX (http://tools.ietf.org/html/rfcXXXX); see the RFC itself for full legal notices."

revision 2015-05-25 {
  description
  "Initial revision.";
  reference
  "RFC XXXX: A YANG Data Model for Routing Management";
}

/* Identities */

identity ipv6-unicast {
  base rt:ipv6;
  description
  "This identity represents the IPv6 unicast address family."
}

/* State data */

/* Oper data not available causes REST interface timeout Mark Collins 11.5.15 */

augment "if:interfaces-state/if:interface/ip:ipv6" {
  description
  "Augment interface state data with IPv6-specific parameters of router interfaces.";
  container ipv6-router-advertisements {
    description
    "Parameters of IPv6 Router Advertisements.";
  }
}
leaf send-advertisements {
  type boolean;
  description
  "A flag indicating whether or not the router sends periodic
   Router Advertisements and responds to Router
   Solicitations.";
}
leaf max-rtr-adv-interval {
  type uint16 {
    range "4..1800";
  }
  units "seconds";
  description
  "The maximum time allowed between sending unsolicited
   multicast Router Advertisements from the interface.";
}
leaf min-rtr-adv-interval {
  type uint16 {
    range "3..1350";
  }
  units "seconds";
  description
  "The minimum time allowed between sending unsolicited
   multicast Router Advertisements from the interface.";
}
leaf managed-flag {
  type boolean;
  description
  "The value that is placed in the 'Managed address
   configuration' flag field in the Router Advertisement.";
}
leaf other-config-flag {
  type boolean;
  description
  "The value that is placed in the 'Other configuration' flag
   field in the Router Advertisement.";
}
leaf link-mtu {
  type uint32;
  description
  "The value that is placed in MTU options sent by the
   router. A value of zero indicates that no MTU options are
   sent.";
}
leaf reachable-time {
  type uint32 {
    range "0..3600000";
  }
}
units "milliseconds";
description
"The value that is placed in the Reachable Time field in
the Router Advertisement messages sent by the router. A
value of zero means unspecified (by this router)."
}
leaf retrans-timer {
type uint32;
units "milliseconds";
description
"The value that is placed in the Retrans Timer field in the
Router Advertisement messages sent by the router. A value
of zero means unspecified (by this router)."
}
leaf cur-hop-limit {
type uint8;
description
"The value that is placed in the Cur Hop Limit field in the
Router Advertisement messages sent by the router. A value
of zero means unspecified (by this router)."
}
leaf default-lifetime {
type uint16 {
  range "0..9000";
}
units "seconds";
description
"The value that is placed in the Router Lifetime field of
Router Advertisements sent from the interface, in seconds.
A value of zero indicates that the router is not to be
used as a default router."
}
container prefix-list {
description
"A list of prefixes that are placed in Prefix Information
options in Router Advertisement messages sent from the
interface.

By default, these are all prefixes that the router
advertises via routing protocols as being on-link for the
interface from which the advertisement is sent."
list prefix {
  key "prefix-spec";
description
  "Advertised prefix entry and its parameters."
  leaf prefix-spec {
    type inet:ipv6-prefix;
description
    "Prefix specification for the router advertisement."
    }
"IPv6 address prefix."

leaf valid-lifetime {
  type uint32;
  units "seconds";
  description
  "The value that is placed in the Valid Lifetime in the
  Prefix Information option. The designated value of all
  1's (0xffffffff) represents infinity.

  An implementation SHOULD keep this value constant in
  consecutive advertisements except when it is
  explicitly changed in configuration."
}

leaf on-link-flag {
  type boolean;
  description
  "The value that is placed in the on-link flag ('L-bit')
  field in the Prefix Information option."
}

leaf preferred-lifetime {
  type uint32;
  units "seconds";
  description
  "The value that is placed in the Preferred Lifetime in
  the Prefix Information option, in seconds. The
  designated value of all 1's (0xffffffff) represents
  infinity.

  An implementation SHOULD keep this value constant in
  consecutive advertisements except when it is
  explicitly changed in configuration."
}

leaf autonomous-flag {
  type boolean;
  description
  "The value that is placed in the Autonomous Flag field
  in the Prefix Information option."
}
"This augment is valid only for IPv6 unicast."
}
description
"This leaf augments an IPv6 unicast route."
leaf destination-prefix {
  type inet:ipv6-prefix;
description
  "IPv6 destination prefix."
}
*/
  + "rt:routes/rt:route/rt:next-hop/rt:next-hop-options/
  + "rt:simple-next-hop" {
when "./././.rt:address-family = "v6ur:ipv6-unicast" {
description
  "This augment is valid only for IPv6 unicast."
}
description
"This leaf augments the 'simple-next-hop' case of IPv6 unicast
routes."
leaf next-hop-address {
  type inet:ipv6-address;
description
  "IPv6 address of the next-hop."
}
}*/

/* Configuration data */
augment "/if:interfaces/if:interface/ip:ipv6" {
  description
  "Augment interface configuration with IPv6-specific parameters
  of router interfaces."
  container ipv6-router-advertisements {
    description
      "Configuration of IPv6 Router Advertisements."
    leaf send-advertisements {
      type boolean;
default "false";
description
      "A flag indicating whether or not the router sends periodic
      Router Advertisements and responds to Router
      Solicitations."
      reference
      "RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
      AdvSendAdvertisements."
    }
    leaf max-rtr-adv-interval {

type uint16 {
    range "4..1800";
}
units "seconds";
default "600";
description
"The maximum time allowed between sending unsolicited
multicast Router Advertisements from the interface."
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
MaxRtrAdvInterval.";
}
leaf min-rtr-adv-interval {
type uint16 {
    range "3..1350";
}
units "seconds";
must ",. <= 0.75 * ../max-rtr-adv-interval" {

description
"The value MUST NOT be greater than 75 % of
'max-rtr-adv-interval'.";
}
description
"The minimum time allowed between sending unsolicited
multicast Router Advertisements from the interface.

The default value to be used operationally if this leaf is
not configured is determined as follows:

- if max-rtr-adv-interval >= 9 seconds, the default value
  is 0.33 * max-rtr-adv-interval;

- otherwise it is 0.75 * max-rtr-adv-interval.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
MinRtrAdvInterval.";
}
leaf managed-flag {
type boolean;
default "false";
description
"The value to be placed in the 'Managed address
configuration' flag field in the Router Advertisement.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
AdvManagedFlag.";
}
leaf other-config-flag {
type boolean;
default "false";
description
"The value to be placed in the 'Other configuration' flag
field in the Router Advertisement.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
AdvOtherConfigFlag.";
}
leaf link-mtu {
  type uint32;
default "0";
description
"The value to be placed in MTU options sent by the router.
A value of zero indicates that no MTU options are sent.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
AdvLinkMTU.";
}
leaf reachable-time {
  type uint32 {
    range "0..3600000";
  }
  units "milliseconds";
default "0";
description
"The value to be placed in the Reachable Time field in the
Router Advertisement messages sent by the router. A value
of zero means unspecified (by this router).";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
AdvReachableTime.";
}
leaf retrans-timer {
  type uint32;
  units "milliseconds";
default "0";
description
"The value to be placed in the Retrans Timer field in the
Router Advertisement messages sent by the router. A value
of zero means unspecified (by this router).";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) -
AdvRetransTimer.";
}
leaf cur-hop-limit {
  type uint8;
description
"The value to be placed in the Cur Hop Limit field in the Router Advertisement messages sent by the router. A value of zero means unspecified (by this router).

If this parameter is not configured, the device SHOULD use the value specified in IANA Assigned Numbers that was in effect at the time of implementation.";

reference
IANA: IP Parameters,
http://www.iana.org/assignments/ip-parameters";

} leaf default-lifetime {
  type uint16 {
    range "0..9000";
  }
  units "seconds";
  description
  "The value to be placed in the Router Lifetime field of Router Advertisements sent from the interface, in seconds. It MUST be either zero or between max-rtr-adv-interval and 9000 seconds. A value of zero indicates that the router is not to be used as a default router. These limits may be overridden by specific documents that describe how IPv6 operates over different link layers.

If this parameter is not configured, the device SHOULD use a value of 3 * max-rtr-adv-interval.";

reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvDefaultLifeTime";

} container prefix-list {
  description
  "Configuration of prefixes to be placed in Prefix Information options in Router Advertisement messages sent from the interface.

Prefixes that are advertised by default but do not have their entries in the child 'prefix' list are advertised with the default values of all parameters.

The link-local prefix SHOULD NOT be included in the list of advertised prefixes.";

reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvPrefixList";
list prefix {
  key "prefix-spec";
  description "Configuration of an advertised prefix entry.";
  leaf prefix-spec {
    type inet:ipv6-prefix;
    description "IPv6 address prefix.";
  }
  choice control-adv-prefixes {
    default "advertise";
    description "The prefix either may be explicitly removed from the set of advertised prefixes, or parameters with which it is advertised may be specified (default case).";
    leaf no-advertise {
      type empty;
      description "The prefix will not be advertised.
This can be used for removing the prefix from the default set of advertised prefixes.";
    }
  }
  case advertise {
    leaf valid-lifetime {
      type uint32;
      units "seconds";
      default "2592000";
      description "The value to be placed in the Valid Lifetime in the Prefix Information option. The designated value of all 1's (0xffffffff) represents infinity.";
      reference "RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvValidLifetime.";
    }
    leaf on-link-flag {
      type boolean;
      default "true";
      description "The value to be placed in the on-link flag ('L-bit') field in the Prefix Information option.";
      reference "RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvOnLinkFlag.";
    }
  }
}
leaf preferred-lifetime {
  type uint32;
  units "seconds";
  must ": . \( \leq \) ../valid-lifetime" {
    description
    "This value MUST NOT be greater than valid-lifetime.";
  }
  default "604800";
  description
  "The value to be placed in the Preferred Lifetime in the Prefix Information option. The designated value of all 1's (0xffffffff) represents infinity.";
  reference
  "RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvPreferredLifetime.";
}
leaf autonomous-flag {
  type boolean;
  default "true";
  description
  "The value to be placed in the Autonomous Flag field in the Prefix Information option.";
  reference
  "RFC 4861: Neighbor Discovery for IP version 6 (IPv6) - AdvAutonomousFlag.";
}

  description
  "This augment defines the configuration of the 'static' pseudo-protocol with data specific to IPv6 unicast.";
  container ipv6 {
    description
    "Configuration of a 'static' pseudo-protocol instance consists of a list of routes.";
    list route {
      key "destination-prefix";
      ordered-by "user";
      description
    }
  }
}
"A user-ordered list of static routes."
leaf destination-prefix {
    type inet:ipv6-prefix;
    mandatory "true";
    description
        "IPv6 destination prefix."
}
leaf description {
    type string;
    description
        "Textual description of the route."
}
container next-hop {
    description
        "Configuration of next-hop."
    uses rt:next-hop-content {
        augment "next-hop-options" {
            description
                "Add next-hop address case."
            leaf next-hop-address {
                type inet:ipv6-address;
                description
                    "IPv6 address of the next-hop."
            }
        }
    }
}

//# RPC operations */

augment "/rt:fib-route/rt:input/rt:destination-address" {
    when "rt:address-family='v6ur:ipv6-unicast'" {
        description
            "This augment is valid only for IPv6 unicast."
    }
    description
        "This leaf augments the 'rt:destination-address' parameter of
        the 'rt:fib-route' operation."
    leaf address {
        type inet:ipv6-address;
        description
            "IPv6 destination address."
    }
}
augment "/rt:fib-route/rt:output/rt:route" {
    when "rt:address-family='v6ur:ipv6-unicast'" {
        description
            "This augment is valid only for IPv6 unicast.";
    }
}

description
    "This leaf augments the reply to the 'rt:fib-route'
    operation."
leaf destination-prefix {
    type inet:ipv6-prefix;
    description
        "IPv6 destination prefix.";
}
}

augment "/rt:fib-route/rt:output/rt:route/rt:next-hop/" + "/rt:next-hop-options/rt:simple-next-hop" {
    when "/..rt:address-family='v6ur:ipv6-unicast'" {
        description
            "This augment is valid only for IPv6 unicast.";
    }
}

description
    "This leaf augments the 'simple-next-hop' case in the reply to
    the 'rt:fib-route' operation."
leaf next-hop-address {
    type inet:ipv6-address;
    description
        "IPv6 address of the next-hop.";
}
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-ipv6-unicast-routing.yang
No license file was found, but licenses were detected in source scan.

submodule openconfig-isis-lsp {

    belongs-to openconfig-isis {
        prefix oc-isis;
    }
    import openconfig-extensions { prefix "oc-ext"; }
    import openconfig-inet-types { prefix "inet"; }
    import openconfig-isis-types { prefix "oc-isis-types"; }
    import openconfig-isis-lsdb-types { prefix "oc-isis-lsdb-types"; }
    import openconfig-types { prefix "oc-types"; }
    import openconfig-mpls-types { prefix "oc-mpls-types"; }
}
// meta
organization
   "OpenConfig working group";

contact
   "OpenConfig working group
   www.openconfig.net ";

description
   "This sub-module describes a YANG model for the IS-IS Link State
   Database (LSDB).

   Portions of this code were derived from IETF RFCs relating to the
   IS-IS protocol.
   Please reproduce this note if possible.
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   to IETF Documents (http://trustee.ietf.org/license-info.";

oc-ext:openconfig-version "0.4.2";

revision "2018-11-21" {
   description
      "Add OpenConfig module metadata extensions.";
   reference "0.4.2";
}

revision "2018-06-05" {
   description
      "Fix bugs in when statements.";
   reference "0.4.1";
}

revision "2018-05-14" {
   description
      "Update LSDB model to correct Extended IS reach TLV
      bug. This change is backwards incompatible due to
      adding an additional level of hierarchy to support
      multiple instances of the TLV.";
   reference "0.4.0";
}
revision "2017-07-26" {
  description
  "Update LSDB and fix bugs.";
  reference "0.3.2";
}

revision "2017-05-15" {
  description
  "Refactor LSDB.";
  reference "0.3.0";
}

revision "2017-01-13" {
  description
  "Remove top-level /isis container";
  reference "0.2.1";
}

revision "2016-12-15" {
  description
  "Add segment routing to IS-IS module";
  reference "0.2.0";
}

revision "2016-10-18" {
  description
  "Initial revision of IS-IS models.";
  reference "0.1.0";
}

typedef isis-metric-flags {
  type enumeration {
    enum INTERNAL {
      description
      "When this flag is not set, internal metrics are in use.";
    }
    enum UNSUPPORTED {
      description
      "When this flag (referred to as the S-bit) is set, then
      the metric is unsupported.";
    }
  }
  description
  "Type definition for flags used in IS-IS metrics";
}

grouping isis-lsdb-link-characteristics-a-bit {
  description
  "Open Source Used In BGP TE Controller Version 4.3.0  3751"
"Definition of the A bit, as used in IS-IS link delay TLVs."

leaf a-bit {
  type boolean;
  description
    "The A bit is set when the measured value of this parameter
    exceeds its configured maximum threshold. The A bit is cleared
    when the measured value falls below its configured reuse
    threshold."
}
grouping isis-lsdb-tlv-type-state {
    description
    "Per-subTLV type operational state parameters for ISIS.";

    leaf type {
        type identityref {
            base oc-isis-lsdb-types:ISIS_TLV_TYPE;
        }
        description
        "The type of TLV being described. The type of TLV is
        expressed as a canonical name.";
    }
}

grouping is-reachability-neighbor-state {
    description
    "This grouping defines is-reachability neighbor.";

container subtlvs {
    description
    "This container describes IS Neighbor sub-TLVs.";

    list subtlv {
        key "type";
        description
        "List of subTLV types in the LSDB for the specified TLV.";

        leaf type {
            type leafref {
                path "/state/type";
            }
            description
            "Reference to the sub-TLV type.";
        }

        container state {
            description
            "State parameters of IS neighbor state";

            uses isis-lsdb-subtlv-type-state;
        }

        container admin-group {
            when "/state/type = " +
                "oc-isis-lsdb-types:IS_REACHABILITY_ADMIN_GROUP"
            description
            "Only include the administrative group container when
the sub-TLV is type 3;"
}  

description  
"This container defines sub-TLV 3."

container state {

description  
"State parameters of sub-TLV 3."

leaf-list admin-group {

type uint32;

description  
"The administrative group sub-TLV contains a 4-octet bit mask assigned by the network administrator. Each set bit corresponds to one administrative group assigned to the interface. By convention, the least significant bit is referred to as group 0, and the most significant bit is referred to as group 31.";

reference  

}

}

container link-id {

when ".state/type =" + 
"oc-isis-lsdb-types:IS_REACHABILITY_LINK_ID" {

description  
"Only include the link identifier container when the sub-TLV is type 4;"

}

description  
"This container defines sub-TLV 4."

container state {

description  
"State parameters of sub-TLV 4."

leaf local {

type uint32;

description  
"The value field of this sub-TLV contains 4 octets of Link Local Identifier followed by 4 octets of Link Remote Identifier.";

reference  
leaf remote {
  type uint32;
  description
    "If the Link Remote Identifier is unknown, it is set to 0."
  reference
}

container ipv4-interface-address {
  when "/.state/type = " + 
    "oc-isis-lsdb-types:IS_REACHABILITY_IPV4_INTERFACE_ADDRESS"
  description
    "Only include the IPv4 interface address group container when the sub-TLV is type 6"
}

description
  "This container defines sub-TLV 6."

container state {
  description
    "State parameters of sub-TLV 6."

  leaf-list address {
    type inet:ipv4-address;
    description
      "A 4-octet IPv4 address for the interface described by the (main) TLV. This sub-TLV can occur multiple times."
    reference
  }
}

container ipv4-neighbor-address {
  when "/.state/type = " + 
    "oc-isis-lsdb-types:IS_REACHABILITY_IPV4_NEIGHBOR_ADDRESS"
  description
    "Only include the IPv4 neighbor address container when
the sub-TLV is type 8.

} description
"This container defines sub-TLV 8."

container state {
  description
  "State parameters of sub-TLV 8."

  leaf-list address {
    type inet:ipv4-address;
    description
    "A single IPv4 address for a neighboring router on
    this link. This sub-TLV can occur multiple times.";
    reference
    "RFC5305: IS-IS Extensions for Traffic Engineering.
    sub-TLV 8: TLV 22,23,141,222,223.";
  }
}

container max-link-bandwidth {
  when "../state/type = " +
  "oc-isis-lsdb-types:IS_REACHABILITY_MAX_LINK_BANDWIDTH" {
    description
    "Only include the maximum link bandwidth container when
    the sub-TLV is type 9.";
  }
  description
  "This container defines sub-TLV 9."

  container state {
    description
    "State parameters of sub-TLV 9."

    leaf bandwidth {
      type oc-types:ieeefloat32;
      units "bytes per second";
      description
      "The maximum bandwidth that can be used on this link
      in this direction (from the system originating the LSP
      to its neighbors). It is encoded in 32 bits in IEEE
      floating point format. The units are bytes (not
      bits!) per second.";
      reference
      "RFC5305: IS-IS Extensions for Traffic Engineering.
      sub-TLV 9: TLV 22,23,141,222,223.";
    }
  }
}
container max-reservable-link-bandwidth {
  when "../state/type = " +
    "oc-isis-Isdb-types:IS_REACHABILITY_MAX_RESERVABLE_BANDWIDTH" {
    description
    "Only include the maximum reservable link bandwidth
    container when the sub-TLV type is 10.;"
  }
  description
  "This container defines sub-TLV 10.;"
}

container state {
  description
  "State parameters of sub-TLV 10.;"

  leaf bandwidth {
    type oc-types:ieeefloat32;
    units "bytes per second";
    description
    "The maximum amount of bandwidth that can be reserved
    in this direction on this link. Note that for
    oversubscription purposes, this can be greater than
    the bandwidth of the link. It is encoded in 32 bits
    in IEEE floating point format. The units are bytes
    (not bits!) per second.";
    reference
    "RFC5305: IS-IS Extensions for Traffic Engineering. sub-
    TLV 10: TLV 22,23,141,222,223;"
  }
}

container unreserved-bandwidth {
  when "../state/type = " +
    "oc-isis-Isdb-types:IS_REACHABILITY_UNRESERVED_BANDWIDTH" {
    description
    "Only include the unreserved bandwidth container when
    the sub-TLV type is 11.;"
  }
  description
  "This container defines unreserved-bandwidth. The units
  are bytes per second.";
  reference
  "RFC5305: IS-IS Extensions for Traffic Engineering. sub-
  TLV 11: TLV 22,23,141,222,223;";}
list setup-priority {
  key "priority";
}

leaf priority {
  type leafref {
    path ../state/priority;
  }
  description
  "Reference to the setup priority to which the unreserved bandwidth corresponds.";
}

description
"Setup priority (0 through 7) for unreserved bandwidth."

container state {
  description
  "State parameters of IS Extended Reachability sub-TLV 11."
}

leaf priority {
  type uint8 {
    range "0..7";
  }
  description
  "Setup priority level of 0 through 7 to be used by Unreserved Bandwidth sub-TLV 11."
}

leaf bandwidth {
  type oc-types:ieeefloat32;
  units "bytes per second";
  description
  "The amount of bandwidth reservable in this direction on this link. Note that for oversubscription purposes, this can be greater than the bandwidth of the link. It contains eight 32-bit IEEE floating point numbers(one for each priority). The units are bytes (not bits!) per second. The values correspond to the bandwidth that can be reserved with a setup priority of 0 through 7, arranged in increasing order with priority 0 occurring at the start of the sub-TLV, and priority 7 at the end of the sub-TLV.";
}
}
container ipv6-interface-address {
  when "./state/type = " +
    "oc-isis-lsdb-types:IS_REACHABILITY_IPV6_INTERFACE_ADDRESS" {
    description
    "Only include the IPv6 interface address when the
    sub-TLV type is 12.;"
  }
  description
  "This container defines sub-TLV 12.;"
}

container state {
  description
  "State parameters of sub-TLV 12.;"

  leaf-list address {
    type inet:ipv6-address;
    description
    "Contains a 16-octet IPv6 address for the interface
    described by the containing Extended IS Reachability
    TLV. This sub-TLV can occur multiple times.;"
    reference
    "RFC6119: IPv6 Traffic Engineering in IS-IS. sub-TLV
    12: TLV 22,23,141,222,223.";
  }
}

container ipv6-neighbor-address {
  when "./state/type = " +
    "oc-isis-lsdb-types:IS_REACHABILITY_IPV6_NEIGHBOR_ADDRESS" {
    description
    "Only include the IPv6 neighbor address when the
    sub-TLV type is 13.;"
  }
  description
  "This container defines sub-TLV 13.;"

  container state {
    description
    "State parameters of sub-TLV 13.;"

    leaf-list address {
      type inet:ipv6-address;
      description
      "Contains a 16-octet IPv6 address for a neighboring
router on the link described by the (main) TLV. This sub-TLV can occur multiple times.

reference

}
}
}

container extended-admin-group {
    when ":/state/type = " + 
    "oc-isis-lsdb-types:IS_REACHABILITY_EXTENDED_ADMIN_GROUP" { 
        description 
        "Only include the extended admin group when the sub-TLV type is 14."
    }
    description 
    "This container defines sub-TLV 14."
}

container state {
    description 
    "State parameters of sub-TLV 14."
}

leaf-list extended-admin-group {
    type uint32;
    description 
    "The extended-admin-group sub-TLV is used in addition to the Administrative Groups when it is desirable to make more than 32 colors available for advertisement in a network."
    reference
}

container te-default-metric {
    when ":/state/type = " + 
    "oc-isis-lsdb-types:IS_REACHABILITY_TE_DEFAULT_METRIC" { 
        description 
        "Only include the default traffic engineering metric container when the sub-TLV type is 18."
    }
    description 
    "This container defines sub-TLV 18."
}

container state {
    description
"State parameters of sub-TLV 18."

leaf metric {
  type uint32;
  description
    "This metric is administratively assigned and can be used to present a differently weighted topology to traffic engineering SPF calculations. To preclude overflow within a traffic engineering SPF implementation, all metrics greater than or equal to MAX_PATH_METRIC SHALL be considered to have a metric of MAX_PATH_METRIC."
  reference
}

container link-attributes {
  when ".state/type = " + ""oc-isis-lsdb-types:IS_REACHABILITY_LINK_ATTRIBUTES"" {
    description
      "Only include the link attributes container when the sub-TLV is type 19."
  }
  description
    "This container defines link-attributes."
}

container state {
  description
    "State parameters of IS Extended Reachability sub-TLV 19."
}

leaf-list local-protection {
  type enumeration {
    enum LOCAL_PROTECTION {
      description
        "If set, local protection is available for the link."
    }
    enum LINK_EXCLUDED {
      description
        "If set, the link is excluded from local protection."
    }
  }
  description

Link local-protection attributes.

reference
"RFC5029: Definition of an IS-IS Link Attribute Sub-TLV: TLV 22, sub-TLV 19."

container link-protection-type {
    when "/state/type = " + "'oc-isis-lsdb-types:IS_REACHABILITY_LINK_PROTECTION_TYPE'"
    description
        "Only include the link protection type container when the sub-TLV type 20.";
}
description
"ISIS LSDB parameters relating to the type of link protection offered."

container state {
    description
        "State parameters of sub-TLV 20."

    leaf-list type {
        type enumeration {
            enum EXTRA_TRAFFIC {
                description
                    "If set the link has extra traffic protection. If the link is of type Extra Traffic, it means that the link is protecting another link or links. The LSPs on a link of this type will be lost if any of the links it is protecting fail."
            }
            enum UNPROTECTED {
                description
                    "If set, the link is unprotected. If the link is of type Unprotected, it means that there is no other link protecting this link. The LSPs on a link of this type will be lost if the link fails."
            }
            enum SHARED {
                description
                    "If set, the link has shared protection. If the link is of type Shared, it means that there are one or more disjoint links of type Extra Traffic that are protecting this link. These Extra
Traffic links are shared between one or more links of type Shared.

enum ONE_ONE {
  description
  "If set, the link has dedicated 1:1 protection. If the link is of type Dedicated 1:1, it means that there is one dedicated disjoint link of type Extra Traffic that is protecting this link."
}

enum PLUS_ONE {
  description
  "If set, the link has dedicated 1+1 protection. If the link is of type Dedicated 1+1, it means that a dedicated disjoint link is protecting this link. However, the protecting link is not advertised in the link state database and is therefore not available for the routing of LSPs."
}

enum ENHANCED {
  description
  "If set the link has enhanced protection. If the link is of type Enhanced, it means that a protection scheme that is more reliable than Dedicated 1+1, e.g., 4 fiber BLSR/MS-SPRING, is being used to protect this link."
}

description
"Link protection capabilities."
reference

container bandwidth-constraints {
  when "./state/type =" +
    ""oc-isis-ldb-types:IS_REACHABILITY_BANDWIDTH_CONSTRAINTS"
      description
      "Only include the bandwidth constraints container when the sub-TLV is type 22."
  }

description
"This container defines bandwidth-constraints. For DS-TE, the existing Maximum Reservable link bandwidth parameter
is retained, but its semantics is generalized and interpreted as the aggregate bandwidth constraint across all Class-Types;

reference

list bandwidth-constraint {
  key "model-id";

description
  "List of the Bandwidth Constraints sub-TLV instances present in the TLV."
}

leaf model-id {
  type leafref {
    path "./state/model-id";
  }

description
  "Reference to the model ID associated with the instance of the Bandwidth Constraints sub-TLV."
}

container state {
  description
  "State parameters of IS Extended Reachability sub-TLV 22."

  leaf model-id {
    type uint8;
    description
    "Identifier for the Bandwidth Constraints Model currently in use by the LSR initiating the IGP advertisement."
  }
}

container constraints {
  description
  "Constraints contained within the Bandwidth Constraints sub-TLV"

  list constraint {
    key "constraint-id";

description
"List of the constraints within the Bandwidth Constraints sub-TLV. The BC0 level is indicated by the constraint-id leaf being set to 0, with BCN being indicated by constraint-id N."

leaf constraint-id {
  type leafref {
    path "./state/constraint-id";
  }
  description
  "Reference to the unique ID for the BCN level.";
}

container state {
  description
  "Operational state parameters of the BCN level";
}

leaf constraint-id {
  type uint32;
  description
  "Unique reference for the bandwidth constraint level. BC0 is indicated by this leaf being set to zero, with BCN represented by this leaf being set to N.";
}

leaf bandwidth {
  type oc-types:ieeefloat32;
  units "bytes per second";
  description
  "The bandwidth constraint, expressed as a 32-bit IEEE floating point number expressed in bytes per second.";
}

container unconstrained-lsp {
  when "./state/type = " + 
  "oc-isis-lsdb-types:IS_REACHABILITY_UNCONSTRAINED_LSP" {
    description
    "Only include the unconstrained LSP container when the sub-TLV is type 23.";
  }
  description
  "This container defines sub-TLV 23."
  container state {
  
}
description
"State parameters of sub-TLV 23."

uses isis-lsdb-subtlv-type-state;

leaf count {
  type uint16;
  description
  "Unconstrained TE LSP count(TE Label Switched Paths
  (LSPs) signalled with zero bandwidth).";
  reference
  "RFC5330: A Link-Type sub-TLV to Convey the Number of
  Traffic Engineering Label Switched Paths Signalled
  with Zero Reserved Bandwidth across a Link. sub-TLV
  23: TLV 22,23,141,222,223";
}
}
}

container adjacency-sids {
  when "./state/type = 'oc-isis-lsdb-types:IS_REACHABILITY_ADJ_SID'" {
    description
    "Only include the adjacency SIDs container when the
    sub-TLV type is 31";
  }

  description
  "This container defines segment routing adjacency SIDs."

  list adjacency-sid {
    key "value";

    description
    "Adjacency Segment-IDs List. An IGP-Adjacency Segment is
    an IGP segment attached to a unidirectional adjacency or
    a set of unidirectional adjacencies. By default, an IGP-
    Adjacency Segment is local to the node which advertises
    it.";

    leaf value {
      type leafref {
        path "./state/value";
      }
      description
      "Reference to the value of the Adjacency-SID.";
    }

  }

  container state {

}
description
"State parameters of Adjacency-SID."

leaf value {
  type uint32;
  description
  "Adjacency-SID value."
}

leaf-list flags {
  type enumeration {
    enum ADDRESS_FAMILY {
      description
      "Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation."
    }
    enum BACKUP {
      description
      "Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR)."
    }
    enum VALUE {
      description
      "Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET."
    }
    enum LOCAL {
      description
      "Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET."
    }
    enum SET {
      description
      "Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies."
    }
  }
  description
  "Flags associated with Adj-Segment-ID."
}

leaf weight {
  type uint8;
description
"Value that represents the weight of the Adj-SID for
the purpose of load balancing."
}
}
}

reference
"draft-ietf-isis-segment-routing-extensions. sub-TLV 31:
TLV 22, 222, 223, 141. ";
}

container lan-adjacency-sids {
when "./state/type = " +
"oc-isis-lsdb-types:IS_REACHABILITY_ADJ_LAN_SID"
{

description
"Only include the LAN adjacency SID container when
the sub-TLV is type 32."
}

description
"This container defines segment routing LAN adjacency
SIDs";

list lan-adjacency-sid {
key "value";

description
"Adjacency Segment-IDs List. An IGP-Adjacency Segment is
an IGP segment attached to a unidirectional adjacency or
a set of unidirectional adjacencies. By default, an IGP-
Adjacency Segment is local to the node which advertises
it."

leaf value {

type leafref {

    path "./state/value";
    }

description
"Reference to the value of the LAN Adjacency-SID."
}
}

container state {

description
"State parameters of LAN Adjacency-SID."

leaf value {

type uint32;

description
"Value that represents the weight of the Adj-SID for
the purpose of load balancing."
}
"LAN Adjacency-SID value."
]

leaf-list flags {
  type enumeration {
    enum ADDRESS_FAMILY {
      description
      "Address-family flag. When unset, the Adj-SID refers to an adjacency with outgoing IPv4 encapsulation. If set then the Adj-SID refers to an adjacency with outgoing IPv6 encapsulation.";
    }
    enum BACKUP {
      description
      "Backup flag. When set, the Adj-SID refers to an adjacency being protected (e.g.: using IPFRR or MPLS-FRR).";
    }
    enum VALUE {
      description
      "Value flag. When set, the SID carries a value (instead of an index). By default the flag is SET.";
    }
    enum LOCAL {
      description
      "Local flag. When set, the value/index carried by the SID has local significance. By default the flag is SET.";
    }
    enum SET {
      description
      "Set flag. When set, the S-Flag indicates that the Adj-SID refers to a set of adjacencies.";
    }
  }
  description
  "Flags associated with LAN-Adj-Segment-ID.";
}

leaf weight {
  type uint8;
  description
  "Value that represents the weight of the Adj-SID for the purpose of load balancing.";
}

leaf neighbor-id {
type oc-isis-types:system-id;
description
"System ID of the neighbor associated with the LAN-Adj-Segment-ID value."
}
}
}

reference
"draft-ietf-isis-segment-routing-extensions. sub-TLV 32:
TLV 22, 222, 223, 141."
}

container link-delay {
when ".../state/type = " +
"oc-isis-lsdb-types:IS_REACHABILITY_LINK_DELAY" {

description
"Include the link delay container only when the sub-TLV
type is type 33."
}
}

description
"This container defines unidirectional link delay."

reference
"RFC7810: IS-IS Traffic Engineering (TE) Metric
Extensions. sub-TLV 33: TLV 22, 23, 141, 222, 223."

container state {

description
"State parameters of IS Extended Reachability sub-TLV 33."

uses isis-lsdb-link-characteristics-a-bit;

leaf delay {

type uint32;

units microseconds;

description
"Average link delay value (in microseconds) between
two directly connected IS-IS neighbors over a
configurable interval."
}
}
}

container min-max-link-delay {
when ".../state/type = " +
"oc-isis-lsdb-types:IS_REACHABILITY_MIN_MAX_LINK_DELAY" {


description
"Only include the min/max link delay container when the
sub-TLV is type 34."
}
description
"This container defines min/max link delay."

reference
"RFC7810: IS-IS Traffic Engineering (TE) Metric
Extensions. sub-TLV 34: TLV 22, 23, 141, 222, 223."

container state {

description
"State parameters of IS Extended Reachability sub-TLV
34."

uses isis-lsdb-link-characteristics-a-bit;

leaf min-delay {

type uint32;

units microseconds;

description
"Minimum measured link delay value(in microseconds)
between two directly connected IS-IS neighbors over a
configurable interval.";
}

leaf max-delay {

type uint32;

units microseconds;

description
"Maximum measured link delay value(in microseconds)
between two directly connected IS-IS neighbors over a
configurable interval.";
}
}
}

container link-delay-variation {

when "/.state/type = " + 
"oc-isis-lsdb-types:IS_REACHABILITY_LINK_DELAY_VARIATION" {

description
"Only include the link delay variation container when
the sub-TLV is type 35."
}

description
"This container defines unidirectional link delay
variation.";
container state {
    description
    "State parameters of IS Extended Reachability sub-TLV 35.";

    leaf delay {
        type uint32;
        units microseconds;
        description
        "Average link delay between two directly connected IS-IS neighbors over a configurable interval.";
    }
}

container link-loss {
    when "./state/type = " +
    "oc-isis-lsdb-types:IS_REACHABILITY_LINK_LOSS" {
        description
        "Only include the link loss container when the sub-TLV is type 36.";
    }
    description
    "This container defines unidirectional link loss delay.";

    reference
    "RFC7810: IS-IS Traffic Engineering (TE) Metric Extensions. sub-TLV 36: TLV 22, 23, 141, 222, 223.";

    container state {
        description
        "State parameters of IS Extended Reachability sub-TLV 36.";

        uses isis-lsdb-link-characteristics-a-bit;

        leaf link-loss {
            type uint32;
            description
            "Link packet loss as a percentage of the total traffic sent over a configurable interval. The basic unit is 0.000003%, where \(2^{24} - 2\) is 50.331642%. This value is the highest packet-loss percentage that can be"
expressed (the assumption being that precision is more
important on high-speed links than the ability to
advertise loss rates greater than this, and that high-
speed links with over 50% loss are unusable).
Therefore, measured values that are larger than the
field maximum SHOULD be encoded as the maximum
value.

container residual-bandwidth {
  when ".state.type = " +
    "oc-isis-lsdb-types:IS_REACHABILITY_RESIDUAL_BANDWIDTH" {
    description
      "Only include the residual bandwidth container when the
      sub-TLV is type 37."
    }
  }
  description
    "This container defines unidirectional residual
    bandwidth."

  reference
    "RFC7810: IS-IS Traffic Engineering (TE) Metric
    Extensions. sub-TLV 37: TLV 22, 23, 141, 222, 223."

  container state {
    description
      "State parameters of IS Extended Reachability sub-TLV
      37."

    leaf bandwidth {
      type oc-types:ieeefloat32;
      units "bytes per second";
      description
        "Residual bandwidth on a link, forwarding adjacency
        [RFC4206], or bundled link in IEEE floating-point
        format with units of bytes per second. For a link or
        forwarding adjacency, residual bandwidth is defined to
        be the Maximum Bandwidth [RFC5305] minus the bandwidth
        currently allocated to RSVP-TE label switched paths.
        For a bundled link, residual bandwidth is defined to
        be the sum of the component link residual
        bandwidths."
    }
  }
}
container available-bandwidth {
  when "./state/type = " +
    "oc-isis-lsdb-types:IS_REACHABILITY_AVAILABLE_BANDWIDTH" {
    description
    "Only include the available bandwidth container when the
    sub-TLV is type 38.";
  }
  description
  "This container defines unidirectional available
  bandwidth.";
  reference
  "RFC7810: IS-IS Traffic Engineering (TE) Metric
  Extensions. sub-TLV 38: TLV 22, 23, 141, 222, 223.";
  container state {
    description
    "State parameters of IS Extended Reachability sub-TLV
    38.";
    uses isis-lsdb-subtlv-type-state;
    leaf bandwidth {
      type oc-types:ieeefloat32;
      units "bytes per second";
      description
      "The available bandwidth on a link, forwarding
      adjacency, or bundled link in IEEE floating-point
      format with units of bytes per second. For a link or
      forwarding adjacency, available bandwidth is defined
      to be residual bandwidth minus the measured bandwidth
      used for the actual forwarding of non-RSVP-TE label
      switched path packets. For a bundled link, available
      bandwidth is defined to be the sum of the component
      link available bandwidths minus the measured bandwidth
      used for the actual forwarding of non-RSVP-TE label
      switched path packets. For a bundled link, available
      bandwidth is defined to be the sum of the component
      link available bandwidths.";
    }
  }
}

container utilized-bandwidth {
  when "./state/type = " +
    "oc-isis-lsdb-types:IS_REACHABILITY_UTILIZED_BANDWIDTH" {
    description
    "Only include the utilized bandwidth container when the
TLV is type 39.

This container defines unidirectional utilized bandwidth.

reference

container state {

description
"State parameters of IS Extended Reachability sub-TLV 39."

uses isis-lsdb-subtlv-type-state;

leaf bandwidth {

type oc-types:ieeefloat32;

units "bytes per second";

description
"The bandwidth utilization on a link, forwarding adjacency, or bundled link in IEEE floating-point format with units of bytes per second. For a link or forwarding adjacency, bandwidth utilization represents the actual utilization of the link (i.e., as measured by the advertising node). For a bundled link, bandwidth utilization is defined to be the sum of the component link bandwidth utilizations."

}

}

uses isis-lsdb-undefined-subtlv;

}

grouping isis-lsdb-undefined-tlv {

description
"Grouping for unknown TLVs in the IS-IS LSDB"

container undefined-tlvs {

description
"Surrounding container for a list of unknown TLVs."

list undefined-tlv {

key "type";

}
description
"List of TLVs that are not defined within the model, or are not recognised by the system."

leaf type {
type leafref {
    path ".../state/type";
}
description
"Reference to the undefined TLV's type";
}

container state {
description
"State parameters of the undefined TLV."

uses undefined-tlv-state;

}
}
}

grouping isis-lsdb-undefined-subtlv {
description
"Grouping for unknown Sub-TLVs in the IS-IS LSDB."

container undefined-subtlvs {
description
"This container describes undefined ISIS TLVs."

list undefined-subtlv {
    key "type";

description
"Sub-TLVs that are not defined in the model or not recognised by system."

leaf type {
type leafref {
    path ".../state/type";
}
description
"Reference to the type of the undefined sub-TLV";
}

container state {
description
"State parameters of the undefined sub-TLV."
}
uses undefined-subtlv-state;
}
}
}

grouping isis-lsdb-prefix-state {
  description
  "This grouping defines prefix reachability."
}

container subtlvs {
  description
  "This container describes IS prefix sub-TLVs."

  list subtlv {
    key "type";
    description
    "List of subTLV types in the LSDB for the specified TLV."

    leaf type {
      type leafref {
        path ".state/type";
      }
      description
      "Reference to the sub-TLV type";
    }

    container state {
      description
      "State parameters for a prefix."

      uses isis-lsdb-subtlv-type-state;
    }

    container tag {
      when ".state/type = " +
      "oc-isis-lsdb-types:IP_REACHABILITY_TAG" {
        description
        "Only include the tag container when the sub-TLV is type 1.";
      }
      description
      "This container defines sub-TLV 1."

      container state {
        description
        "State parameters for a prefix."
      }
    }
  }
}
"State parameters of sub-TLV 1."

leaf-list tag32 {
  type uint32;
  description
  "List of 32-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.";
  reference
  "RFC5130: A Policy Control Mechanism in IS-IS Using Administrative Tags. sub-TLV 1.";
}
}
}

container tag64 {
  when "./.state/type = " +
  "oc-isis-lsdb-types:IP_REACHABILITY_TAG64" {
    description
    "Only include the tag64 container when the sub-TLV is type 2.";
  }
  description
  "This container defines sub-TLV 2."
}

container state {
  description
  "State parameters of sub-TLV 2."

  leaf-list tag64 {
    type uint64;
    description
    "List of 64-bit tags associated with the prefix. Example uses of these tags include carrying BGP standard (or extended) communities and controlling redistribution between levels and areas, different routing protocols, or multiple instances of IS-IS running on the same router.";
    reference
    "RFC5130: A Policy Control Mechanism in IS-IS Using Administrative Tags. sub-TLV 2.";
  }
}

container flags {
  when "./.state/type = " +
    "oc-isis-lsdb-types:IP_REACHABILITY_PREFIX_FLAGS" { 
    description
      "Only include the flags container when the sub-TLV is type 4.";
  }
}
description
  "This container defines sub-TLV 4."

container state {
  description
    "State parameters of sub-TLV 4."

  uses isis-lsdb-subtlv-type-state;
}

leaf-list flags {
  type enumeration {
    enum EXTERNAL_FLAG {
      description
        "External prefix flag. Set if the prefix has been redistributed from another protocol. This includes the case where multiple virtual routers are supported and the source of the redistributed prefix is another IS-IS instance.";
    }
    enum READVERTISEMENT_FLAG {
      description
        "Readvertisement flag. Set when the prefix has been leaked from one level to another (upwards or downwards).";
    }
    enum NODE_FLAG {
      description
        "Node flag. Set when the prefix identifies the advertising router, i.e., the prefix is a host prefix advertising a globally reachable address typically associated with a loopback address.";
    }
  }
  description
    "Additional prefix reachability flags."

  reference
    "RFC7794: IS-IS Prefix Attributes for Extended IPv4 and IPv6 Reachability. sub-TLV 4.";
}
container ipv4-source-router-id {
    when "./state/type = " +
        "oc-isis-lsdb-types:IP_REACHABILITY_IPV4_ROUTER_ID"
    description
        "Only include the IPv4 Source Router ID container when
         the sub-TLV is type 11."
}

description
    "This container defines sub-TLV 11."

container state {
    description
        "State parameters of sub-TLV 11."
    uses isis-lsdb-subtlv-type-state;

    leaf router-id {
        type inet:ipv4-address;
        description
            "IPv4 Source router ID address. In cases where the
             advertisement is an identifier for the advertising
             router (e.g., with the N-flag set in the Prefix
             Attribute Flags sub-TLV), it may be useful for other
             routers to know the source of the advertisement. When
             reachability advertisement is leaked from one level to
             another, Router ID advertised is always the Router ID
             of the IS-IS instance that originated the
             advertisement. This would be true even if the prefix
             had been learned from another protocol.";
        reference
            "RFC7794: IS-IS Prefix Attributes for Extended IPv4
             and IPv6 Reachability. sub-TLV 11";
    }
}

container ipv6-source-router-id {
    when "./state/type = " +
        "oc-isis-lsdb-types:IP_REACHABILITY_IPV6_ROUTER_ID"
    description
        "Only include the IPv6 Source Router ID container when
         the sub-TLV is type 12."
}

description
    "This container defines sub-TLV 12.";
container state {
  description
  "State parameters of sub-TLV 12."
}

uses isis-lsdb-subtlv-type-state;

leaf router-id {
  type inet:ipv6-address;
  description
  "IPv6 Source router ID address. In cases where the advertisement is an identifier for the advertising router (e.g., with the N-flag set in the Prefix Attribute Flags sub-TLV), it may be useful for other routers to know the source of the advertisement. When reachability advertisement is leaked from one level to another, Router ID advertised is always the Router ID of the IS-IS instance that originated the advertisement. This would be true even if the prefix had been learned from another protocol.";
  reference
  "RFC7794: IS-IS Prefix Attributes for Extended IPv4 and IPv6 Reachability. sub-TLV 12.";
}

uses isis-lsdb-prefix-sid-state;

uses isis-lsdb-undefined-subtlv;

grouping isis-lsdb-prefix-sid-state {
  description
  "This grouping defines ISIS Prefix SID.";

  container prefix-sids {
    when ".state/type = " + "oc-isis-lsdb-types:IP_REACHABILITY_PREFIX_SID"
    description
    "Only include the Prefix SID container when the sub-TLV is type 3.";
  }
  description
  "This container defines segment routing extensions for prefixes.";
list prefix-sid {
  key "value";

  description
  "Prefix Segment-ID list. IGP-Prefix Segment is an IGP segment
  attached to an IGP prefix. An IGP-Prefix Segment is global
  (unless explicitly advertised otherwise) within the SR/IGP
  domain.";

  leaf value {
    type leafref {
      path ".../state/value";
    }
    description
    "Reference to the value of the prefix SID.";
  }

  container state {
    description
    "State parameters for Prefix-SID.";

    leaf value {
      type uint32;
      description
      "IGP Prefix-SID value.";
    }

    leaf-list flags {
      type enumeration {
        enum READVERTISEMENT {
          description
          "Readvertisement flag. When set, the prefix to which
          this Prefix-SID is attached, has been propagated by
          the router either from another level or from
          redistribution.";
        }
        enum NODE {
          description
          "Node flag. When set, the Prefix-SID refers to the
          router identified by the prefix. Typically, the
          N-Flag is set on Prefix-SIDs attached to a router
          loopback address.";
        }
        enum NO_PHP{
          description
          "";
        }
      }
    }
  }
}
description
"Penultimate-Hop-Popping flag. When set, then the
penultimate hop MUST NOT pop the Prefix-SID before
delivering the packet to the node that advertised
the Prefix-SID.";
}
enum EXPLICIT_NULL {

description
"Explicit-Null flag. When set, any upstream neighbor
of the Prefix-SID originator MUST replace the
Prefix-SID with a Prefix-SID having an Explicit-NULL
value (0 for IPv4 and 2 for IPv6) before forwarding
the packet.";
}
enum VALUE {

description
"Value flag. When set, the Prefix-SID carries a
value (instead of an index). By default the flag is
UNSET.";
}
enum LOCAL {

description
"Local flag. When set, the value/index carried by
the Prefix-SID has local significance. By default
the flag is UNSET.";
}
}
}
description
"Flags associated with Prefix Segment-ID."
}

leaf algorithm {

type uint8;

description
"Prefix-SID algorithm to be used for path computation."
}
}
}
}

grouping isis-lsdb-common-metric-specification {

description
"Common definitions of the metric in IS-IS."
}

container default-metric {

description
"This container defines ISIS Default Metric."
}
container state {
  description
  "State parameters for default-metric.";
}

leaf flags {
  type enumeration {
    enum INTERNAL {
      description
      "When set to zero, indicates internal metrics.";
    }
  }
  description
  "ISIS Default-Metric Flags.";
}

leaf metric {
  type oc-isis-types:narrow-metric;
  description
  "ISIS default metric value. This is a metric understood by every Intermediate system in the domain. Each circuit shall have a positive integral value assigned for this metric. The value may be associated with any objective function of the circuit, but by convention is intended to measure the capacity of the circuit for handling traffic, for example, its throughput in bits-per-second. Higher values indicate a lower capacity.";
}

container delay-metric {
  description
  "This container defines the ISIS delay metric.";
}

container state {
  description
  "State parameters of delay-metric.";
}

leaf metric {
  type oc-isis-types:narrow-metric;
  description
  "ISIS delay metric value. This metric measures the transit delay of the associated circuit. It is an optional metric, which if assigned to a circuit shall have a positive integral value. Higher values indicate a longer transit delay.";
}
leaf-list flags {
    type isis-metric-flags;
    description
        "ISIS Delay Metric Flags."
}
}
}

container expense-metric {
    description
        "This container defines the ISIS expense metric."
}

container state {
    description
        "State parameters of expense-metric."
}

leaf metric {
    type oc-isis-types:narrow-metric;
    description
        "ISIS expense metric value. This metric measures the monetary cost of utilising the associated circuit. It is an optional metric, which if assigned to a circuit shall have a positive integral value. Higher values indicate a larger monetary expense."
}

leaf-list flags {
    type isis-metric-flags;
    description
        "ISIS Expense Metric Flags."
}
}

container error-metric {
    description
        "This container defines the ISIS error metric."
}

container state {
    description
        "State parameters of error-metric."
}

leaf metric {
    type oc-isis-types:narrow-metric;
    description
        "ISIS error metric value. This metric measures the residual error probability of the associated circuit. It
is an optional metric, which if assigned to a circuit shall have a non-zero value. Higher values indicate a larger probability of undetected errors on the circuit.

leaf-list flags {
  type isis-metric-flags;
  description
    "IS-IS error metric flags."
}

 grouping isis-lsdb-neighbor {
  description
    "This grouping defines attributes of an ISIS standard neighbor.";

container state {
  description
    "State parameters of IS standard neighbor.";

  leaf system-id {
    type oc-isis-types:system-id;
    description
      "System-ID of IS neighbor."
  }
}

  uses isis-lsdb-common-metric-specification;
}

 grouping ipv4-prefix-attributes-state {
  description
    "This group defines attributes of an IPv4 standard prefix."

container state {
  description
    "State parameters of IPv4 standard prefix."

  leaf up-down {
    type boolean;
    description
      "The up/down bit. Set if a prefix is advertised from a higher level to a lower level (e.g., level 2 to level 1), indicating that the prefix has traveled down the hierarchy."
Prefixes that have the up/down bit set may only be advertised down the hierarchy, i.e., to lower levels. When a prefix is first injected into IS-IS, the bit is UNSET.

leaf prefix {
  type inet:ipv4-prefix;
  description
    "IPv4 prefix contained within reachability TLVs."
}

uses isis-lsdb-common-metric-specification;

}

grouping isis-lsdb-common-mt-id {
  description
    "Common definition of the multi-topology ID"

  leaf mt-id {
    type uint16 {
      range "0..4095"
    }
    description
      "Multi-topology ID"
  }
}

grouping ipv4-prefix-extended-state {
  description
    "This grouping defines attributes of an IPv4 extended prefix."

  container state {
    description
      "State parameters of an IPv4 extended prefix."
    uses ipv4-prefix-extended-params-state;
  }

  uses isis-lsdb-prefix-state;
}

grouping ipv4-mt-prefix-extended-state {
  description
    "State parameters that relate to an IPv4 prefix in a multi-topology context."

  container state {
    description
      "State parameters that relate to an IPv4 prefix in a multi-topology context."
  }
"State parameters of an IPv4 extended prefix."
uses ipv4-prefix-extended-params-state;
uses isis-lsdb-common-mt-id;
}

uses isis-lsdb-prefix-state;
}

grouping ipv4-prefix-extended-params-state {
  description
  "State parameters that relate to an IPv4 prefix."

  leaf up-down {
    type boolean;
    description
    "The up/down bit. Set if a prefix is advertised from a higher level to a lower level (e.g., level 2 to level 1), indicating that the prefix has traveled down the hierarchy. Prefixes that have the up/down bit set may only be advertised down the hierarchy, i.e., to lower levels. When a prefix is first injected into IS-IS, the bit is UNSET.";
  }

  leaf s-bit {
    type boolean;
    description
    "The Sub-TLV present bit. If UNSET, the octets of Sub-TLVs are not present. Otherwise, the bit is set and the octet following the prefix will contain the length of the Sub-TLV portion of the structure.";
  }

  leaf prefix {
    type inet:ipv4-prefix;
    description
    "IPv4 prefix contained within extended reachability TLVs."
  }

  leaf metric {
    type oc-isis-types:wide-metric;
    description
    "ISIS metric value."
  }
}

grouping ipv6-prefix-extended-state {
  description
  "State parameters relating to an IPv6 prefix.";
}
container state {
  description
  "State parameters of IPv6 prefix attributes";

  uses ipv6-prefix-extended-params-state;
}

uses isis-lsdb-prefix-state;

grouping ipv6-mt-prefix-extended-state {
  description
  "State parameters relating to a multi-topology IPv6 prefix.";

  container state {
    description
    "State parameters relating an IPv6 prefix attribute";
    uses ipv6-prefix-extended-params-state;
    uses isis-lsdb-common-mt-id;
  }

  uses isis-lsdb-prefix-state;
}

grouping ipv6-prefix-extended-params-state {
  description
  "Common parameters of an IPv6 extended prefix.";

  leaf up-down {
    type boolean;
    description
    "The up/down bit. Set if a prefix is advertised from a higher level to a lower level (e.g., level 2 to level 1), indicating that the prefix has traveled down the hierarchy. Prefixes that have the up/down bit set may only be advertised down the hierarchy, i.e., to lower levels. When a prefix is first injected into IS-IS, the bit is UNSET.";
  }

  leaf x-bit {
    type boolean;
    description
    "The external bit. Set when the prefix was distributed into IS-IS from another routing protocol.";
  }
}
leaf s-bit {
    type boolean;
    description
    "The sub-tlv present bit. If UNSET, the octets of Sub-TLVs
    are not present. Otherwise, the bit is set and the octet
    following the prefix will contain the length of the Sub-TLV
    portion of the structure.";
}

leaf prefix {
    type inet:ipv6-prefix;
    description
    "IPv6 prefix contained within extended reachability TLVs.";
}

leaf metric {
    type oc-isis-types:wide-metric;
    description
    "ISIS metric value.";
}
}

grouping isis-lsdb-common-extisreach-neighbors {
    description
    "Common structure for the Extended IS Reachability and IS
    Reachability Neighbour attributes.";
}

container neighbors {
    description
    "This container describes IS neighbors.";
}

list neighbor {
    key "system-id";
    description
    "This list describes ISIS extended neighbors and
    reachability attributes.";
}

leaf system-id {
    type leafref {
        path "./state/system-id";
    }
    description
    "Reference to the neighboring system's system ID.";
}

container state {
    description
    "State parameters corresponding to the extended
leaf system-id {
    type oc-isis-types:system-id;
    description
        "System-id of the neighbor."
}
}

container instances {
    description
        "This list contains all instances of an adjacency between the originating IS and the remote IS. Multiple instances are used where there are parallel adjacencies between two systems."
}

list instance {
    key "id";
    description
        "Instance of the TLV to the remote IS neighbor."
}

leaf id {
    type leafref {
        path "./state/id";
    }
    description
        "Reference to the unique identifier for the instance of the extended IS reachability sub-TLV."
}

container state {
    description
        "State parameters of extended neighbor"
}

leaf id {
    type uint64;
    description
        "Unique identifier for the instance of the TLV for the IS neighbor. The instance ID is not required to be consistent across readvertisements of the LSP."
}

leaf metric {
    type oc-isis-types:wide-metric;
    description

"Metric value."
}
}
uses is-reachability-neighbor-state;
}
}
}

}  
grouping isis-lsdb-mtis-common {
  description "Common grouping for structure used within the multi-topology IS neighbour and multi-topology IS neighbour attribute TLVs.";

  container neighbors {
    description "MT-IS neigbor attributes.";

    list neighbor {
      key "mt-id system-id";
      description "This container describes IS neighbors."

      leaf mt-id {
        type leafref {
          path ".../state/mt-id";
        }
        description "Reference to the topology that the neighbor is within.";
      }

      leaf system-id {
        type leafref {
          path ".../state/system-id";
        }
        description "Reference to the System ID of the neighbor.";
      }

      container state {
        description "Operational state parameters related to the MT ISN TLV.";

        uses mt-isis-neighbor-state;
      }
    }
  }
}


container instances {
  description
  "This list contains all instances of an adjacency
  between the originating and remote IS. Multiple
  instances are used to indicate where there are
  parallel adjacencies between systems."

  list instance {
    key "id";

    description
    "Instance of TLV-222 between the originating
    and remote IS."

    leaf id {
      type leafref {
        path "./state/id";
      }
      description
      "Reference to the unique identifier for the
      instance of the multi-topology IS neighbor
      TLV instance."
    }

    uses mt-isis-neighbor-instance;
  }
}
}
}
}
}

grouping mt-isis-neighbor-state {
  description
  "This grouping defines state parameters that are related to
each neighbour entry for the MT ISN TLV."

  leaf mt-id {
    type uint16 {
      range "0..4095";
    }
    description
    "Identifier of a topology being announced."
  }

  leaf system-id {
    type oc-isis-types:system-id;
    description
grouping mt-isis-neighbor-instance {
    description
    "This grouping defines list of ISIS multi-topology neighbors for extended ISIS LSP (multiple system IDs).";

    container state {
        description
        "State parameters of MT neighbor.";

        leaf metric {
            type oc-isis-types:wide-metric;
            description
            "ISIS metric value.";
        }

        leaf id {
            type uint64;
            description
            "Unique identifier for the TLV instance for the neighbor. The ID is not required to be consistent across readvertisements of the LSP.";
        }
    }
}

uses is-reachability-neighbor-state;

}

grouping isis-lsdb-generic-tlv {
    description
    "Generic TLV encoding grouping.";

    leaf type {
        type uint8;
        description
        "TLV Type.";
    }

    leaf length {
        type uint8;
        description
        "TLV length.";
    }

    leaf value {
        type binary;
    }
}
description
  "TLV value.";
}

grouping undefined-tlv-state {
  description
  "Generic grouping defining an unknown TLV.";

  uses isis-lsdb-generic-tlv;
}

grouping undefined-subtlv-state {
  description
  "Generic grouping defining an unknown sub-TLV.";

  uses isis-lsdb-generic-tlv;
}

grouping lsp-state {
  description
  "This grouping defines ISIS LSP state information.";

  leaf lsp-id {
    type leafref {
      path "../state/lsp-id";
    }

    description
      "A reference to the Link State PDU ID.";
  }

  container state {
    description
      "State parameters of Link State PDU.";

    leaf lsp-id {
      type oc-isis-types:lsp-id;
      description
        "LSP ID of the LSP.";
    }

    leaf maximum-area-addresses {
      type uint8;
      description
        "Number of area addresses permitted for this ISs area. 0 indicates the IS only supports three area addresses (by default). Any number inclusive of 1 and 254 indicates the"; 
    }
  }
}
number of areas allowed.

leaf version {
    type uint8;
    default 1;
    description
        "PDU version. This is set to 1."
}

leaf version2 {
    type uint8;
    default 1;
    description
        "PDU version2. This is set to 1"
}

leaf id-length {
    type uint8;
    description
        "Length of the ID field of NSAP addresses and NETs used in
        this routing domain."
}

leaf pdu-type {
    type enumeration {
        enum LEVEL_1 {
            description "This enum describes ISIS level 1 PDU."
        }
        enum LEVEL_2 {
            description "This enum describes ISIS level 2 PDU."
        }
    }
    description
        "Link State PDU type."
}

leaf remaining-lifetime {
    type uint16;
    units "seconds";
    description
        "Remaining lifetime in seconds before the LSP expiration."
}

leaf sequence-number {
    type uint32;
    description
        "Sequence number of the LSP."
}
leaf checksum {
  type uint16;
  description
    "Checksum of the LSP."
}

leaf pdu-length {
  type uint16;
  description
    "Total length of the LSP."
}

leaf-list flags {
  type enumeration {
    enum PARTITION_REPAIR {
      description
        "When set, the originator supports partition
        repair."
    }
    enum ATTACHED_ERROR {
      description
        "When set, the originator is attached to another
        area using the referred metric."
    }
    enum ATTACHED_EXPENSE {
      description
        "When set, the originator is attached to another
        area using the referred metric."
    }
    enum ATTACHED_DELAY {
      description
        "When set, the originator is attached to another
        area using the referred metric."
    }
    enum ATTACHED_DEFAULT {
      description
        "When set, the originator is attached to another
        area using the referred metric."
    }
    enum OVERLOAD {
      description
        "When set, the originator is overloaded, and must
        be avoided in path calculation."
    }
  }
}

description
"LSP Type-Block flags."
}

leaf is-type {
  type oc-isis-types:level-number;
  description
    "Type of neighboring system."
}

container tlvs {
  description
    "This container defines Link State PDU State TLVs."

  list tlv {
    key "type";

    description
      "List of TLV types in the LSDB for the specified LSP."

    leaf type {
      type leafref {
        path "../state/type";
      }
      description
        "Reference to the TLV's type."
    }

    container state {
      config false;
      description
        "Operational state parameters relating to the specified
         LSP";

      uses isis-lsdb-tlv-type-state;
    }

    container area-address {
      when "../state/type = 'oc-isis-lsdb-types:AREA_ADDRESSES'" {
        description
          "Include area address parameters only when the TLV type
           is TLV 1."
      }

      description
        "This container defines TLV 1."

    container state {

description
"State parameters of ISIS TLV 1."

leaf-list address {
type oc-isis-types:area-address;
description
"Area address(es) of the IS. Set of manual area
addresses of this IS.";
reference
"ISO 10589 Intermediate System to Intermediate System
Intra- Domain Routeing Exchange Protocol for use in
Conjunction with the Protocol for Providing the
Connectionless-mode Network Service (ISO 8473 )
2002. TLV 1."
}

container lsp-buffer-size {
when "/state/type = " + 
"oc-isis-lsdb-types:LSP_BUFFER_SIZE" {
description
"Include the LSP buffer size parameters only when the
TLV type is TLV 14.";
}

description
"This container defines TLV 14 - the LSP Buffer Size
TLV."

container state {
description
"State parameters of TLV 14."

leaf size {
type uint16;
units "bytes";
description
"The maximum MTU that the advertising system can
receive, expressed in bytes.";
reference
"ISO 10589 Intermediate System to Intermediate System
Intra- Domain Routeing Exchange Protocol for use in
Conjunction with the Protocol for Providing the
Connectionless-mode Network Service (ISO 8473 )
2002. TLV 14.";
container nlpid {
    when "/../state/type = 'oc-isis-lsdb-types:NLPID'" {
        description "Include NLPIID specification only when the TLV type is TLV 129.;"
    }
}

description "This container defines TLV 129.;"

container state {
    description "State parameters of ISIS TLV 129.;"

    uses isis-lsdb-tlv-nlpid-state;
}

container hostname {
    when "/../state/type = 'oc-isis-lsdb-types:DYNAMIC_NAME'" {
        description "Include the dynamic hostname TLV only when the TLV is type 137.;"
    }
}

description "This container defines TLV 137.;"

container state {
    description "State parameters of ISIS TLV 137.;"

    leaf-list hostname {
        type string;
        description "Name of the node."

        reference "RFC6233: IS-IS Registry Extension for Purges, RFC 5301: Dynamic Hostname Exchange Mechanism for IS-IS. TLV 137;"
    }
}
}
container ipv4-interface-addresses {
  when "/..state/type = " +
    "oc-isis-lsdb-types:IPV4_INTERFACE_ADDRESSES" {
    description
    "Include the IPv4 interface addresses TLV only when the
    TLV is type 132.";
  }
  description
  "This container defines TLV 132.";
}

container state {
  description
  "State parameters of ISIS TLV 132.";
  leaf-list address {
    type inet:ipv4-address;
    description
    "IPv4 address(es) of the interface corresponding to
    the SNPA over which this PDU is to be transmitted.";
    reference
    "RFC1195: Use of OSI IS-IS for Routing in TCP/IP and
    Dual Environments. TLV 132.";
  }
}

container ipv6-interface-addresses {
  when "/..state/type = " +
    "oc-isis-lsdb-types:IPV6_INTERFACE_ADDRESSES" {
    description
    "Include the IPv6 interface addresses TLV only when the
    TLV is type 232.";
  }
  description
  "This container defines TLV 232.";
}

container state {
  description
  "State parameters of ISIS TLV 232.";
  leaf-list address {
    type inet:ipv6-address;
    description
    "IPv6 interface addresses of the node. MUST contain
    only the non-link-local IPv6 addresses assigned to the
    IS.";
    reference
    "RFC5308: Routing IPv6 with IS-IS. TLV 232.";
  }
}
container ipv4-te-router-id {
  when "./state/type = " + 
    "oc-isis-lsdb-types:IPV4_TE_ROUTER_ID" {
    description
    "Include the IPv4 traffic engineering router ID TLV only when the TLV is type 134.";
  }
  description
  "This container defines TLV 134."
}

container state {
  description
  "State parameters of ISIS TLV 134."

  leaf-list router-id {
    type inet:ipv4-address;
    description
    "IPv4 Traffic Engineering router ID of the node. For traffic engineering, it guarantees that we have a single stable address that can always be referenced in a path that will be reachable from multiple hops away, regardless of the state of the node's interfaces.";
    reference
    "RFC5305: IS-IS Extensions for Traffic Engineering. TLV 134.";
  }
}

container ipv6-te-router-id {
  when "./state/type = " + 
    "oc-isis-lsdb-types:IPV6_TE_ROUTER_ID" {
    description
    "Include the IPv6 traffic engineering router ID TLV only when the TLV is type 140.";
  }
  description
  "This container defines TLV 140."
}

container state {
  description
  "State parameters of ISIS TLV 140."

  leaf-list router-id {
    type inet:ipv6-address;
    description
    "IPv6 Traffic Engineering router ID of the node. For traffic engineering, it guarantees that we have a single stable address that can always be referenced in a path that will be reachable from multiple hops away, regardless of the state of the node's interfaces.";
    reference
    "RFC5305: IS-IS Extensions for Traffic Engineering. TLV 140.";
  }
}
type inet:ipv6-address;
description
"IPv6 Traffic Engineering router ID of the node. For traffic engineering, it guarantees that we have a single stable address that can always be referenced in a path that will be reachable from multiple hops away, regardless of the state of the node's interfaces."
reference
"RFC6119: IPv6 Traffic Engineering in IS-IS. TLV 140.";
}

container instance-ids {
when "/state/type = 'oc-isis-lsdb-types:INSTANCE_ID'" {

description
"Include the ISIS Instance Identifier TLV only when the TLV is type 7."
}

description
"This container defines ISIS Instance Identifier TLV."
reference "RFC6822: IS-IS Multi-Instance. TLV 7."

list instance-id {

type leafref {
    path "/state/instance-id";
}

description
"Reference to the unique instance ID."
}

container state {

description
"State parameters of ISIS TLV 7."

leaf instance-id {
    type uint16;
    description
"A list of instance IDs received within TLV 7 within an IS-IS LSP. In the case that more than one instance of TLV 7 is included in the LSP, the instance IDs specified within the instances are concatenated within this list."
}

leaf instance-id {
    type leafref {
      path "/state/instance-id";
    }
    description
"Reference to the unique instance ID."
}
"An Instance Identifier (IID) to uniquely identify an IS-IS instance. When the IID = 0, the list of supported ITIDs MUST NOT be present. An IID-TLV with IID = 0 MUST NOT appear in an SNP or LSP. When the TLV appears (with a non-zero IID) in an SNP or LSP, exactly one ITID MUST be present indicating the topology with which the PDU is associated. If no ITIDs or multiple ITIDs are present or the IID is zero, then the PDU MUST be ignored."

leaf-list topology-id {
  type uint16;
  description "Instance-Specific Topology Identifiers (ITIDs)."
}

container ipv4-srlgs {
  when "/state/type = 'oc-isis-lsdb-types:IPV4_SRLG'" {
    description "Include the IPv4 SRLG TLV only when the TLV is type 138."
  }
  description "This container defines ISIS SRLG TLV 138."

  list ipv4-srlg {
    key "instance-number";
    description "Instance of the IPv4 SRLG TLV;"
    leaf instance-number {
      type leafref {
        path "/state/instance-number";
      }
      description "Reference to the instance number of TLV 138."
    }
  }
}

container state {

description
"State parameters of TLV 138."

leaf instance-number {
  type uint32;
  description
  "An arbitrary unsigned 32-bit integer used to
  disambiguate the instance of TLV 138. The instance
  identifier is synthesised by the system
  and may be renumbered for the same SRLG definition
  in subsequent advertised LSPs if (and only if) the
  entire list of SRLGs is replaced."
}

leaf system-id {
  type oc-isis-types:system-id;
  description
  "Neighbor system ID."
}

leaf psn-number {
  type uint8;
  description
  "Pseudonode number if the neighbor is on a LAN
  interface."
}

leaf-list flags {
  type enumeration {
    enum NUMBERED {
      description
      "When set, the interface is numbered, whereas if
      unset indicates that the interface is
      unnumbered."
    }
  }
  description
  "SRLG flags."
}

leaf ipv4-interface-address {
  type inet:ipv4-address;
  description
  "IPv4 interface address."
}

leaf ipv4-neighbor-address {
  type inet:ipv4-address;
container ipv6-srlgs {
  when "./state/type = 'oc-isis-lsdb-types:IPV6_SRLG'" {
    description
    "Include the IPv6 SRLG TLV only when the TLV is type 139.";
  }
  description
  "This container defines ISIS SRLG TLV."
}

list ipv6-srlg {
  key "instance-number";

  description
  "Instance of the IPv6 SRLG TLV."

  leaf instance-number {
    type leafref {
      path "./state/instance-number";
    }
    description
    "Reference to the instance number of the IPv6 Shared Risk Link Group (SRLG) TLV."
  }
}

container state {
  description
  "State parameters of TLV 139."

  leaf instance-number {
    type uint32;
    description
    "An arbitrary unsigned 32-bit integer used to
disambiguate the instance of TLV 138. The instance identifier is synthesised by the system and may be renumbered for the same SRLG definition in subsequent advertised LSPs if (and only if) the entire list of SRLGs is replaced.”;
}

leaf system-id {
  type oc-isis-types:system-id;
  description
    "Neighbor system ID.";
}

leaf psn-number {
  type uint8;
  description
    "Pseudonode number if the neighbor is on a LAN interface.";
}

leaf-list flags {
  type enumeration {
    enum NA {
      description
        "When set, the IPv6 neighbour address is included, whereas if unset, it is omitted";
    }
  }
  description
    "IPv6 SRLG flags.";
}

leaf ipv6-interface-address {
  type inet:ipv6-address;
  description
    "IPv6 interface address or Link Local Identifier.";
}

leaf ipv6-neighbor-address {
  type inet:ipv6-address;
  description
    "IPv6 neighbor address or Link Remote Identifier.";
}

leaf-list srlg-value {
  type uint32;
  description
    "SRLG values.";
container purge-oi {
    when "./.state/type = 'oc-isis-lsdb-types:PURGE_OI'" {
        description
            "Only include the purge originator identification TLV
when the TLV type is 13.";
    }
    description
        "This container defines ISIS purge TLV.";
}

reference
    "RFC6232: Purge Originator Identification TLV for IS-IS. TLV 13.";

container state {
    description
        "State parameters of TLV 13.";

    leaf system-id-count {
        type uint8;
        description
            "Number of system IDs carried in this TLV.";
    }

    leaf source-system-id {
        type oc-isis-types:system-id;
        description
            "System ID of the Intermediate System that inserted
this TLV.";
    }

    leaf received-system-id {
        type oc-isis-types:system-id;
        description
            "System ID of the Intermediate System from which the
purge was received.";
    }
}

container router-capabilities {
    when "./.state/type = " + ""oc-isis-lsdb-types:ROUTER_CAPABILITY"" {
        description
            "";
    }
}
"Only include the router capability TLV when the TLV is type 242."

description
"This container defines router capabilities."

list capability {
  key "instance-number";

description
"This list describes IS Router capabilities."

reference

leaf instance-number {
  type leafref {
    path "./../state/instance-number";
  }

description
"Reference to the instance number of the router capability TLV."

}

container state {

description
"State parameters of TLV 242."

leaf instance-number {
  type uint32;

description
"A unique instance number for the instance of the router capabilities TLV. The instance number should be autogenerated by the producer of the data and may be renumbered if the entire LSP contents are replaced in subsequent advertisements."

}

leaf router-id {
  type inet:ipv4-address;

description
"IPv4 router-id."

}

leaf-list flags {
  type enumeration {

}}
enum FLOOD {
    description
    "When the S bit is set(1), the IS-IS Router CAPABILITY TLV MUST be flooded across the entire routing domain. When the S bit is not set(0), the TLV MUST NOT be leaked between levels. This bit MUST NOT be altered during the TLV leaking."
}
enum DOWN {
    description
    "When the IS-IS Router CAPABILITY TLV is leaked from level-2 to level-1, the Down bit MUST be set. Otherwise, this bit MUST be clear. IS-IS Router capability TLVs with the Down bit set MUST NOT be leaked from level-1 to level-2. This is to prevent TLV looping."
}
container subtlvs {
    description
    "This container describes router capability TLV sub-TLVs"
}
list subtlv {
    key "type";
    description
    "List of subTLV types in the LSDB for the specified TLV"
}
leaf type {
    type leafref {
        path "./state/type";
    }
    description
    "Reference to the sub-TLV type"
}
container state {
    description
    "State parameters of IS Router Capabilities"
}
uses isis-lsdb-subtlv-type-state;
container segment-routing-algorithms {
    when "./state/type = " +
        "oc-isis-ldsb-types:ROUTER_CAPABILITY_SR_ALGORITHM" {
        description
        "Only include segment routing algorithm when the
        sub-TLV is type 19.";
    }

description
"This container defines SR algorithm sub-TLV 19."

reference
"draft-ietf-isis-segment-routing-extensions.
TLV 242, sub-TLV 19";

container state {
    description
    "State parameters of sub-TLV 19 - Segment
    Routing Algorithm.";

    leaf-list algorithm {
        type enumeration {
            enum SPF {
                value 0;
                description
                "Shortest Path First (SPF) algorithm
                based on link metric. This is the
                well-known shortest path algorithm as
                computed by the IS-IS Decision process.
                Consistent with the deployed practice
                for link-state protocols, algorithm 0
                permits any node to overwrite the SPF
                path with a different path based on
                local policy.";
            }
            enum STRICT_SPF {
                value 1;
                description
                "Strict Shortest Path First (SPF)
                algorithm based on link metric. The
                algorithm is identical to algorithm 0
                but algorithm 1 requires that all nodes
                along the path will honor the SPF
                routing decision. Local policy MUST NOT
                alter the forwarding decision computed
                by algorithm 1 at the node claiming to
                support algorithm 1.";
            }
        }
    }
}
container segment-routing-capability {
  when "./.state/type = " +
    "oc-isis-lsdb-types:ROUTER_CAPABILITY_SR_CAPABILITY"" {
    description
    "Only include the SR capability sub-TLV when
    the sub-TLV type is 2.";
  }
  description
  "This container defines SR Capability sub-TLV 2.";
}

reference
"draft-ietf-isis-segment-routing-extensions. TLV
242, sub-TLV 2.";

container state {
  description
  "State parameters of IS SR Router Capability";

  leaf-list flags {
    type enumeration {
      enum IPV4_MPLS {
        description
        "When set, the router is capable of
        processing SR MPLS encapsulated IPv4
        packets on all interfaces.";
      }
      enum IPV6_MPLS {
        description
        "When set, the router is capable of
        processing SR MPLS encapsulated IPv6
        packets on all interfaces.";
      }
      enum IPV6_SR {
        description
        "When set, the router is capable of
        processing the IPv6 Segment Routing Header
        on all interfaces.";
      }
    }
  }
}
container srgb-descriptors {
  description
  "SRGB Descriptors included within the SR capability sub-TLV";
}

list srgb-descriptor {
  key "range";
  description
  "Descriptor entry within the SR capability sub-TLV";
}

leaf range {
  type leafref {
    path ".state/range";
  }
  description
  "Reference to unique SRGB Descriptor.";
}

container state {
  description
  "State parameters of the SR range";

  leaf range {
    type uint32;
    description
    "Number of SRGB elements. The range value MUST be greater than 0.";
  }

  leaf label {
    type oc-mpls-types:mpls-label;
    description
    "The first value of the SRGB when expressed as an MPLS label.";
  }
}
uses isis-lsdb-undefined-subtlv;
container is-reachability {
    when "./state/type = 'oc-isis-lsdb-types:IIS_NEIGHBORS'" {
        description
        "Include IIS_NEIGHBORS sub-TLV when the TLV type is 2."
    }
    description
    "This container describes list of ISIS neighbors and attributes."
}

classification

container neighbors {
    description
    "This container describes IS neighbors."
}

list neighbor {
    key "system-id";
    description
    "IS reachability neighbor attributes."
}

leaf system-id {
    type leafref {
        path "./state/system-id";
    }
    description
    "Reference to the system ID of the neighbor."
}

    uses isis-lsdb-neighbor;
}
}

container ipv4-internal-reachability {
    when "./state/type = " + "oc-isis-lsdb-types:IPV4_INTERNAL_REACHABILITY" {
        description
        "Include IPv4 internal reachability TLV when the TLV type is specified as 128."
    }
}
This container defines list of IPv4 internal reachability information.

"RFC1195: OSI ISIS for IP and Dual Environments. RFC5302: Domain-Wide Prefix Distribution with Two-Level IS-IS. TLV 128"

This container describes IS prefixes.

"RFC1195: OSI ISIS for IP and Dual Environments. RFC5302: Domain-Wide Prefix Distribution with Two-Level IS-IS. TLV 130"

This container defines list of IPv4 external reachability information.
container prefixes {  
    description  
        "This container describes IS neighbors.";  

    list prefix {  
        key "prefix";  

        description  
            "IPv4 external prefixes and reachability attributes.";  

        leaf prefix {  
            type leafref {  
                path "./state/prefix";  
            }  

            description  
                "Reference to the IPv4 prefix.";  

            uses ipv4-prefix-attributes-state;  
        }  

        uses ipv4-prefix-attributes-state;  
    }  

    container authentication {  
        when "./state/type = 'oc-isis-ldsb-types:AUTHENTICATION'" {  
            description  
                "Only include the authentication TLV when the TLV is  
                    type 10.";  

            }  

            description  
                "This container defines authentication information of the  
                    node.";  

            reference  
                "ISO 10589 Intermediate System to Intermediate System  
                    Intra- Domain Routeing Exchange Protocol for use in  
                    Conjunction with the Protocol for Providing the  
                    Connectionless-mode Network Service (ISO 8473)  
                    TLV 10.";  

        }  

        container state {  
            description  
                "State parameters of TLV 10.";  

            leaf crypto-type {  
                type enumeration {
enum HMAC_MD5 {
    description
    "HMAC-MD5 Authentication type.";
}

enum CLEARTEXT {
    description
    "Cleartext Authentication type.";
}

leaf authentication-key {
    type string;
    description
    "Authentication key to be used.";
}

container extended-is-reachability {
    when ".state/type = " + 
    "oc-isis-lsdb-types:EXTENDED_IS_REACHABILITY" {
        description
        "Only included the extended IS reachability TLV when the TLV is type 22.";
    }
}

description
"This container defines list of ISIS extended reachability neighbors.";

reference
"RFC5305: IS-IS Extensions for Traffic Engineering. TLV 22.";

uses isis-lsdb-common-extisreach-neighbors;
}

container extended-ipv4-reachability {
    when ".state/type = " + 
    "oc-isis-lsdb-types:EXTENDED_IPV4_REACHABILITY" {
        description
        "Only include the extended IPv4 reachability container when the TLV type is 135.";
    }
}

description
"This container defines list of IPv4 extended reachability information."

reference
"RFC5305: IS-IS Extensions for Traffic Engineering. TLV 135"

container prefixes {
  description
  "This container describes IS prefixes."

  list prefix {
    key "prefix";

    description
    "This list describes IPv4 extended prefixes and attributes."

    leaf prefix {
      type leafref {
        path "../state/prefix";
      }

      description
      "Reference to the IPv4 prefix that the TLV describes the attributes of."
    }

    uses ipv4-prefix-extended-state;
  }
}

container ipv6-reachability {
  when "/../state/type = " +
    "oe-isis-lsdb-types:IPV6_REACHABILITY" {
    description
    "Only include the IPv6 reachability container when the TLV type is 236."
  }

  description
  "This container defines list of IPv6 reachability information."

  reference
  "RFC5308: Routing IPv6 with IS-IS. TLV 236"

  container prefixes {
    description
"This container describes IS prefixes."

list prefix {
    key "prefix";
    description
        "This list defines IPv6 extended prefix attributes."

    leaf prefix {
        type leafref {
            path "./state/prefix";
        }
        description
            "Reference to the IPv6 prefix that the TLV corresponds to."
    }
    uses ipv6-prefix-extended-state;
}

container multi-topology {
    when "./state/type = 'oc-isis-lsdb-types:MULTI_TOPOLOGY'" {
        description
            "Only include the multi-topology container when the TLV is type 229."
    }
    description
        "This container defines the topology supported."
    reference

carrier topologies {
    description
        "This container describes IS topologies."

    list topology {
        key "mt-id";
        description
            "This list describes a topology."

        leaf mt-id {

    ```
type leafref {
    path "./state(mt-id)":
}
description
"Reference to the multi-topology ID being described by the list entry."
}

container state {
    description
"State parameters of IS multi-topology TLV 229."

    leaf mt-id {
        type uint16 {
            range "0 .. 4095"
        }
        description
"Multi-topology ID."
    }

    leaf attributes {
        type enumeration {
            enum OVERLOAD {
                description
"When set, node is overloaded, still part of the topology but cannot be used for transit."
            }
            enum ATTACHED {
                description
"When set, node is attached to another area using the referred metric and can be used as default gateway."
            }
        }
        description
"Attributes of the LSP for the associated topology."
    }
}

container isis-neighbor-attribute {
    when "./state(type) = " + "oc-isis-lsdb-types:IS_NEIGHBOR_ATTRIBUTE"
        description
"Only include the neighbor attribute container when the
TLV is type 23.

} description
"This container defines list of ISIS topology neighbors for extended ISIS LSP (multiple system IDs). ";

reference
"RFC5311: Simplified Extension of Link State PDU (LSP) Space for IS-IS. TLV 23. It is identical in format to the extended IS reachability TLV 22."

uses isis-lsdb-common-extisreach-neighbors;

}

container is-alias-id {
when "./state/type = 'oc-isis-lsdb-types:ISIS_ALIAS_ID'" {
  description
  "Only include the ISIS alias ID container when the TLV is type 24."
}

description
"This container defines the IS-Alias TLV which allows extension-capable ISs to recognize the Originating System of an Extended LSP set. It identifies the Normal system-id of the Originating System."

reference
"RFC5311: Simplified Extension of Link State PDU (LSP) Space for IS-IS TLV 24."

container state {
  config false;
  description
  "State parameters of alias ID."

  leaf alias-id {
    type oc-isis-types:system-id;
    description
    "List of alias ID(s)."
  }
}

container mt-isn {
when "./state/type = 'oc-isis-lsdb-types:MT_ISN'" {
  description
  "Only include the MT ISN container when the TLV is type
container mt-isis-neighbor-attribute {
  when "./state/type = " +
    "oc-isis-lsdb-types:MT_IS_NEIGHBOR_ATTRIBUTE" { 
    description
    "Only include the MT ISIS neighbor attribute container when the TLV is type 223.";
  }
}

description
"This container defines list of ISIS multi-topology neighbors.";

reference

uses isis-lsdb-mtis-common;
}

container mt-ipv4-reachability {
  when "./state/type = " +
    "oc-isis-lsdb-types:MT_IPV4_REACHABILITY" { 
    description
    "Only include the multi-topology IPv4 reachability container when the TLV is type 235.";
  }
}

description
"This container defines list of IPv4 reachability Information in multi-topology environment.";

reference
"RFC5121: Simplified Extension of Link State PDU (LSP) Space for IS-IS. TLV 223. It is identical in format to the MT-ISN TLV 222.";

uses isis-lsdb-mtis-common;
}
container prefixes {
    description
    "This container describes IS prefixes."
    
    list prefix {
        key "mt-id prefix";
        
        leaf mt-id {
            type leafref {
                path "./state/mt-id";
            }
            description
            "Reference to the topology ID of the topology that
             the prefix is within.";
        }
        
        leaf prefix {
            type leafref {
                path "./state/prefix";
            }
            description
            "Reference to the prefix to which reachability is
             being advertised.";
        }
        
        description
        "IPv4 prefixes that are contained within MT reachability TLV.";
        
        uses ipv4-mt-prefix-extended-state;
    }
}

container mt-ipv6-reachability {
    when "./state/type = " +
        "oc-isis-lsdb-types:MT_IPV6_REACHABILITY" {
        description
        "Only include the multi-topology IPv6 reachability container when the TLV is type 237.";
        
        description
        "This container defines list of IPv6 reachability information in multi-topology environment.";
        
        reference
container prefixes {
  description
  "This container describes IS prefixes."

  list prefix {
    key "prefix mt-id";
    description
    "List of IPv6 prefixes contained within MT
    reachability TLV."

    leaf prefix {
      type leafref {
        path "../state/prefix";
      }
      description
      "Reference to the IPv6 prefix described by the
      TLV."
    }

    leaf mt-id {
      type leafref {
        path "../state/mt-id";
      }
      description
      "Reference to the multi-topology ID."
    }

    uses ipv6-mt-prefix-extended-state;
  }
  uses isis-lsdb-undefined-tlv;
}

module ietf-diffserv-action {
namespace "urn:ietf:params:xml:ns:yang:ietf-diffserv-action";
prefix action;

import ietf-inet-types { prefix inet; }
import ietf-diffserv-classifier { prefix classifier; }
import ietf-diffserv-policy { prefix policy; }
import policy-types { prefix policy-types; }
organization "IETF NETMOD (Netmod Working Group) Working Group";
contact
  "WG Web: <http://tools.ietf.org/wg/netmod/> WG List: <mailto:netmod@ietf.org>
  WG Chair: Jurgen Schonwalder <mailto:j.schoenwaelder@jacobs-university.de>
  WG Chair: Tom Nadeau <mailto:tnadeau@lucidvision.com> Editor: Aseem Choudhary <mailto:asechoud@cisco.com> Editor: Shitanshu Shah <mailto:svshah@cisco.com>");
description
  "This module contains a collection of YANG definitions for configuring
diffserv specification implementations. Copyright (c) 2014 IETF
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This version of this YANG module is part of RFC XXXX; see the
RFC itself for full legal notices.";

revision 2015-04-07 {
  description
    "Latest revision for diffserv actions";
  reference "RFC XXXX";
}

feature hierarchial-policy-support {
  description
    "This feature allows hierarchial policy to be configured";
}

feature aqm-red-support {
  description
    "This feature allows AQM RED to be configured";
}

feature priority-rate-burst-support {
  description "support rate and burst in priority";
}

grouping dscp-range {
  description
"dscp range definition";
leaf dscp-min {
  type inet:dscp;
  description
    "Minimum of dscp range";
}
leaf dscp-max {
  type inet:dscp;
  description
    "Maximum of dscp range";
}

grouping burst {
  description
    "burst size or interval configuration";
  choice burst-type {
    case size {
      leaf burst-size {
        type uint64;
        units "bytes";
        description
          "burst size";
      }
    }
    case interval {
      leaf burst-interval {
        type uint64;
        units "microsecond";
        description
          "burst interval";
      }
    }
  }
  description
    "Choice of burst type";
}

grouping threshold {
  description
    "Threshold Parameters";
  container threshold {
    description
      "threshold";
    choice threshold-type {
      case size {
        leaf threshold-size {
          type uint64;
        }
      }
    }
  }
}
units "bytes";
description
    "Threshold size";
}
}
case interval {
    leaf threshold-interval {
        type uint64;
        units "microsecond";
        description
            "Threshold interval";
    }
}

description
    "Choice of threshold type";
}
}

identity marking {
    base policy:action-type;
    description
        "marking action type";
}

identity meter {
    base policy:action-type;
    description
        "meter action type";
}

identity priority {
    base policy:action-type;
    description
        "priority action type";
}

identity min-rate {
    base policy:action-type;
    description
        "min-rate action type";
}

identity max-rate {
    base policy:action-type;
    description
        "max-rate action type";
}
identity algorithmic-drop {
    base policy:action-type;
    description
    "algorithmic-drop action type";
}

identity drop-type {
    description
    "drop algorithm";
}

identity always-drop {
    base drop-type;
    description
    "always drop algorithm";
}

identity tail-drop {
    base drop-type;
    description
    "tail drop algorithm";
}

identity random-detect {
    base drop-type;
    description
    "random detect algorithm";
}

identity meter-action-type {
    description
    "action type in a meter";
}

identity meter-action-drop {
    base meter-action-type;
    description
    "drop action type in a meter";
}

identity meter-action-set {
    base meter-action-type;
    description
    "mark action type in a meter";
}

grouping drop {

leaf drop-action {
    type empty;
    description
    "always drop algorithm";
}

description "the drop action";

grouping queuelimit {
    list qlimit-dscp-thresh {
        key "dscp-min dscp-max";
        uses dscp-range;
        uses threshold;
        description
        "the queue limit per dscp range";
    }
    description "the queue limit beyond which queue will not hold any packet";
}

grouping meter-action-params {
    leaf meter-action-type {
        type identityref {
            base meter-action-type;
        }
        description "meter action type";
    }
    leaf next-meter-id {
        type uint16;
        description "next meter identifier";
    }
    choice val {
        case meter-action-mark {
            uses marking;
            description "meter action: mark";
        }
        case meter-action-drop {
            description "meter action: drop";
            uses drop;
        }
        description "meter action based on choice of meter action type";
    }
    description
}
"meter action parameters";
}

grouping meter {
    leaf meter-id {
        type uint16;
        description "meter identifier";
    }
    leaf meter-rate {
        type uint64;
        units "bits-per-second";
        description "meter rate";
    }
    uses burst;
    container color {
        uses classifier:classifier-entry-generic-attr;
        description "color aware & color blind attributes container";
    }
    container succeed-action {
        uses meter-action-params;
        description "confirm action";
    }
    container fail-action {
        uses meter-action-params;
        description "exceed action";
    }
    description "meter attributes";
}

grouping priority {
    leaf priority-level {
        type uint8;
        description "priority level";
    }
    description "priority attributes";
}

grouping min-rate {
    leaf min-rate {
        type uint64;
units "bits-per-second";
description
  "minimum rate";
}
description
  "minimum rate grouping";
}
grouping marking {
  leaf dscp {
    type inet:dscp;
    description
      "dscp marking";
  }
description
    "marking grouping";
}
grouping max-rate {
  leaf absolute-rate {
    type uint64;
    units "bits-per-second";
    description
      "rate in bits per second";
  }
  uses burst;
  description
    "maximum rate attributes";
}
grouping red-threshold {
  container red-min-thresh {
    uses threshold;
    description
      "Minimum threshold";
  }
  container red-max-thresh {
    uses threshold;
    description
      "Maximum threshold";
  }
  leaf mark-probability {
    type uint32 {
      range "1..1000";
    }
    description
      "Mark probability";
  }
description
"RED threshold attributes";
}

grouping randomdetect {
  leaf exp-weighting-const {
    type uint32;
    description "Exponential weighting constant factor for red profile ";
  }
  uses red-threshold;
  description "Random detect attributes";
}

typedef percent-value-1to100 {
  type uint8 {
    range "1..100";
  }
  description "Percent range from 1 to 100";
}

grouping RATE-OPER {
  leaf rate {
    type uint64;
    units "bits-per-second";
    description "Rate value";
  }
  uses RATE-UNIT;
  description "Rate value and units operator";
}

grouping RATE-UNIT {
  leaf absolute-rate-metric {
    type policy-types:metric;
    default none;
    description "Metric";
  }
  leaf absolute-rate-units {
    type policy-types:rate-unit;
    description "Rate basic units";
  }
  leaf rate-percent {
    type percent-value-1to100;
    description "percent";
  }
}
leaf rate-ratio {
    type uint32 {range "1..65532";}
}

description "Rate units";

augment "/policy:policies/policy:policy-entry" + 
"/policy:classifier-entry" + 
"/policy:classifier-action-entry-cfg" + 
"/policy:action-cfg-params" {
    case marking {
        container marking-cfg {
            uses marking;
            description 
                "Marking configuration container";
        }
    }
    case priority {
        container priority-cfg {
            uses priority;
            container rate-burst {
                if-feature priority-rate-burst-support;
                uses RATE-OPER;
                uses burst;
                description "absolute priority rate with/without burst rate" + 
                    "and absolute percent";
            }
            description 
                "priority attributes container";
        }
    }
    case meter {
        container meter-cfg {
            list meter-list {
                key "meter-id";
                uses meter;
                description 
                    "Meter configuration";
            }
            description 
                "Meter list configuration container";
        }
    }
    case min-rate {
        container min-rate-cfg {
            uses min-rate;
            uses RATE-UNIT;
container bw-excess-share-cfg {
    leaf value {
        type uint32;
        description "percentage or ratio value";
    }
    uses RATE-UNIT;
    description "share the bandwidth remaning";
}

case max-rate {
    container max-rate-cfg {
        uses max-rate;
        uses RATE-UNIT;
        description "maximum rate attributes";
    }
}

case algorithmic-drop {
    choice drop-algorithm {
        case always-drop {
            container drop-cfg {
                uses drop;
                description "Always Drop configuration container";
            }
        }
        case tail-drop {
            container tail-drop-cfg {
                uses queuelimit;
                description "Tail Drop configuration container";
            }
        }
        case random-detect {
            container random-detect-cfg {
                if-feature aqm-red-support;
                uses randomdetect;
                description "Random Detect configuration container";
            }
        }
    }
}

description "Choice of Drop Algorithm";
description
"Augment the actions to policy entry";

module ietf-interfaces {
    namespace "urn:ietf:params:xml:ns:yang:ietf-interfaces";
    prefix if;

    import ietf-yang-types {
        prefix yang;
    }

    organization
    "IETF NETMOD (NETCONF Data Modeling Language) Working Group";
    contact
    "WG Web: <http://tools.ietf.org/wg/netmod/>
    WG List: <mailto:netmod@ietf.org>
    WG Chair: Thomas Nadeau
        <mailto:tnadeau@lucidvision.com>
    WG Chair: Juergen Schoenwaelder
        <mailto:j.schoenwaelder@jacobs-university.de>
    Editor: Martin Bjorklund
        <mailto:mbj@tail-f.com>";
    description
    "This module contains a collection of YANG definitions for
    managing network interfaces.

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    This version of this YANG module is part of RFC 7223; see
the RFC itself for full legal notices.;

revision 2014-05-08 {
  description
  "Initial revision.";
  reference "RFC 7223: A YANG Data Model for Interface Management";
}

feature arbitrary-names {
  description
  "This feature indicates that the device allows user-controlled
  interfaces to be named arbitrarily.";
}

feature pre-provisioning {
  description
  "This feature indicates that the device supports
  pre-provisioning of interface configuration, i.e., it is
  possible to configure an interface whose physical interface
  hardware is not present on the device.";
}

feature if-mib {
  description
  "This feature indicates that the device implements
  the IF-MIB.";
  reference "RFC 2863: The Interfaces Group MIB";
}

identity interface-type {
  description
  "Base identity from which specific interface types are
  derived.";
}

typedef interface-ref {
  type leafref {
    path "/if:interfaces/if:interface/if:name";
  }
  description
  "This type is used by data models that need to reference
  configured interfaces.";
}

typedef interface-state-ref {
  type leafref {
    path "/if:interfaces-state/if:interface/if:name";
  }
}
description
"This type is used by data models that need to reference
the operationally present interfaces.";
}

container interfaces {
  description
  "Interface configuration parameters.";
  list interface {
    key "name";
    description
    "The list of configured interfaces on the device.

    The operational state of an interface is available in the
/interfaces-state/interface list. If the configuration of a
system-controlled interface cannot be used by the system
(e.g., the interface hardware present does not match the
interface type), then the configuration is not applied to
the system-controlled interface shown in the
/interfaces-state/interface list. If the configuration
of a user-controlled interface cannot be used by the system,
the configured interface is not instantiated in the
/interfaces-state/interface list.";

    leaf name {
      type string;
      description
      "The name of the interface.

      A device MAY restrict the allowed values for this leaf,
possibly depending on the type of the interface.
For system-controlled interfaces, this leaf is the
device-specific name of the interface. The 'config false'
list /interfaces-state/interface contains the currently
existing interfaces on the device.

      If a client tries to create configuration for a
system-controlled interface that is not present in the
/interfaces-state/interface list, the server MAY reject
the request if the implementation does not support
pre-provisioning of interfaces or if the name refers to
an interface that can never exist in the system. A
NETCONF server MUST reply with an rpc-error with the
error-tag 'invalid-value' in this case.

      If the device supports pre-provisioning of interface
configuration, the 'pre-provisioning' feature is
advertised."}
If the device allows arbitrarily named user-controlled interfaces, the 'arbitrary-names' feature is advertised.

When a configured user-controlled interface is created by the system, it is instantiated with the same name in the /interface-state/interface list.

leaf description {
  type string;
  description
    "A textual description of the interface.

    A server implementation MAY map this leaf to the ifAlias MIB object. Such an implementation needs to use some mechanism to handle the differences in size and characters allowed between this leaf and ifAlias. The definition of such a mechanism is outside the scope of this document.

    Since ifAlias is defined to be stored in non-volatile storage, the MIB implementation MUST map ifAlias to the value of 'description' in the persistently stored datastore.

    Specifically, if the device supports ':startup', when ifAlias is read the device MUST return the value of 'description' in the 'startup' datastore, and when it is written, it MUST be written to the 'running' and 'startup' datastores. Note that it is up to the implementation to decide whether to modify this single leaf in 'startup' or perform an implicit copy-config from 'running' to 'startup'.

    If the device does not support ':startup', ifAlias MUST be mapped to the 'description' leaf in the 'running' datastore."

  reference "RFC 2863: The Interfaces Group MIB - ifAlias";
}
leaf type {
  type identityref {
    base interface-type;
  }
  mandatory true;
  description
    "The type of the interface.

    When an interface entry is created, a server MAY initialize the type leaf with a valid value, e.g., if it
is possible to derive the type from the name of the interface.

If a client tries to set the type of an interface to a value that can never be used by the system, e.g., if the type is not supported or if the type does not match the name of the interface, the server MUST reject the request. A NETCONF server MUST reply with an rpc-error with the error-tag 'invalid-value' in this case."

reference "RFC 2863: The Interfaces Group MIB - ifType";
}
leaf enabled {
  type boolean;
default "true";
description
  "This leaf contains the configured, desired state of the interface.

  Systems that implement the IF-MIB use the value of this leaf in the 'running' datastore to set IF-MIB.ifAdminStatus to 'up' or 'down' after an ifEntry has been initialized, as described in RFC 2863.

  Changes in this leaf in the 'running' datastore are reflected in ifAdminStatus, but if ifAdminStatus is changed over SNMP, this leaf is not affected.";
 reference "RFC 2863: The Interfaces Group MIB - ifAdminStatus";
}
leaf link-up-down-trap-enable {
  if-feature "if-mib";
type enumeration {
    enum "enabled" {
      value 1;
    }
    enum "disabled" {
      value 2;
    }
  }
description
  "Controls whether linkUp/linkDown SNMP notifications should be generated for this interface.

  If this node is not configured, the value 'enabled' is operationally used by the server for interfaces that do not operate on top of any other interface (i.e., there are no 'lower-layer-if' entries), and 'disabled' otherwise.";
 reference "RFC 2863: The Interfaces Group MIB -
ifLinkUpDownTrapEnable";
}
}
}

container interfaces-state {
  config false;
  description
  "Data nodes for the operational state of interfaces."
};

list interface {
  key "name";
  description
  "The list of interfaces on the device.

  System-controlled interfaces created by the system are always present in this list, whether they are configured or not."
};

leaf name {
  type string;
  description
  "The name of the interface.

  A server implementation MAY map this leaf to the ifName MIB object. Such an implementation needs to use some mechanism to handle the differences in size and characters allowed between this leaf and ifName. The definition of such a mechanism is outside the scope of this document."
  reference "RFC 2863: The Interfaces Group MIB - ifName";
}

leaf type {
  type identityref {
    base interface-type;
  }
  mandatory true;
  description
  "The type of the interface."
  reference "RFC 2863: The Interfaces Group MIB - ifType";
}

leaf admin-status {
  if-feature "if-mib";
  type enumeration {
    enum "up" {
      value 1;
      description
      "Ready to pass packets."
    }
    enum "down" {
      value 2;
      description
      "Not ready to pass packets."
    }
  }
}
"Not ready to pass packets and not in some test mode."
}
enum "testing" {
   value 3;
   description
      "In some test mode."
}
}
mandatory true;
description
   "The desired state of the interface.

This leaf has the same read semantics as ifAdminStatus."
reference "RFC 2863: The Interfaces Group MIB - ifAdminStatus"
}
leaf oper-status {
type enumeration {
   enum "up" {
      value 1;
      description
         "Ready to pass packets."
   }
   enum "down" {
      value 2;
      description
         "The interface does not pass any packets."
   }
   enum "testing" {
      value 3;
      description
         "In some test mode. No operational packets can be passed."
   }
   enum "unknown" {
      value 4;
      description
         "Status cannot be determined for some reason."
   }
   enum "dormant" {
      value 5;
      description
         "Waiting for some external event."
   }
   enum "not-present" {
      value 6;
      description
         "Some component (typically hardware) is missing."
   }
}
enum "lower-layer-down" {
    value 7;
    description
    "Down due to state of lower-layer interface(s).";
}

mandatory true;
description
"The current operational state of the interface.
This leaf has the same semantics as ifOperStatus."
reference "RFC 2863: The Interfaces Group MIB - ifOperStatus";
}
leaf last-change {
    type yang:date-and-time;
description
"The time the interface entered its current operational
state. If the current state was entered prior to the
last re-initialization of the local network management
subsystem, then this node is not present.";
reference "RFC 2863: The Interfaces Group MIB - ifLastChange";
}
leaf if-index {
    if-feature "if-mib";
type int32 {
        range "1..2147483647";
    }
    mandatory true;
description
"The ifIndex value for the ifEntry represented by this
interface.";
reference "RFC 2863: The Interfaces Group MIB - ifIndex";
}
leaf phys-address {
    type yang:phys-address;
description
"The interface's address at its protocol sub-layer. For
example, for an 802.x interface, this object normally
contains a Media Access Control (MAC) address. The
interface's media-specific modules must define the bit
and byte ordering and the format of the value of this
object. For interfaces that do not have such an address
(e.g., a serial line), this node is not present.";
reference "RFC 2863: The Interfaces Group MIB - ifPhysAddress";
}
leaf-list higher-layer-if {
    type interface-state-ref;
description
"A list of references to interfaces layered on top of this
interface.;
reference "RFC 2863: The Interfaces Group MIB - ifStackTable";
}
leaf-list lower-layer-if {
type interface-state-ref;
description
"A list of references to interfaces layered underneath this
interface.\";
reference "RFC 2863: The Interfaces Group MIB - ifStackTable";
}
leaf speed {
type yang:gauge64;
units "bits/second";
description
"An estimate of the interface's current bandwidth in bits
per second. For interfaces that do not vary in
bandwidth or for those where no accurate estimation can
be made, this node should contain the nominal bandwidth.
For interfaces that have no concept of bandwidth, this
node is not present.\";
reference
"RFC 2863: The Interfaces Group MIB -
   ifSpeed, ifHighSpeed";
}
container statistics {
description
"A collection of interface-related statistics objects.\";
leaf discontinuity-time {
type yang:date-and-time;
mandatory true;
description
"The time on the most recent occasion at which any one or
more of this interface's counters suffered a
discontinuity. If no such discontinuities have occurred
since the last re-initialization of the local management
subsystem, then this node contains the time the local
management subsystem re-initialized itself.\";
}
leaf in-octets {
type yang:counter64;
description
"The total number of octets received on the interface,
including framing characters.

Discontinuities in the value of this counter can occur
at re-initialization of the management system, and at
other times as indicated by the value of
'discontinuity-time'.\";
reference "RFC 2863: The Interfaces Group MIB - ifHCInOctets";
}
leaf in-unicast-pkts {
  type yang:counter64;
  description
    "The number of packets, delivered by this sub-layer to a
     higher (sub-)layer, that were not addressed to a
     multicast or broadcast address at this sub-layer.

    Discontinuities in the value of this counter can occur
    at re-initialization of the management system, and at
    other times as indicated by the value of
    'discontinuity-time'.";
  reference "RFC 2863: The Interfaces Group MIB - ifHCInUcastPkts";
}
leaf in-broadcast-pkts {
  type yang:counter64;
  description
    "The number of packets, delivered by this sub-layer to a
     higher (sub-)layer, that were addressed to a broadcast
     address at this sub-layer.

    Discontinuities in the value of this counter can occur
    at re-initialization of the management system, and at
    other times as indicated by the value of
    'discontinuity-time'.";
  reference
    "RFC 2863: The Interfaces Group MIB - ifHCInBroadcastPkts";
}
leaf in-multicast-pkts {
  type yang:counter64;
  description
    "The number of packets, delivered by this sub-layer to a
     higher (sub-)layer, that were addressed to a multicast
     address at this sub-layer. For a MAC-layer protocol,
     this includes both Group and Functional addresses.

    Discontinuities in the value of this counter can occur
    at re-initialization of the management system, and at
    other times as indicated by the value of
    'discontinuity-time'.";
  reference
    "RFC 2863: The Interfaces Group MIB - ifHCInMulticastPkts";
}
leaf in-discards {
  type yang:counter32;
description
"The number of inbound packets that were chosen to be
discarded even though no errors had been detected to
prevent their being deliverable to a higher-layer
protocol. One possible reason for discarding such a
packet could be to free up buffer space.

Discontinuities in the value of this counter can occur
at re-initialization of the management system, and at
other times as indicated by the value of
'discontinuity-time'.";
reference "RFC 2863: The Interfaces Group MIB - ifInDiscards";
}
leaf in-errors {
  type yang:counter32;
  description
  "For packet-oriented interfaces, the number of inbound
  packets that contained errors preventing them from being
deliverable to a higher-layer protocol. For character-
oriented or fixed-length interfaces, the number of
inbound transmission units that contained errors
preventing them from being deliverable to a higher-layer
protocol.

Discontinuities in the value of this counter can occur
at re-initialization of the management system, and at
other times as indicated by the value of
'discontinuity-time'.";
reference "RFC 2863: The Interfaces Group MIB - ifInErrors";
}
leaf in-unknown-protos {
  type yang:counter32;
  description
  "For packet-oriented interfaces, the number of packets
  received via the interface that were discarded because
  of an unknown or unsupported protocol. For
  character-oriented or fixed-length interfaces that
  support protocol multiplexing, the number of
  transmission units received via the interface that were
discarded because of an unknown or unsupported protocol.
  For any interface that does not support protocol
  multiplexing, this counter is not present.

Discontinuities in the value of this counter can occur
at re-initialization of the management system, and at
other times as indicated by the value of
'discontinuity-time'.";
reference "RFC 2863: The Interfaces Group MIB - ifInUnknownProtos";
leaf out-octets {
    type yang:counter64;
    description
        "The total number of octets transmitted out of the
        interface, including framing characters.
        Discontinuities in the value of this counter can occur
        at re-initialization of the management system, and at
        other times as indicated by the value of
        'discontinuity-time'.";
    reference "RFC 2863: The Interfaces Group MIB - ifHCOutOctets";
}
leaf out-unicast-pkts {
    type yang:counter64;
    description
        "The total number of packets that higher-level protocols
        requested be transmitted, and that were not addressed
        to a multicast or broadcast address at this sub-layer,
        including those that were discarded or not sent.
        Discontinuities in the value of this counter can occur
        at re-initialization of the management system, and at
        other times as indicated by the value of
        'discontinuity-time'.";
    reference "RFC 2863: The Interfaces Group MIB - ifHCOutUcastPkts";
}
leaf out-broadcast-pkts {
    type yang:counter64;
    description
        "The total number of packets that higher-level protocols
        requested be transmitted, and that were addressed to a
        broadcast address at this sub-layer, including those
        that were discarded or not sent.
        Discontinuities in the value of this counter can occur
        at re-initialization of the management system, and at
        other times as indicated by the value of
        'discontinuity-time'.";
    reference
        "RFC 2863: The Interfaces Group MIB -
         ifHCOutBroadcastPkts";
}
leaf out-multicast-pkts {
    type yang:counter64;
    description
        "The total number of packets that higher-level protocols
        requested be transmitted, and that were addressed to a
        broadcast address at this sub-layer, including those
        that were discarded or not sent. Discontinuities in the value of
        this counter can occur at re-initialization of the management
        system, and at other times as indicated by the value of
        'discontinuity-time'.";
    reference
        "RFC 2863: The Interfaces Group MIB -
         ifHCOutMulticastPkts";
multicast address at this sub-layer, including those that were discarded or not sent. For a MAC-layer protocol, this includes both Group and Functional addresses.

Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'.

reference
"RFC 2863: The Interfaces Group MIB - ifHCOutMulticastPkts";
}
leaf out-discards {
  type yang:counter32;
  description
  "The number of outbound packets that were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space.

  Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'.
  reference "RFC 2863: The Interfaces Group MIB - ifOutDiscards";
}
leaf out-errors {
  type yang:counter32;
  description
  "For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors.

  Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of 'discontinuity-time'.
  reference "RFC 2863: The Interfaces Group MIB - ifOutErrors";
}
}
module openconfig-if-ip {

  yang-version "1";

  // namespace
  namespace "http://openconfig.net/yang/interfaces/ip";

  prefix "oc-ip";

  // import some basic types
  import openconfig-inet-types { prefix oc-inet; }
  import openconfig-interfaces { prefix oc-if; }
  import openconfig-vlan { prefix oc-vlan; }
  import openconfig-yang-types { prefix oc-yang; }
  import openconfig-extensions { prefix oc-ext; }

  // meta
  organization "OpenConfig working group";

  contact
    "OpenConfig working group
    netopenconfig@googlegroups.com";

  description
    "This model defines data for managing configuration and
    operational state on IP (IPv4 and IPv6) interfaces.

    This model reuses data items defined in the IETF YANG model for
    interfaces described by RFC 7277 with an alternate structure
    (particularly for operational state data) and with
    additional configuration items."
Portions of this code were derived from IETF RFC 7277.
Please reproduce this note if possible.

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to IETF Documents (http://trustee.ietf.org/license-info).”;

oc-ext:openconfig-version "3.0.0";

revision "2019-01-08" {
  description
  "Eliminate use of the 'empty' type.";
  reference "3.0.0";
}

revision "2018-11-21" {
  description
  "Add OpenConfig module metadata extensions.";
  reference "2.3.1";
}

revision "2018-01-05" {
  description
  "Add logical loopback to interface.";
  reference "2.3.0";
}

revision "2017-12-21" {
  description
  "Added IPv6 router advertisement configuration.";
  reference "2.1.0";
}

revision "2017-07-14" {
  description
  "Added Ethernet/IP state data; Add dhcp-client;
migrate to OpenConfig types modules; Removed or
renamed opstate values";
  reference "2.0.0";
}
revision "2017-04-03"{
  description
  "Update copyright notice."
  reference "1.1.1"
}

revision "2016-12-22"{
  description
  "Fixes to Ethernet interfaces model"
  reference "1.1.0"
}

// OpenConfig specific extensions for module metadata.
oc-ext:regexp-posix;
oc-ext:catalog-organization "openconfig";
oc-ext:origin "openconfig";

// typedef statements

typedef ip-address-origin {
  type enumeration {
    enum OTHER {
      description
      "None of the following."
    }
    enum STATIC {
      description
      "Indicates that the address has been statically
      configured - for example, using NETCONF or a Command Line
      Interface."
    }
    enum DHCP {
      description
      "Indicates an address that has been assigned to this
      system by a DHCP server."
    }
    enum LINK_LAYER {
      description
      "Indicates an address created by IPv6 stateless
      autoconfiguration that embeds a link-layer address in its
      interface identifier."
    }
    enum RANDOM {
      description
      "Indicates an address chosen by the system at
      random, e.g., an IPv4 address within 169.254/16, an
      RFC 4941 temporary address, or an RFC 7217 semantically
      opaque address."
    }
  }
}
typedef neighbor-origin {
  type enumeration {
    enum OTHER {
      description "None of the following.";
    }
    enum STATIC {
      description "Indicates that the mapping has been statically
                  configured - for example, using NETCONF or a Command Line
                  Interface.";
    }
    enum DYNAMIC {
      description "Indicates that the mapping has been dynamically resolved
                  using, e.g., IPv4 ARP or the IPv6 Neighbor Discovery
                  protocol.";
    }
  }
  description "The origin of a neighbor entry.";
}

// grouping statements

grouping ip-common-global-config {
  description "Shared configuration data for IPv4 or IPv6 assigned
globally on an interface.";

  leaf dhcp-client {
    type boolean;
    default false;
    description "Enables a DHCP client on the interface in order to request
                  an address";
  }
}
grouping ip-common-counters-state {
  description
    "Operational state for IP traffic statistics for IPv4 and IPv6";

  container counters {
    description
      "Packet and byte counters for IP transmission and reception for the address family."
  }

  leaf in-pkts {
    type oc-yang:counter64;
    description
      "The total number of IP packets received for the specified address family, including those received in error";
    reference
      "RFC 4293 - Management Information Base for the Internet Protocol (IP)"
  }

  leaf in-octets {
    type oc-yang:counter64;
    description
      "The total number of octets received in input IP packets for the specified address family, including those received in error."
    reference
      "RFC 4293 - Management Information Base for the Internet Protocol (IP)"
  }

  leaf in-error-pkts {
    // TODO: this counter combines several error conditions -- could consider breaking them out to separate leaf nodes
    type oc-yang:counter64;
    description
      "Number of IP packets discarded due to errors for the specified address family, including errors in the IP header, no route found to the IP destination, invalid address, unknown protocol, etc.";
    reference
      "RFC 4293 - Management Information Base for the Internet Protocol (IP)"
  }
}
leaf in-forwarded-pkts {
  type oc-yang:counter64;
  description
      "The number of input packets for which the device was not
      their final IP destination and for which the device
      attempted to find a route to forward them to that final
      destination.";
  reference
      "RFC 4293 - Management Information Base for the
      Internet Protocol (IP)";
}

leaf in-forwarded-octets {
  type oc-yang:counter64;
  description
      "The number of octets received in input IP packets
      for the specified address family for which the device was
      not their final IP destination and for which the
      device attempted to find a route to forward them to that
      final destination.";
  reference
      "RFC 4293 - Management Information Base for the
      Internet Protocol (IP)";
}

leaf in-discarded-pkts {
  type oc-yang:counter64;
  description
      "The number of input IP packets for the
      specified address family, for which no problems were
      encountered to prevent their continued processing, but
      were discarded (e.g., for lack of buffer space).";
  reference
      "RFC 4293 - Management Information Base for the
      Internet Protocol (IP)";
}

leaf out-pkts {
  type oc-yang:counter64;
  description
      "The total number of IP packets for the
      specified address family that the device supplied
      to the lower layers for transmission. This includes
      packets generated locally and those forwarded by the
      device.";
  reference
      "RFC 4293 - Management Information Base for the
leaf out-octets {
  type oc-yang:counter64;
  description
  "The total number of octets in IP packets for the
  specified address family that the device
  supplied to the lower layers for transmission. This
  includes packets generated locally and those forwarded by
  the device."
  reference
  "RFC 4293 - Management Information Base for the
  Internet Protocol (IP)";
}

leaf out-error-pkts {
  // TODO: this counter combines several error conditions --
  // could consider breaking them out to separate leaf nodes
  type oc-yang:counter64;
  description
  "Number of IP packets for the specified address family
  locally generated and discarded due to errors, including
  no route found to the IP destination."
  reference
  "RFC 4293 - Management Information Base for the
  Internet Protocol (IP)";
}

leaf out-forwarded-pkts {
  type oc-yang:counter64;
  description
  "The number of packets for which this entity was not their
  final IP destination and for which it was successful in
  finding a path to their final destination."
  reference
  "RFC 4293 - Management Information Base for the
  Internet Protocol (IP)";
}

leaf out-forwarded-octets {
  type oc-yang:counter64;
  description
  "The number of octets in packets for which this entity was
  not their final IP destination and for which it was
  successful in finding a path to their final destination."
  reference
  "RFC 4293 - Management Information Base for the
leaf out-discarded-pkts {
  type oc-yang:counter64;
  description
  "The number of output IP packets for the
  specified address family for which no problem was
  encountered to prevent their transmission to their
  destination, but were discarded (e.g., for lack of
  buffer space).";
  reference
  "RFC 4293 - Management Information Base for the
  Internet Protocol (IP)";
}

}

grouping ipv4-global-config {
  description
  "Configuration data for IPv4 interfaces across
  all addresses assigned to the interface";

  leaf enabled {
    type boolean;
    default true;
    description
    "Controls whether IPv4 is enabled or disabled on this
    interface. When IPv4 is enabled, this interface is
    connected to an IPv4 stack, and the interface can send
    and receive IPv4 packets."
  }

  leaf mtu {
    type uint16 {
      range "68..max";
    }
    units octets;
    description
    "The size, in octets, of the largest IPv4 packet that the
    interface will send and receive.

    The server may restrict the allowed values for this leaf,
    depending on the interface's type."
If this leaf is not configured, the operationally used MTU depends on the interface's type.

reference
"RFC 791: Internet Protocol";
}

uses ip-common-global-config;

}

grouping ipv4-address-config {

description
"Per IPv4 address configuration data for the interface."
;

leaf ip {

type oc-inet:ipv4-address;

description
"The IPv4 address on the interface."
;
}

leaf prefix-length {

type uint8 {

range "0..32";

}

description
"The length of the subnet prefix."
;
}

}

grouping ipv4-neighbor-config {

description
"Per IPv4 neighbor configuration data. Neighbor entries are analogous to static ARP entries, i.e., they create a correspondence between IP and link-layer addresses."

leaf ip {

type oc-inet:ipv4-address;

description
"The IPv4 address of the neighbor node."
;
}

leaf link-layer-address {

type oc-yang:phys-address;

mandatory true;

description
"The link-layer address of the neighbor node."
;
grouping ipv4-address-state {
    description "State variables for IPv4 addresses on the interface";

    leaf origin {
        type ip-address-origin;
        description "The origin of this address, e.g., statically configured, assigned by DHCP, etc.";
    }
}

grouping ipv4-neighbor-state {
    description "State variables for IPv4 neighbor entries on the interface.";

    leaf origin {
        type neighbor-origin;
        description "The origin of this neighbor entry, static or dynamic.";
    }
}

grouping ipv6-global-config {
    description "Configuration data at the global level for each IPv6 interface";

    leaf enabled {
        type boolean;
        default true;
        description "Controls whether IPv6 is enabled or disabled on this interface. When IPv6 is enabled, this interface is connected to an IPv6 stack, and the interface can send and receive IPv6 packets.";
    }

    leaf mtu {
        type uint32 {
            range "1280..max";
        }
        units octets;
        description "The size, in octets, of the largest IPv6 packet that the
interface will send and receive.

The server may restrict the allowed values for this leaf, depending on the interface's type.

If this leaf is not configured, the operationally used MTU depends on the interface's type.

reference
   Section 5";
}

leaf dup-addr-detect-transmits {
   type uint32;
   default 1;
   description
   "The number of consecutive Neighbor Solicitation messages
    sent while performing Duplicate Address Detection on a
    tentative address. A value of zero indicates that
    Duplicate Address Detection is not performed on
    tentative addresses. A value of one indicates a single
    transmission with no follow-up retransmissions.";
   reference
   "RFC 4862: IPv6 Stateless Address Autoconfiguration";
}

uses ip-common-global-config;
}

grouping ipv6-address-config {
   description "Per-address configuration data for IPv6 interfaces";

   leaf ip {
      type oc-inet:ipv6-address;
      description
      "The IPv6 address on the interface.";
   }

   leaf prefix-length {
      type uint8 {
         range "0..128";
      }
      mandatory true;
      description
      "The length of the subnet prefix.";
   }
}
grouping ipv6-address-state {
  description
   "Per-address operational state data for IPv6 interfaces";

  leaf origin {
    type ip-address-origin;
    description
      "The origin of this address, e.g., static, dhcp, etc.";
  }

  leaf status {
    type enumeration {
      enum PREFERRED {
        description
          "This is a valid address that can appear as the
destination or source address of a packet."
      }
      enum DEPRECATED {
        description
          "This is a valid but deprecated address that should
no longer be used as a source address in new
communications, but packets addressed to such an
address are processed as expected."
      }
      enum INVALID {
        description
          "This isn't a valid address, and it shouldn't appear
as the destination or source address of a packet."
      }
      enum INACCESSIBLE {
        description
          "The address is not accessible because the interface
to which this address is assigned is not
operational."
      }
      enum UNKNOWN {
        description
          "The status cannot be determined for some reason."
      }
      enum TENTATIVE {
        description
          "The uniqueness of the address on the link is being
verified. Addresses in this state should not be
used for general communication and should only be
used to determine the uniqueness of the address."
      }
      enum DUPLICATE {
        description
          "This is a valid but deprecated address that should
no longer be used as a source address in new
communications, but packets addressed to such an
address are processed as expected."
    }
  }
}
"The address has been determined to be non-unique on the link and so must not be used."
}

enum OPTIMISTIC {
    description
    "The address is available for use, subject to restrictions, while its uniqueness on a link is being verified.";
}
}

description
"The status of an address. Most of the states correspond to states from the IPv6 Stateless Address Autoconfiguration protocol.";
reference
"RFC 4293: Management Information Base for the Internet Protocol (IP) - IpAddressStatusTC
RFC 4862: IPv6 Stateless Address Autoconfiguration";
}
}

grouping ipv6-neighbor-config {
    description
    "Per-neighbor configuration data for IPv6 interfaces";

    leaf ip {
        type oc-inet:ipv6-address;
        description
        "The IPv6 address of the neighbor node."
    }
}

leaf link-layer-address {
    type oc-yang:phys-address;
    mandatory true;
    description
    "The link-layer address of the neighbor node."
}
}

grouping ipv6-neighbor-state {
    description "Per-neighbor state variables for IPv6 interfaces";

    leaf origin {
        type neighbor-origin;
        description
        "The origin of this neighbor entry."
    }
}
leaf is-router {
  type boolean;
  description
  "Indicates that the neighbor node acts as a router.";
}

leaf neighbor-state {
  type enumeration {
    enum INCOMPLETE {
      description
      "Address resolution is in progress, and the link-layer
      address of the neighbor has not yet been
determined.";
    }
    enum REACHABLE {
      description
      "Roughly speaking, the neighbor is known to have been
      reachable recently (within tens of seconds ago).";
    }
    enum STALE {
      description
      "The neighbor is no longer known to be reachable, but
      until traffic is sent to the neighbor no attempt
      should be made to verify its reachability.";
    }
    enum DELAY {
      description
      "The neighbor is no longer known to be reachable, and
      traffic has recently been sent to the neighbor.
      Rather than probe the neighbor immediately, however,
      delay sending probes for a short while in order to
give upper-layer protocols a chance to provide
reachability confirmation.";
    }
    enum PROBE {
      description
      "The neighbor is no longer known to be reachable, and
      unicast Neighbor Solicitation probes are being sent
to verify reachability.";
    }
  }
}

description
"The Neighbor Unreachability Detection state of this
entry.";
reference
"RFC 4861: Neighbor Discovery for IP version 6 (IPv6)
Section 7.3.2";
grouping ip-vrrp-ipv6-config {
    description
    "IPv6-specific configuration data for VRRP on IPv6 interfaces";

    leaf virtual-link-local {
        type oc-inet:ip-address;
        description
        "For VRRP on IPv6 interfaces, sets the virtual link local address";
    }
}

grouping ip-vrrp-ipv6-state {
    description
    "IPv6-specific operational state for VRRP on IPv6 interfaces";

    uses ip-vrrp-ipv6-config;
}

grouping ip-vrrp-tracking-config {
    description
    "Configuration data for tracking interfaces in a VRRP group";

    leaf-list track-interface {
        type leafref {
            path "/oc-if:interfaces/oc-if:interface/oc-if:name";
        }
        // TODO: we may need to add some restriction to ethernet
        // or IP interfaces.
        description
        "Sets a list of one or more interfaces that should be tracked for up/down events to dynamically change the priority state of the VRRP group, and potentially change the mastership if the tracked interface going down lowers the priority sufficiently. Any of the tracked interfaces going down will cause the priority to be lowered. Some implementations may only support a single tracked interface.";
    }

    leaf priority-decrement {
        type uint8 {
            range 0..254;
        }
        default 0;
    }
}
description "Set the value to subtract from priority when the tracked interface goes down";
}
}

grouping ip-vrrp-tracking-state {

description "Operational state data for tracking interfaces in a VRRP group";
}

grouping ip-vrrp-tracking-top {

description "Top-level grouping for VRRP interface tracking";

container interface-tracking {

description "Top-level container for VRRP interface tracking";

container config {

description "Configuration data for VRRP interface tracking";

uses ip-vrrp-tracking-config;
}

container state {

config false;

description "Operational state data for VRRP interface tracking";

uses ip-vrrp-tracking-config;
uses ip-vrrp-tracking-state;
}
}
}

grouping ip-vrrp-config {

description "Configuration data for VRRP on IP interfaces";

leaf virtual-router-id {

type uint8 {
    range 1..255;
}

description
"Set the virtual router id for use by the VRRP group. This usually also determines the virtual MAC address that is generated for the VRRP group";
}

leaf-list virtual-address {
  type oc-inet:ip-address;
  description
  "Configure one or more virtual addresses for the VRRP group";
}

leaf priority {
  type uint8 {
    range 1..254;
  }
  default 100;
  description
  "Specifies the sending VRRP interface's priority for the virtual router. Higher values equal higher priority";
}

leaf preempt {
  type boolean;
  default true;
  description
  "When set to true, enables preemption by a higher priority backup router of a lower priority master router";
}

leaf preempt-delay {
  type uint16 {
    range 0..3600;
  }
  default 0;
  description
  "Set the delay the higher priority router waits before preempting";
}

leaf accept-mode {
  type boolean;
  // TODO: should we adopt the RFC default given the common // operational practice of setting to true?
  default false;
  description
  "Configure whether packets destined for
virtual addresses are accepted even when the virtual address is not owned by the router interface;
}

leaf advertisement-interval {
  type uint16 {
    range 1..4095;
  }
  // TODO this range is theoretical -- needs to be validated
  // against major implementations.
  units "centiseconds";
  default 100;
  description
    "Sets the interval between successive VRRP advertisements -- RFC 5798 defines this as a 12-bit value expressed as 0.1 seconds, with default 100, i.e., 1 second. Several implementation express this in units of seconds";
}

grouping ip-vrrp-state {
  description
    "Operational state data for VRRP on IP interfaces";

  leaf current-priority {
    type uint8;
    description "Operational value of the priority for the interface in the VRRP group";
  }
}

grouping ip-vrrp-top {
  description
    "Top-level grouping for Virtual Router Redundancy Protocol";

  container vrrp {
    description
      "Enclosing container for VRRP groups handled by this IP interface";

    reference "RFC 5798 - Virtual Router Redundancy Protocol (VRRP) Version 3 for IPv4 and IPv6";

    list vrrp-group {
      key "virtual-router-id";
      description
        "List of VRRP groups, keyed by virtual router id";
    }
  }
}
leaf virtual-router-id {
  type leafref {
    path "../config/virtual-router-id";
  }
  description
  "References the configured virtual router id for this VRRP group";
}

container config {
  description
  "Configuration data for the VRRP group";

  uses ip-vrrp-config;
}

container state {
  config false;
  description
  "Operational state data for the VRRP group";

  uses ip-vrrp-config;
  uses ip-vrrp-state;
}

  uses ip-vrrp-tracking-top;
}

grouping ipv6-ra-config {
  description
  "Configuration parameters for IPv6 router advertisements.";

  leaf interval {
    type uint32;
    units seconds;
    description
    "The interval between periodic router advertisement neighbor discovery messages sent on this interface expressed in seconds.";
  }

  leaf lifetime {
    type uint32;
  }
}
units seconds;

description
"The lifetime advertised in the router advertisement neighbor
discovery message on this interface."

}

leaf suppress {

type boolean;

default false;

description
"When set to true, router advertisement neighbor discovery
messages are not transmitted on this interface."

}

}

}
whereas with the ALL value, all requests, regardless of their
target address are replied to.";
reference "RFC1027: Using ARP to Implement Transparent Subnet Gateways";
}
}

grouping ipv4-top {
  description "Top-level configuration and state for IPv4 interfaces";
}

container ipv4 {
  description
    "Parameters for the IPv4 address family.";
}

container addresses {
  description
    "Enclosing container for address list";
}

list address {
  key "ip";
  description
    "The list of configured IPv4 addresses on the interface.";
}

leaf ip {
  type leafref {
    path "./config/ip";
  }
  description "References the configured IP address";
}

container config {
  description "Configuration data for each configured IPv4 address on the interface";

  uses ipv4-address-config;
}

container state {

  config false;
  description "Operational state data for each IPv4 address configured on the interface";

  uses ipv4-address-config;
  uses ipv4-address-state;
}
container proxy-arp {
  description
  "Configuration and operational state parameters relating to proxy ARP. This functionality allows a system to respond to ARP requests that are not explicitly destined to the local system."
}

container config {
  description
  "Configuration parameters for proxy ARP"
  uses ipv4-proxy-arp-config;
}

container state {
  config false;
  description
  "Operational state parameters for proxy ARP"
  uses ipv4-proxy-arp-config;
}

container neighbors {
  description
  "Enclosing container for neighbor list"
}

list neighbor {
  key "ip";
  description
  "A list of mappings from IPv4 addresses to link-layer addresses.

Entries in this list are used as static entries in the ARP Cache.";
  reference
  "RFC 826: An Ethernet Address Resolution Protocol";
}

leaf ip {
  type leafref {
    path "../config/ip";
  }
  description "References the configured IP address"
}

container config {
  description "Configuration data for each configured IPv4
address on the interface;

uses ipv4-neighbor-config;
}

container state {

  config false;
  description "Operational state data for each IPv4 address configured on the interface";

  uses ipv4-neighbor-config;
  uses ipv4-neighbor-state;
}

}

uses oc-if:sub-unnumbered-top;

container config {
  description "Top-level IPv4 configuration data for the interface";

  uses ipv4-global-config;
}

container state {

  config false;
  description "Top level IPv4 operational state data";

  uses ipv4-global-config;
  uses ip-common-counters-state;
}

}

}

grouping ipv6-top {
  description "Top-level configuration and state for IPv6 interfaces";

  container ipv6 {
    description "Parameters for the IPv6 address family.";

    container addresses {

description
"Enclosing container for address list";

list address {
  key "ip";
  description
  "The list of configured IPv6 addresses on the interface."

  leaf ip {
    type leafref {
      path "../config/ip";
    }
    description "References the configured IP address";
  }

  container config {
    description
    "Configuration data for each IPv6 address on the interface";
    uses ipv6-address-config;
  }

  container state {
    config false;
    description
    "State data for each IPv6 address on the interface";
    uses ipv6-address-config;
    uses ipv6-address-state;
  }

  container router-advertisement {
    description
    "Configuration and operational state parameters relating to router advertisements.";

    container config {
      description
      "Configuration parameters relating to router advertisements for IPv6.";
      uses ipv6-ra-config;
    }
  }
}
container state {
    config false;
    description
        "Operational state parameters relating to router
         advertisements for IPv6."
    uses ipv6-ra-config;
}
}

container neighbors {
    description
        "Enclosing container for list of IPv6 neighbors";

    list neighbor {
        key "ip";
        description
            "List of IPv6 neighbors";

        leaf ip {
            type leafref {
                path "../config/ip";
            }
            description
                "References the configured IP neighbor address";
        }
    }

    container config {
        description "Configuration data for each IPv6 address on
             the interface";

        uses ipv6-neighbor-config;
    }
}

container state {
    config false;
    description "State data for each IPv6 address on the
         interface";

    uses ipv6-neighbor-config;
    uses ipv6-neighbor-state;
}
}

uses oc-if:sub-unnumbered-top;
container config {
  description "Top-level config data for the IPv6 interface";

  uses ipv6-global-config;
}

container state {
  config false;
  description
  "Top-level operational state data for the IPv6 interface";

  uses ipv6-global-config;
  uses ip-common-counters-state;

}

// augment statements

augment "/oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/" +
  "oc-if:subinterface" {
  description
  "IPv4 address family configuration for interfaces";

  uses ipv4-top;
}

augment "/oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/" +
  "oc-if:subinterface" {
  description
  "IPv6 address family configuration for interfaces";

  uses ipv6-top;
}

// VRRP for IPv4 interfaces

augment "/oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/" +

  description
  "Additional IP addr family configuration for interfaces";
// VRRP for IPv6 interfaces

augment "/oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/" + 
"vrrp/vrrp-group/config/" {
  description
  "Additional VRRP data for IPv6 interfaces";
}

uses ip-vrrp-ipv6-config;

}

augment "/oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/" + 
"vrrp-group/state/" {
  description
  "Additional VRRP data for IPv6 interfaces";
}

uses ip-vrrp-ipv6-state;

}

// Augments for for routed VLANs

  description
  "IPv4 address family configuration for interfaces";
}

uses ipv4-top;

}

  description
  "IPv6 address family configuration for
uses ipv6-top;
}

// VRRP for routed VLAN interfaces

  description
  "Additional IP addr family configuration for interfaces";

  uses ip-vrrp-top;
}

  description
  "Additional IP addr family configuration for interfaces";

  uses ip-vrrp-top;
}

  description
  "Additional VRRP data for IPv6 interfaces";

  uses ip-vrrp-ipv6-config;
}

  description
  "Additional VRRP data for IPv6 interfaces";

  uses ip-vrrp-ipv6-state;
}

// rpc statements

// notification statements

module ietf-ipv4-unicast-routing {

    namespace "urn:ietf:params:xml:ns:yang:ietf-ipv4-unicast-routing";

    prefix "v4ur";

    import ietf-routing {
        prefix "rt";
    }

    import ietf-inet-types {
        prefix "inet";
    }

    organization
    "IETF NETMOD (NETCONF Data Modeling Language) Working Group";

    contact
    "WG Web:  <http://tools.ietf.org/wg/netmod/>
    WG List:  <mailto:netmod@ietf.org>

    WG Chair: Thomas Nadeau
    <mailto:tnadeau@lucidvision.com>

    WG Chair: Juergen Schoenwaelder
    <mailto:j.schoenwaelder@jacobs-university.de>

    Editor:  Ladislav Lhotka
    <mailto:lhotka@nic.cz>";

    description
    "This YANG module augments the 'ietf-routing' module with basic
    configuration and state data for IPv4 unicast routing.

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    authors of the code. All rights reserved.

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    (http://trustee.ietf.org/license-info)."
The key words 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in the module text are to be interpreted as described in RFC 2119 (http://tools.ietf.org/html/rfc2119).

This version of this YANG module is part of RFC XXXX (http://tools.ietf.org/html/rfcXXXX); see the RFC itself for full legal notices.

revision 2015-05-25 {
  description
    "Initial revision.";
  reference
    "RFC XXXX: A YANG Data Model for Routing Management";
}

/* Identities */
identity ipv4-unicast {
  base rt:ipv4;
  description
    "This identity represents the IPv4 unicast address family.";
}

/* State data */

   + "/rt:routes/rt:route/"
   when "./rt:address-family = 'v4ur:ipv4-unicast'" {
  description
    "This augment is valid only for IPv4 unicast.";
}

   + "/rt:routes/rt:route/rt:next-hop/rt:next-hop-options/"
   + "/rt:simple-next-hop"
   when "./rt:address-family = 'v4ur:ipv4-unicast'" {
  description
    "This augment is valid only for IPv4 unicast.";
description
  "This leaf augments the 'simple-next-hop' case of IPv4 unicast
  routes.";
leaf next-hop-address {
  type inet:ipv4-address;
  description
    "IPv4 address of the next-hop."
}
}*/

/* Configuration data */

augment "/rt:routing/rt:routing-instance/rt:routing-protocols/"
  + "rt:routing-protocol/rt:static-routes" {
    description
      "This augment defines the configuration of the 'static'
      pseudo-protocol with data specific to IPv4 unicast.";
    container ipv4 {
      description
        "Configuration of a 'static' pseudo-protocol instance
        consists of a list of routes.";
      list route {
        key "destination-prefix";
        ordered-by "user";
        description
          "A user-ordered list of static routes.";
        leaf destination-prefix {
          type inet:ipv4-prefix;
          mandatory "true";
          description
            "IPv4 destination prefix.";
        }
        leaf description {
          type string;
          description
            "Textual description of the route.";
        }
      }
      container next-hop {
        description
          "Configuration of next-hop.";
        uses rt:next-hop-content {
          augment "next-hop-options" {
            description
              "Add next-hop address case.";
            leaf next-hop-address {
              type inet:ipv4-address;
              description
                "IPv4 address of the next-hop.";
            }
          }
        }*/
    }
}
/* RPC operations */

augment "/rt:fib-route/rt:input/rt:destination-address" {
    when "rt:address-family='v4ur:ipv4-unicast'" {
        description
        "This augment is valid only for IPv4 unicast.";
    }
    description
    "This leaf augments the 'rt:destination-address' parameter of
     the 'rt:fib-route' operation.";
    leaf address {
        type inet:ipv4-address;
        description
        "IPv4 destination address.";
    }
}

augment "/rt:fib-route/rt:output/rt:route" {
    when "rt:address-family='v4ur:ipv4-unicast'" {
        description
        "This augment is valid only for IPv4 unicast.";
    }
    description
    "This leaf augments the reply to the 'rt:fib-route'
     operation.";
    leaf destination-prefix {
        type inet:ipv4-prefix;
        description
        "IPv4 destination prefix.";
    }
}

augment "/rt:fib-route/rt:output/rt:route/rt:next-hop/
    + "rt:next-hop-options/rt:simple-next-hop" {
    when "./rt:address-family='v4ur:ipv4-unicast'" {
        description
        "This augment is valid only for IPv4 unicast.";
    }
    description
    "This leaf augments the 'simple-next-hop' case in the reply to
leaf next-hop-address {
    type inet:ipv4-address;
    description
    "IPv4 address of the next-hop."
};

module ietf-yang-library {
    namespace "urn:ietf:params:xml:ns:yang:ietf-yang-library";
    prefix yanglib;

    import ietf-yang-types {
        prefix yang;
    }
    import ietf-inet-types {
        prefix inet;
    }

    organization
    "IETF NETCONF (Network Configuration) Working Group";
    contact
    "WG Web:  <https://datatracker.ietf.org/wg/netconf/>
    WG List:  <mailto:netconf@ietf.org>
    WG Chair: Mehmet Ersue
      <mailto:mehmet.ersue@nsn.com>
    WG Chair: Mahesh Jethanandani
      <mailto:mjethanandani@gmail.com>
    Editor:  Andy Bierman
      <mailto:andy@yumaworks.com>
    Editor:  Martin Bjorklund
      <mailto:mbj@tail-f.com>
    Editor:  Kent Watsen
      <mailto:kwatsen@juniper.net>";
    description
    "This module contains monitoring information about the YANG
    modules and submodules that are used within a YANG-based
    server.
    Copyright (c) 2016 IETF Trust and the persons identified as
    authors of the code.  All rights reserved.
    Redistribution and use in source and binary forms, with or
    without modification, is permitted pursuant to, and subject

    No license file was found, but licenses were detected in source scan.

    Found in path(s):
    * /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-ipv4-unicast-routing.yang
typedef revision-identifier {
    type string {
        pattern "\d{4}-\d{2}-\d{2}";
    }
    description
    "Represents a specific date in YYYY-MM-DD format.";
}

grouping module-list {
    description
    "The module data structure is represented as a grouping
    so it can be reused in configuration or another monitoring
data structure.";
}

grouping common-leafs {
    description
    "Common parameters for YANG modules and submodules.";
    leaf name {
        type yang:yang-identifier;
        description
        "The YANG module or submodule name.";
    }
    leaf revision {
        type union {
            type revision-identifier;
            type string {
                length "0";
            }
        }
        description
        "The YANG module or submodule revision date.
        A zero-length string is used if no revision statement
        is present in the YANG module or submodule.";
    }
}
grouping schema-leaf {
  description
  "Common schema leaf parameter for modules and submodules."
  leaf schema {
    type inet:uri;
    description
    "Contains a URL that represents the YANG schema
    resource for this module or submodule.
    This leaf will only be present if there is a URL
    available for retrieval of the schema for this entry."
  }
}

list module {
  key "name revision";
  description
  "Each entry represents one revision of one module
  currently supported by the server."
  uses common-leafs;
  uses schema-leaf;
  leaf namespace {
    type inet:uri;
    mandatory true;
    description
    "The XML namespace identifier for this module."
  }
  leaf-list feature {
    type yang:yang-identifier;
    description
    "List of YANG feature names from this module that are
    supported by the server, regardless of whether they are
    defined in the module or any included submodule."
  }
  list deviation {
    key "name revision";
    description
    "List of YANG deviation module names and revisions
    used by this server to modify the conformance of
    the module associated with this entry. Note that
    the same module can be used for deviations for
    multiple modules, so the same entry MAY appear
    within multiple 'module' entries.
    The deviation module MUST be present in the 'module'
    list, with the same name and revision values.
    The 'conformance-type' value will be 'implement' for
    the deviation module.";
    uses common-leafs;
  }
}
leaf conformance-type {
  type enumeration {
    enum "implement" {
      description
      "Indicates that the server implements one or more
        protocol-accessible objects defined in the YANG module
        identified in this entry. This includes deviation
        statements defined in the module.
        For YANG version 1.1 modules, there is at most one
        module entry with conformance type 'implement' for a
        particular module name, since YANG 1.1 requires that,
        at most, one revision of a module is implemented.
        For YANG version 1 modules, there SHOULD NOT be more
        than one module entry for a particular module name."
    }
    enum "import" {
      description
      "Indicates that the server imports reusable definitions
        from the specified revision of the module but does
        not implement any protocol-accessible objects from
        this revision.
        Multiple module entries for the same module name MAY
        exist. This can occur if multiple modules import the
        same module but specify different revision dates in
        the import statements."
    }
  }
  mandatory true;
  description
  "Indicates the type of conformance the server is claiming
  for the YANG module identified by this entry."
}
list submodule {
  key "name revision";
  description
  "Each entry represents one submodule within the
  parent module."
  uses common-leafs;
  uses schema-leaf;
}

notification yang-library-change {
  description
  "Generated when the set of modules and submodules supported
  by the server has changed."
  leaf module-set-id {

type leafref {
    path "/yanglib:modules-state/yanglib:module-set-id";
}
mandatory true;
description
    "Contains the module-set-id value representing the
    set of modules and submodules supported at the server at
    the time the notification is generated."
}

container modules-state {
    config false;
description
    "Contains YANG module monitoring information.";
leaf module-set-id {
    type string;
    mandatory true;
description
    "Contains a server-specific identifier representing
    the current set of modules and submodules. The
    server MUST change the value of this leaf if the
    information represented by the 'module' list instances
    has changed.";
}
uses module-list;
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-yang-library.yang
No license file was found, but licenses were detected in source scan.

module openconfig-aaa {

    yang-version "1";

    // namespace
    namespace "http://openconfig.net/yang/aaa";

    prefix "oc-aaa";

    // import some basic types
    import openconfig-extensions { prefix oc-ext; }
    import openconfig-inet-types { prefix oc-inet; }
    import openconfig-yang-types { prefix oc-yang; }
    import openconfig-aaa-types { prefix oc-aaa-types; }

}
include openconfig-aaa-tacacs;
include openconfig-aaa-radius;

// meta
organization "OpenConfig working group";

contact
 "OpenConfig working group
 www.openconfig.net";

description
 "This module defines configuration and operational state data
 related to authorization, authentication, and accounting (AAA)
 management.

 Portions of this model reuse data definitions or structure from
 RFC 7317 - A YANG Data Model for System Management";

oc-ext:openconfig-version "0.4.0";

revision "2018-04-12" {
  description
   "Add when conditions, correct identities";
  reference "0.4.0";
}

revision "2017-09-18" {
  description
   "Updated to use OpenConfig types modules";
  reference "0.3.0";
}

revision "2017-07-06" {
  description
   "Move to oc-inet types, add IETF attribution, add RADIUS
   counters, changed password leaf names to indicate hashed";
  reference "0.2.0";
}

revision "2017-01-29" {
  description
   "Initial public release";
  reference "0.1.0";
}

// identity statements
// grouping statements
grouping aaa-servergroup-common-config {
    description
        "Configuration data for AAA server groups";

    leaf name {
        type string;
        description
            "Name for the server group";
    }

    leaf type {
        type identityref {
            base oc-aaa-types:AAA_SERVER_TYPE;
        }
        description
            "AAA server type -- all servers in the group must be of this type";
    }
}

grouping aaa-servergroup-common-state {
    description
        "Operational state data for AAA server groups";

    //TODO: add list of group members as opstate
}

grouping aaa-servergroup-common-top {
    description
        "Top-level grouping for AAA server groups";

    container server-groups {
        description
            "Enclosing container for AAA server groups";

        list server-group {
            key "name";
            description
                "List of AAA server groups. All servers in a group must have the same type as indicated by the server type.";

            leaf name {
                type leafref {
                    path "/..//config/name";
                }
                description
            }
        }
    }
}
"Reference to configured name of the server group";
}

container config {
  description
    "Configuration data for each server group";

  uses aaa-servergroup-common-config;
}

container state {
  config false;

  description
    "Operational state data for each server group";

  uses aaa-servergroup-common-config;
  uses aaa-servergroup-common-state;
}

uses aaa-server-top;
}
}
}

grouping aaa-server-config {
  description
    "Common configuration data for AAA servers";

  leaf name {
    type string;
    description
      "Name assigned to the server";
  }

  leaf address {
    type oc-inet:ip-address;
    description "Address of the authentication server";
  }

  leaf timeout {
    type uint16;
    units seconds;
    description
      "Set the timeout in seconds on responses from the AAA server";
  }
}
grouping aaa-server-state {
  description
  "Common operational state data for AAA servers";

  leaf connection-opens {
    type oc-yang:counter64;
    description
    "Number of new connection requests sent to the server, e.g.
    socket open";
  }

  leaf connection-closes {
    type oc-yang:counter64;
    description
    "Number of connection close requests sent to the server, e.g.
    socket close";
  }

  leaf connection-aborts {
    type oc-yang:counter64;
    description
    "Number of aborted connections to the server. These do
    not include connections that are close gracefully.";
  }

  leaf connection-failures {
    type oc-yang:counter64;
    description
    "Number of connection failures to the server";
  }

  leaf connection-timeouts {
    type oc-yang:counter64;
    description
    "Number of connection timeouts to the server";
  }

  leaf messages-sent {
    type oc-yang:counter64;
    description
    "Number of messages sent to the server";
  }

  leaf messages-received {
    type oc-yang:counter64;
    description
    "Number of messages received from the server";
  }
}
"Number of messages received by the server";
}

leaf errors-received {
type oc-yang:counter64;
description
"Number of error messages received from the server";
}
}

grouping aaa-server-top {
description
"Top-level grouping for list of AAA servers";

container servers {
description
"Enclosing container the list of servers";

list server {
key "address";
description
"List of AAA servers";

leaf address {
type leafref {
path ".../config/address";
}
description
"Reference to the configured address of the AAA server";
}

container config {
description
"Configuration data ";

uses aaa-server-config;
}

container state {
config false;

description
"Operational state data ";

uses aaa-server-config;
uses aaa-server-state;
}
uses aaa-tacacs-server-top {
    when ".//config/type = 'oc-aaa-types:TACACS'";
}

uses aaa-radius-server-top {
    when ".//config/type = 'oc-aaa-types:RADIUS'";
}

}
}
}
}
}

grouping aaa-admin-config {
    description
    "Configuration data for the system built-in
    administrator / root user account";

    leaf admin-password {
        type string;
        oc-ext:openconfig-hashed-value;
        description
        "The admin/root password, supplied as a cleartext string.
        The system should hash and only store the password as a
        hashed value.";
    }

    leaf admin-password-hashed {
        type oc-aaa-types:crypt-password-type;
        description
        "The admin/root password, supplied as a hashed value
        using the notation described in the definition of the
        crypt-password-type.";
    }
}

grouping aaa-admin-state {
    description
    "Operational state data for the root user";

    leaf admin-username {
        type string;
        description
        "Name of the administrator user account, e.g., admin, root,
        etc.";
    }
}

grouping aaa-authentication-admin-top {

container admin-user {
  description
  "Top-level container for the system root or admin user
  configuration and operational state";
}

container config {
  description
  "Configuration data for the root user account";

  uses aaa-admin-config;
}

container state {
  config false;

  description
  "Operational state data for the root user account";

  uses aaa-admin-config;
  uses aaa-admin-state;
}

grouping aaa-authentication-user-config {
  description
  "Configuration data for local users";

  leaf username {
    type string;
    description
    "Assigned username for this user";
  }

  leaf password {
    type string;
    oc-ext:openconfig-hashed-value;
    description
    "The user password, supplied as cleartext. The system
    must hash the value and only store the hashed value.";
  }

  leaf password-hashed {
    type oc-aaa-types:encrypt-password-type;
    description
  }
}
"The user password, supplied as a hashed value using the notation described in the definition of the crypt-password-type.";

leaf ssh-key {
  type string;
  description
  "SSH public key for the user (RSA or DSA)";
}

leaf role {
  type union {
    type string;
    type identityref {
      base oc-aaa-types:SYSTEM_DEFINED_ROLES;
    }
  }
  description
  "Role assigned to the user. The role may be supplied as a string or a role defined by the SYSTEM_DEFINED_ROLES identity.";
}

grouping aaa-authentication-user-state {
  description
  "Operational state data for local users";
}

grouping aaa-authentication-user-top {
  description
  "Top-level grouping for local users";
}

container users {
  description
  "Enclosing container list of local users";
}

list user {
  key "username";
  description
  "List of local users on the system";
}

leaf username {
  type leafref {
    path ".//config/username";
  }
  description
"References the configured username for the user";
}

container config {
  description
  "Configuration data for local users";

  uses aaa-authentication-user-config;
}

container state {
  config false;

  description
  "Operational state data for local users";

  uses aaa-authentication-user-config;
  uses aaa-authentication-user-state;
}
}
}

grouping aaa-accounting-methods-common {
  description
  "Common definitions for accounting methods";

  leaf-list accounting-method {
    type union {
      type identityref {
        base oc-aaa-types:AAA_METHOD_TYPE;
      }
      type string;
      //TODO: in YANG 1.1 this should be converted to a leafref to
      //point to the server group name.
    }
    ordered-by user;
    description
    "An ordered list of methods used for AAA accounting for this
    event type. The method is defined by the destination for
    accounting data, which may be specified as the group of
    all TACACS+/RADIUS servers, a defined server group, or
    the local system.";
  }
}

grouping aaa-accounting-events-config {
    description
    "Configuration data for AAA accounting events";
}

leaf event-type {
    type identityref {
        base oc-aaa-types:AAA_ACCOUNTING_EVENT_TYPE;
    }
    description
    "The type of activity to record at the AAA accounting server";
}

leaf record {
    type enumeration {
        enum START_STOP {
            description
            "Send START record to the accounting server at the beginning of the activity, and STOP record at the end of the activity."
        }
        enum STOP {
            description
            "Send STOP record to the accounting server when the user activity completes"
        }
    }
    description
    "Type of record to send to the accounting server for this activity type";
}

}

}

grouping aaa-accounting-events-state {
    description
    "Operational state data for accounting events";
}

}

}

grouping aaa-accounting-events-top {
    description
    "Top-level grouping for accounting events";
}

container events {
    description
    "Enclosing container for defining handling of events for accounting";
}

list event {
key "event-type";
description
"List of events subject to accounting";

leaf event-type {
  type leafref {
    path ".../config/event-type";
  }
  description
  "Reference to the event-type being logged at the accounting server";
}

container config {
  description
  "Configuration data for accounting events";

  uses aaa-accounting-events-config;
}

container state {
  config false;

  description
  "Operational state data for accounting events";

  uses aaa-accounting-events-config;
  uses aaa-accounting-events-state;
}

}

grouping aaa-accounting-config {
  description
  "Configuration data for event accounting";

  uses aaa-accounting-methods-common;
}

grouping aaa-accounting-state {
  description
  "Operational state data for event accounting services";
}

grouping aaa-accounting-top {
  description
"Top-level grouping for user activity accounting";

container accounting {
  description
  "Top-level container for AAA accounting";

  container config {
    description
    "Configuration data for user activity accounting.";

    uses aaa-accounting-config;
  }

  container state {
    config false;

    description
    "Operational state data for user accounting.";

    uses aaa-accounting-config;
    uses aaa-accounting-state;
  }

  uses aaa-accounting-events-top;
}

grouping aaa-authorization-methods-config {
  description
  "Common definitions for authorization methods for global
  and per-event type";

  leaf-list authorization-method {
    type union {
      type identityref {
        base oc-aaa-types:AAA_METHOD_TYPE;
      }
      type string;
    }
    ordered-by user;

    description
    "Ordered list of methods for authorizing commands. The first
    method that provides a response (positive or negative) should
    be used. The list may contain a well-defined method such
    as the set of all TACACS or RADIUS servers, or the name of
    a defined AAA server group. The system must validate
    that the named server group exists.";
  }
}
grouping aaa-authorization-events-config {
    description "Configuration data for AAA authorization events";

    leaf event-type {
        type identityref {
            base oc-aaa-types:AAA_AUTHORIZATION_EVENT_TYPE;
        }
        description "The type of event to record at the AAA authorization server";
    }
}

grouping aaa-authorization-events-state {
    description "Operational state data for AAA authorization events";
}

grouping aaa-authorization-events-top {
    description "Top-level grouping for authorization events";

    container events {
        description "Enclosing container for the set of events subject to authorization";

        list event {
            key "event-type";
            description "List of events subject to AAA authorization";

            leaf event-type {
                type leafref {
                    path ".../config/event-type";
                }
                description "Reference to the event-type list key";
            }

            container config {
                description "Configuration data for each authorized event";
            }
        }
    }
}
uses aaa-authorization-events-config;
}

container state {
  config false;

description
  "Operational state data for each authorized activity";

  uses aaa-authorization-events-config;
  uses aaa-authorization-events-state;
}
}
}
}
}
}
}
}

grouping aaa-authorization-config {
  description
  "Configuration data for AAA authorization";

  uses aaa-authorization-methods-config;
}

grouping aaa-authorization-state {
  description
  "Operational state data for AAA authorization";
}

grouping aaa-authorization-top {
  description
  "Top-level grouping for AAA authorization";

container authorization {
  description
    "Top-level container for AAA authorization configuration
    and operational state data";

container config {
  description
    "Configuration data for authorization based on AAA
    methods";

    uses aaa-authorization-config;
}

container state {
  config false;
description
"Operational state data for authorization based on AAA":

uses aaa-authorization-config;
uses aaa-authorization-state;
}

uses aaa-authorization-events-top;
}
}

grouping aaa-authentication-config {
    description
    "Configuration data for global authentication";

    leaf-list authentication-method {
        type union {
            type identityref {
                base oc-aaa-types:AAA_METHOD_TYPE;
            }
            type string;
            //TODO: string should be a leafref to a defined
            //server group. this will be possible in YANG 1.1
            //type leafref {
            //    //path "/aaa/server-groups/server-group/config/name";
            //}
        }
        ordered-by user;
        description
        "Ordered list of authentication methods for users. This
        can be either a reference to a server group, or a well-
        defined designation in the AAA_METHOD_TYPE identity. If
        authentication fails with one method, the next defined
        method is tried -- failure of all methods results in the
        user being denied access."
    }
}

grouping aaa-authentication-state {
    description
    "Operational state data for global authentication";
}

grouping aaa-authentication-top {
    description
    "Top-level grouping for top-level authentication";
container authentication {
  description
  "Top-level container for global authentication data";
}

container config {
  description
  "Configuration data for global authentication services";

  uses aaa-authentication-config;
}

container state {
  config false;

  description
  "Operational state data for global authentication services";

  uses aaa-authentication-config;
  uses aaa-authentication-state;
}

uses aaa-authentication-admin-top;
uses aaa-authentication-user-top;

}

grouping aaa-config {
  description
  "Configuration data for top level AAA";
}

grouping aaa-state {
  description
  "Operational state data for top level AAA";
}

grouping aaa-top {
  description
  "Top-level grouping for AAA services";

  container aaa {
    description
    "Top-level container for AAA services";

    container config {
      description
      "Configuration data for top level AAA services";
    }
  }
}
uses aaa-config;
}

container state {
  config false;

description
  "Operational state data for top level AAA services ";

uses aaa-config;
uses aaa-state;
}

uses aaa-authentication-top;
uses aaa-authorization-top;
uses aaa-accounting-top;
uses aaa-servergroup-common-top;

}
}

// data definition statements

}

Found in path(s):
*/opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/openconfig-aaa.yang

No license file was found, but licenses were detected in source scan.

module iana-crypt-hash {
  namespace "urn:ietf:params:xml:ns:yang:iana-crypt-hash";
  prefix ianach;

  organization "IANA";
  contact
    " Internet Assigned Numbers Authority"

  Postal: ICANN
  12025 Waterfront Drive, Suite 300
  Los Angeles, CA  90094-2536
  United States

  Tel:  +1 310 301 5800
This YANG module defines a type for storing passwords using a hash function and features to indicate which hash functions are supported by an implementation.

The latest revision of this YANG module can be obtained from the IANA web site.

Requests for new values should be made to IANA via email (iana@iana.org).

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The initial version of this YANG module is part of RFC 7317; see the RFC itself for full legal notices."

revision 2014-08-06 {
  description
   "Initial revision.";
  reference
   "RFC 7317: A YANG Data Model for System Management";
}

typedef crypt-hash {
  type string {
    pattern
     'S0$.*' + \$1$[a-zA-Z0-9-./]{1,8}$[a-zA-Z0-9-./]{22}' + \$5$(rounds=d+$)?[a-zA-Z0-9-./]{1,16}$[a-zA-Z0-9-./]{43}' + \$6$(rounds=d+$)?[a-zA-Z0-9-./]{1,16}$[a-zA-Z0-9-./]{86}';
  }
  description
   "The crypt-hash type is used to store passwords using a hash function. The algorithms for applying the hash function and encoding the result are implemented in various UNIX systems as the function crypt(3).

   A value of this type matches one of the forms:
$0$<clear text password>
$<id>$<salt>$<password hash>
$<id>$<parameter>$<salt>$<password hash>

The '$0$' prefix signals that the value is clear text. When such a value is received by the server, a hash value is calculated, and the string '$<id>$<salt>$' or '$<id>$<parameter>$<salt>$' is prepended to the result. This value is stored in the configuration data store.

If a value starting with '$<id>$', where <id> is not '0', is received, the server knows that the value already represents a hashed value and stores it 'as is' in the data store.

When a server needs to verify a password given by a user, it finds the stored password hash string for that user, extracts the salt, and calculates the hash with the salt and given password as input. If the calculated hash value is the same as the stored value, the password given by the client is accepted.

This type defines the following hash functions:

<table>
<thead>
<tr>
<th>id</th>
<th>hash function</th>
<th>feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MD5</td>
<td>crypt-hash-md5</td>
</tr>
<tr>
<td>5</td>
<td>SHA-256</td>
<td>crypt-hash-sha-256</td>
</tr>
<tr>
<td>6</td>
<td>SHA-512</td>
<td>crypt-hash-sha-512</td>
</tr>
</tbody>
</table>

The server indicates support for the different hash functions by advertising the corresponding feature.”;

reference
"IEEE Std 1003.1-2008 - crypt() function
RFC 1321: The MD5 Message-Digest Algorithm
FIPS.180-4.2012: Secure Hash Standard (SHS)";

feature crypt-hash-md5 {
  description
  "Indicates that the device supports the MD5 hash function in 'crypt-hash' values.";
  reference "RFC 1321: The MD5 Message-Digest Algorithm";
}

feature crypt-hash-sha-256 {
  description
  "Indicates that the device supports the SHA-256 hash function in 'crypt-hash' values.";
}
found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-
  0.1.8/ydk/models/openconfig/_yang/iana-crypt-hash.yang
No license file was found, but licenses were detected in source scan.

### openconfig_if_ip

This model defines data for managing configuration and operational state on IP (IPv4 and IPv6) interfaces.

This model reuses data items defined in the IETF YANG model for interfaces described by RFC 7277 with an alternate structure (particularly for operational state data) and with additional configuration items.

Portions of this code were derived from IETF RFC 7277. Please reproduce this note if possible.

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```python
import sys
from collections import OrderedDict
from ydk.types import Entity as _Entity_
from ydk.types import EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty,
Decimal64
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits,
```
class IpAddressOrigin(Enum):
    """
    IpAddressOrigin (Enum Class)
    
    The origin of an address.
    """
    .. data:: OTHER = 0

    None of the following.
    
    .. data:: STATIC = 1

    Indicates that the address has been statically configured - for example, using NETCONF or a Command Line Interface.
    
    .. data:: DHCP = 2

    Indicates an address that has been assigned to this system by a DHCP server.
    
    .. data:: LINK_LAYER = 3

    Indicates an address created by IPv6 stateless autoconfiguration that embeds a link-layer address in its interface identifier.
    
    .. data:: RANDOM = 4

    Indicates an address chosen by the system at random, e.g., an IPv4 address within 169.254/16, an RFC 4941 temporary address, or an RFC 7217 semantically opaque address.
class NeighborOrigin(Enum):
    """
    NeighborOrigin (Enum Class)
    
The origin of a neighbor entry.
    
    .. data:: OTHER = 0
    
    None of the following.
    
    .. data:: STATIC = 1
    
    Indicates that the mapping has been statically configured - for example, using NETCONF or a Command Line Interface.
    
    .. data:: DYNAMIC = 2
    
    Indicates that the mapping has been dynamically resolved using, e.g., IPv4 ARP or the IPv6 Neighbor Discovery protocol.
    """

OTHER = Enum.YLeaf(0, "OTHER")
STATIC = Enum.YLeaf(1, "STATIC")
DHCP = Enum.YLeaf(2, "DHCP")
LINK_LAYER = Enum.YLeaf(3, "LINK_LAYER")
RANDOM = Enum.YLeaf(4, "RANDOM")
module ietf-restconf-monitoring {
    prefix rcmon;

    import ietf-yang-types {
        prefix yang;
    }
    import ietf-inet-types {
        prefix inet;
    }

    organization
        "IETF NETCONF (Network Configuration) Working Group";
    contact
        "WG Web: <http://tools.ietf.org/wg/netconf/>
         WG List: <mailto:netconf@ietf.org>
         Author: Andy Bierman
             <mailto:andy@yumaworks.com>
         Author: Martin Bjorklund
             <mailto:mbj@tail-f.com>
         Author: Kent Watsen
             <mailto:kwatsen@juniper.net>";
    description
        "This module contains monitoring information for the
         RESTCONF protocol.

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    authors of the code. All rights reserved.

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    set forth in Section 4.c of the IETF Trust’s Legal Provisions
    Relating to IETF Documents
    (http://trustee.ietf.org/license-info).

    This version of this YANG module is part of RFC XXXX; see
    the RFC itself for full legal notices.";

    revision 2016-08-15 {
description
"Initial revision.";
reference "RFC XXXX: RESTCONF Protocol."
}

container restconf-state {
  config false;
  description
  "Contains RESTCONF protocol monitoring information.";
  container capabilities {
    description
    "Contains a list of protocol capability URIs";
    leaf-list capability {
      type inet:uri;
      description
      "A RESTCONF protocol capability URI.";
    }
  }
}

container streams {
  description
  "Container representing the notification event streams
   supported by the server.";
  reference "RFC 5277, Section 3.4, <streams> element.";
  list stream {
    key "name";
    description
    "Each entry describes an event stream supported by
     the server.";
    leaf name {
      type string;
      description
      "The stream name";
      reference "RFC 5277, Section 3.4, <name> element.";
    }
    leaf description {
      type string;
      description
      "Description of stream content";
      reference "RFC 5277, Section 3.4, <description> element.";
    }
    leaf replay-support {
      type boolean;
      default "false";
      description
      "Indicates if replay buffer supported for this stream.
       If 'true', then the server MUST support the 'start-time'
       and 'stop-time' query parameters for this stream.";
      reference "RFC 5277, Section 3.4, <replaySupport> element.";
    }
  }
}
leaf replay-log-creation-time {
  when "./replay-support" {
    description  
    "Only present if notification replay is supported";
  }
  type yang:date-and-time;
  description  
  " Indicates the time the replay log for this stream 
  was created.";
  reference  
  "RFC 5277, Section 3.4, <replayLogCreationTime> 
  element.";
}

list access {
  key "encoding";
  min-elements 1;
  description  
  "The server will create an entry in this list for each 
  encoding format that is supported for this stream. 
  The media type 'text/event-stream' is expected 
  for all event streams. This list identifies the 
  sub-types supported for this stream.";
  leaf encoding {
    type string;
    description  
    "This is the secondary encoding format within the 
    'text/event-stream' encoding used by all streams. 
    The type 'xml' is supported for XML encoding. 
    The type 'json' is supported for JSON encoding.";
  }
  leaf location {
    type inet:uri;
    mandatory true;
    description  
    "Contains a URL that represents the entry point 
    for establishing notification delivery via server 
    sent events.";
  }
}
}
module ietf-diffserv-policy {
    yang-version 1;
    prefix policy;

    import ietf-diffserv-classifier {
        prefix classifier;
    }

    organization "IETF NETMOD (Netmod Working Group) Working Group";
    contact
        "WG Web:  <http://tools.ietf.org/wg/netmod/>
        WG List: <mailto:netmod@ietf.org>

        WG Chair: Juergen Schoenwaelder
        <mailto:j.schoenwaelder@jacobs-university.de>

        WG Chair: Tom Nadeau
        <mailto:tnadeau@lucidvision.com>

        Editor: Aseem Choudhary
        <mailto:asechoud@cisco.com>

        Editor: Shitanshu Shah
        <mailto:svshah@cisco.com>
    }

    description
        "This module contains a collection of YANG definitions for
        configuring diffserv specification implementations.

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        authors of the code. All rights reserved.

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        Relating to IETF Documents
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        This version of this YANG module is part of RFC XXXX; see
        the RFC itself for full legal notices.";

    revision 2015-04-07 {
        description
            "Latest revision of diffserv policy"
        reference "RFC XXXX";
    }
}
feature policy-template-support {
    description
        "This feature allows policy template to be configured";
}

feature hierarchial-policy-support {
    description
        "This feature allows hierarchical policy to be configured";
}

grouping policy-generic-attr {
    description
        "Policy Attributes";
    leaf policy-name {
        type string;
        description
            "Diffserv policy name";
    }
    leaf policy-descr {
        type string;
        description
            "Diffserv policy description";
    }
}

identity action-type {
    description
        "This base identity type defines action-types";
}

grouping classifier-action-entry-cfg {
    description
        "List of Configuration of classifier & associated actions";
    list classifier-action-entry-cfg {
        key "action-type";
        ordered-by user;
        description
            "Configuration of classifier & associated actions";
        leaf action-type {
            type identityref {
                base action-type;
            }
            description
                "This defines action type";
        }
        choice action-cfg-params {
description
   "Choice of action types";

}
}
}

container policies {
  if-feature policy-template-support;
  description
   "list of policy templates";
  list policy-entry {
    key "policy-name";
    description
     "policy template";
    uses policy-generic-attr;
    list classifier-entry {
      key "classifier-entry-name";
      ordered-by user;
      description
       "Classifier entry configuration in a policy";
      leaf classifier-entry-name {
        type string;
        description
         "Diffserv classifier entry name";
      }
      uses classifier:classifier-entry-inline-attr;
      uses classifier-action-entry-cfg;
    }
  }
}
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-
  0.1.8/ydk/models/openconfig/_yang/ietf-diffserv-policy.yang
No license file was found, but licenses were detected in source scan.

module ietf-inet-types {
  namespace "urn:ietf:params:xml:ns:yang:ietf-inet-types";
  prefix inet;

  organization
   "IETF NETMOD (NETCONF Data Modeling Language) Working Group";
  contact
   "WG Web:  <http://tools.ietf.org/wg/netmod/>"
   WG List:   <mailto:netmod@ietf.org>

    WG Chair: David Kessens
This module contains a collection of generally useful derived YANG data types for Internet addresses and related things.

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This version of this YANG module is part of RFC 6991; see the RFC itself for full legal notices.

revision 2013-07-15 {
  description
  "This revision adds the following new data types:
  - ip-address-no-zone
  - ipv4-address-no-zone
  - ipv6-address-no-zone";
  reference "RFC 6991: Common YANG Data Types";
}
revision 2010-09-24 {
  description
  "Initial revision.";
  reference "RFC 6021: Common YANG Data Types";
}

typedef ip-version {
  type enumeration {
    enum "unknown" {
      value 0;
      description
      "An unknown or unspecified version of the Internet protocol.";
    }
    enum "ipv4" {
      value 1;
      

typedef dscp {
  type uint8 {
    range "0..63";
  }
  description
    "The dscp type represents a Differentiated Services Code Point
    that may be used for marking packets in a traffic stream.
    In the value set and its semantics, this type is equivalent
    to the Dscp textual convention of the SMIv2.";
  reference
    "RFC 3289: Management Information Base for the Differentiated
     Services Architecture
    RFC 2474: Definition of the Differentiated Services Field
     (DS Field) in the IPv4 and IPv6 Headers
    RFC 2780: IANA Allocation Guidelines For Values In
     the Internet Protocol and Related Headers";
}

typedef ipv6-flow-label {
  type uint32 {
    range "0..1048575";
  }
  description
    "The ipv6-flow-label type represents the flow identifier or Flow
    Label in an IPv6 packet header that may be used to
discriminate traffic flows.

    In the value set and its semantics, this type is equivalent
typedef port-number {
    type uint16 {
        range "0..65535";
    }
    description
    "The port-number type represents a 16-bit port number of an
    Internet transport-layer protocol such as UDP, TCP, DCCP, or
    SCTP. Port numbers are assigned by IANA. A current list of
    all assignments is available from <http://www.iana.org/>.
    
    Note that the port number value zero is reserved by IANA. In
    situations where the value zero does not make sense, it can
    be excluded by subtyping the port-number type.
    In the value set and its semantics, this type is equivalent
to the InetPortNumber textual convention of the SMIv2.";
    reference
    "RFC 768: User Datagram Protocol
    RFC 793: Transmission Control Protocol
    RFC 4960: Stream Control Transmission Protocol
    RFC 4340: Datagram Congestion Control Protocol (DCCP)
    RFC 4001: Textual Conventions for Internet Network Addresses";
}

tYPedef as-number {
    type uint32;
    description
    "The as-number type represents autonomous system numbers
which identify an Autonomous System (AS). An AS is a set
of routers under a single technical administration, using
an interior gateway protocol and common metrics to route
packets within the AS, and using an exterior gateway
protocol to route packets to other ASes. IANA maintains
the AS number space and has delegated large parts to the
regional registries.

    Autonomous system numbers were originally limited to 16
bits. BGP extensions have enlarged the autonomous system
number space to 32 bits. This type therefore uses an uint32
base type without a range restriction in order to support
a larger autonomous system number space.

    In the value set and its semantics, this type is equivalent
to the InetAutonomousSystemNumber textual convention of the SMIv2.

reference
"RFC 1930: Guidelines for creation, selection, and registration of an Autonomous System (AS)
RFC 4271: A Border Gateway Protocol 4 (BGP-4)
RFC 4001: Textual Conventions for Internet Network Addresses
RFC 6793: BGP Support for Four-Octet Autonomous System (AS) Number Space";

typedef ip-address {
  type union {
    type inet:ipv4-address;
    type inet:ipv6-address;
  }
}

description
"The ip-address type represents an IP address and is IP version neutral. The format of the textual representation implies the IP version. This type supports scoped addresses by allowing zone identifiers in the address format."

reference "RFC 4007: IPv6 Scoped Address Architecture";

typedef ipv4-address {
  type string {
    pattern "((\[[0-9a-fA-F]{0,4}\]|\.[0-9a-fA-F]{0,4}|1\.[0-9]{1,3}|2\.[0-4][0-9]|25[0-5])\.)\{3\}((\[[0-9a-fA-F]{0,4}\]|\.[0-9a-fA-F]{0,4}|1\.[0-9]{1,3}|2\.[0-4][0-9]|25[0-5])\)%?";
  }
}

description
"The ipv4-address type represents an IPv4 address in dotted-quad notation. The IPv4 address may include a zone index, separated by a % sign.

The zone index is used to disambiguate identical address values. For link-local addresses, the zone index will typically be the interface index number or the name of an interface. If the zone index is not present, the default zone of the device will be used.

The canonical format for the zone index is the numerical format";

typedef ipv6-address {
  type string {
    pattern "((\[[0-9a-fA-F]{0,4}\]|\.[0-9a-fA-F]{0,4}|1\.[0-9]{1,3}|2\.[0-4][0-9]|25[0-5])\.)\{3\}(\[[0-9a-fA-F]{0,4}\]|\.[0-9a-fA-F]{0,4}|1\.[0-9]{1,3}|2\.[0-4][0-9]|25[0-5])\)%?";
  }
}
pattern "(([^:/]+:){6}(([^:/]+:\[^:/]+)|(.*\..*)))|((([^:/]+:)*[^:/]+)?::(([^:/]+:)*[^:/]+)?(%+.)?";
}
description
"The ipv6-address type represents an IPv6 address in full, mixed, shortened, and shortened-mixed notation. The IPv6 address may include a zone index, separated by a % sign.

The zone index is used to disambiguate identical address values. For link-local addresses, the zone index will typically be the interface index number or the name of an interface. If the zone index is not present, the default zone of the device will be used.

The canonical format of IPv6 addresses uses the textual representation defined in Section 4 of RFC 5952. The canonical format for the zone index is the numerical format as described in Section 11.2 of RFC 4007."
reference
"RFC 4291: IP Version 6 Addressing Architecture
RFC 4007: IPv6 Scoped Address Architecture
RFC 5952: A Recommendation for IPv6 Address Text Representation";
}
typedef ip-address-no-zone {
type union {
type inet:ipv4-address-no-zone;
type inet:ipv6-address-no-zone;
}
description
"The ip-address-no-zone type represents an IP address and is IP version neutral. The format of the textual representation implies the IP version. This type does not support scoped addresses since it does not allow zone identifiers in the address format.";
reference "RFC 4007: IPv6 Scoped Address Architecture";
}
typedef ipv4-address-no-zone {
type inet:ipv4-address {
pattern "[0-9]\..*";
}
description
"An IPv4 address without a zone index. This type, derived from ipv4-address, may be used in situations where the zone is known from the context and hence no zone index is needed.";
}
typedef ipv6-address-no-zone {
    type inet:ipv6-address {
        pattern "[0-9a-fA-F:\.]*";
    }
    description
    "An IPv6 address without a zone index. This type, derived from
    ipv6-address, may be used in situations where the zone is
    known from the context and hence no zone index is needed.";
    reference
    "RFC 4291: IP Version 6 Addressing Architecture
    RFC 4007: IPv6 Scoped Address Architecture
    RFC 5952: A Recommendation for IPv6 Address Text
    Representation";
}

typedef ip-prefix {
    type union {
        type inet:ipv4-prefix;
        type inet:ipv6-prefix;
    }
    description
    "The ip-prefix type represents an IP prefix and is IP
    version neutral. The format of the textual representations
    implies the IP version.";
}

typedef ipv4-prefix {
    type string {
        pattern "((\[0-9\]|1-9\]|1\-9\]|2\-5\]}\.)\(3)\)\(0-9\]|1-9\]|0-9\]|2\-5\]|0-9\]|1-9\]|0-9\]|2\-5\]|0-9\]|9-9\]|2\-5\]|0-9\]|1-2\]|9-9\]|3\-2\))";
    description
    "The ipv4-prefix type represents an IPv4 address prefix.
    The prefix length is given by the number following the
    slash character and must be less than or equal to 32.

    A prefix length value of n corresponds to an IP address
    mask that has n contiguous 1-bits from the most
    significant bit (MSB) and all other bits set to 0.

    The canonical format of an IPv4 prefix has all bits of
    the IPv4 address set to zero that are not part of the
    IPv4 prefix.";
}

typedef ipv6-prefix {
    type string {
        pattern "(((0-9a-fA-F):0-9a-F]:0,4]):0-9a-F]:0,4])0,5])0,5]0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-9a-F]:0,4])0,5]0-
The ipv6-prefix type represents an IPv6 address prefix. The prefix length is given by the number following the slash character and must be less than or equal to 128.

A prefix length value of n corresponds to an IP address mask that has n contiguous 1-bits from the most significant bit (MSB) and all other bits set to 0.

The IPv6 address should have all bits that do not belong to the prefix set to zero.

The canonical format of an IPv6 prefix has all bits of the IPv6 address set to zero that are not part of the IPv6 prefix. Furthermore, the IPv6 address is represented as defined in Section 4 of RFC 5952.

Internet domain names are only loosely specified. Section 3.5 of RFC 1034 recommends a syntax (modified in Section 2.1 of RFC 1123). The pattern above is intended to allow for current practice in domain name use, and some possible future expansion. It is designed to hold various types of domain names, including names used for A or AAAA records (host names) and other records, such as SRV records. Note that Internet host names have a stricter syntax (described in RFC 952) than the DNS recommendations in RFCs 1034 and 1123, and that systems that want to store host names in schema nodes using the domain-name type are recommended to adhere to this stricter standard to ensure interoperability.
The encoding of DNS names in the DNS protocol is limited to 255 characters. Since the encoding consists of labels prefixed by a length byte and there is a trailing NULL byte, only 253 characters can appear in the textual dotted notation.

The description clause of schema nodes using the domain-name type MUST describe when and how these names are resolved to IP addresses. Note that the resolution of a domain-name value may require to query multiple DNS records (e.g., A for IPv4 and AAAA for IPv6). The order of the resolution process and which DNS record takes precedence can either be defined explicitly or may depend on the configuration of the resolver.

Domain-name values use the US-ASCII encoding. Their canonical format uses lowercase US-ASCII characters. Internationalized domain names MUST be A-labels as per RFC 5890.

reference
"RFC 952: DoD Internet Host Table Specification
RFC 1034: Domain Names - Concepts and Facilities
RFC 1123: Requirements for Internet Hosts -- Application and Support
RFC 2782: A DNS RR for specifying the location of services (DNS SRV)
RFC 5890: Internationalized Domain Names in Applications (IDNA): Definitions and Document Framework";

typedef host {
  type union {
    type inet:ip-address;
    type inet:domain-name;
  }
  description
  "The host type represents either an IP address or a DNS domain name.;"
}

typedef uri {
  type string;
  description
  "The uri type represents a Uniform Resource Identifier (URI) as defined by STD 66.

  Objects using the uri type MUST be in US-ASCII encoding, and MUST be normalized as described by RFC 3986 Sections 6.2.1, 6.2.2.1, and 6.2.2.2. All unnecessary
percent-encoding is removed, and all case-insensitive characters are set to lowercase except for hexadecimal digits, which are normalized to uppercase as described in Section 6.2.2.1.

The purpose of this normalization is to help provide unique URIs. Note that this normalization is not sufficient to provide uniqueness. Two URIs that are textually distinct after this normalization may still be equivalent.

Objects using the uri type may restrict the schemes that they permit. For example, 'data:' and 'urn:' schemes might not be appropriate.

A zero-length URI is not a valid URI. This can be used to express 'URI absent' where required.

In the value set and its semantics, this type is equivalent to the Uri SMIv2 textual convention defined in RFC 5017.

"RFC 3986: Uniform Resource Identifier (URI): Generic Syntax
RFC 3305: Report from the Joint W3C/IETF URI Planning Interest Group: Uniform Resource Identifiers (URIs), URLs, and Uniform Resource Names (URNs): Clarifications and Recommendations
RFC 5017: MIB Textual Conventions for Uniform Resource Identifiers (URIs)"

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-inet-types.yang
No license file was found, but licenses were detected in source scan.

```python
*
```

Model for managing system-wide services and functions on network devices.

Portions of this code were derived from IETF RFC 7317.
Please reproduce this note if possible.

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```python
import sys
from collections import OrderedDict
from ydk.types import Entity as _Entity_
from ydk.types import EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.types import Entity, EntityPath, Identity, Enum, YType, YLeaf, YLeafList, YList, LeafDataList, Bits, Empty, Decimal64
from ydk.filters import YFilter
from ydk.errors import YError, YModelError
from ydk.errors.error_handler import handle_type_error as _handle_type_error

class NTPAUTHTYPE(Identity):
    """
    Base identity for encryption schemes supported for NTP authentication keys
    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self, ns="http://openconfig.net/yang/system", pref="openconfig-system", tag="openconfig-system:NTP_AUTH_TYPE"): # is not consistent with type
        if sys.version_info > (3,):
            super().__init__(ns, pref, tag)
        else:
            super(NTPAUTHTYPE, self).__init__(ns, pref, tag)

class System(_Entity_):
    """
    Enclosing container for system-related configuration and operational state data
    """
    
```

---
.. attribute:: config

Global configuration data for the system

**type**: :py:class:`Config <ydk.models.openconfig.openconfig_system.System.Config>`

.. attribute:: state

Global operational state data for the system

**type**: :py:class:`State <ydk.models.openconfig.openconfig_system.System.State>`

**config**: False

.. attribute:: clock

Top-level container for clock configuration data

**type**: :py:class:`Clock <ydk.models.openconfig.openconfig_system.System.Clock>`

.. attribute:: dns

Enclosing container for DNS resolver data

**type**: :py:class:`Dns <ydk.models.openconfig.openconfig_system.System.Dns>`

.. attribute:: ntp

Top-level container for NTP configuration and state

**type**: :py:class:`Ntp <ydk.models.openconfig.openconfig_system.System.Ntp>`

.. attribute:: grpc_server

Top-level container for the gRPC server

**type**: :py:class:`GrpcServer <ydk.models.openconfig.openconfig_system.System.GrpcServer>`

.. attribute:: ssh_server

Top-level container for ssh server

**type**: :py:class:`SshServer <ydk.models.openconfig.openconfig_system.System.SshServer>`

.. attribute:: telnet_server

Top-level container for telnet terminal servers

**type**: :py:class:`TelnetServer <ydk.models.openconfig.openconfig_system.System.TelnetServer>`

.. attribute:: logging

Top-level container for data related to logging / syslog

**type**: :py:class:`Logging <ydk.models.openconfig.openconfig_system.System.Logging>`
.. attribute:: aaa
Top-level container for AAA services
**type**: :py:class:`Aaa <ydk.models.openconfig.openconfig_system.System.Aaa>`

.. attribute:: memory
Top-level container for system memory data
**type**: :py:class:`Memory <ydk.models.openconfig.openconfig_system.System.Memory>`

.. attribute:: cpus
Enclosing container for the list of CPU cores on the system
**type**: :py:class:`Cpus <ydk.models.openconfig.openconfig_system.System.Cpus>`

**config**: False

.. attribute:: processes
Parameters related to all monitored processes
**type**: :py:class:`Processes <ydk.models.openconfig.openconfig_system.System.Processes>`

.. attribute:: alarms
Top-level container for device alarms
**type**: :py:class:`Alarms <ydk.models.openconfig.openconfig_system.System.Alarms>`

**config**: False

```python
_prefix = 'oc-sys'
_revision = '2018-07-17'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System, self).__init__()
    self._top_entity = None
    self.yang_name = "system"
    self.yang_parent_name = "openconfig-system"
    self.is_top_level_class = True
    self.has_list_ancestor = False
    self.ylist_key_names = []
```

self._leafs = OrderedDict()

self.config = System.Config()
self.config.parent = self
self._children_name_map["config"] = "config"

self.state = System.State()
self.state.parent = self
self._children_name_map["state"] = "state"

self.clock = System.Clock()
self.clock.parent = self
self._children_name_map["clock"] = "clock"

self.dns = System.Dns()
self.dns.parent = self
self._children_name_map["dns"] = "dns"

self.ntp = System.Ntp()
self.ntp.parent = self
self._children_name_map["ntp"] = "ntp"

self.grpc_server = System.GrpcServer()
self.grpc_server.parent = self
self._children_name_map["grpc_server"] = "grpc-server"

self.ssh_server = System.SshServer()
self.ssh_server.parent = self
self._children_name_map["ssh_server"] = "ssh-server"

self.telnet_server = System.TelnetServer()
self.telnet_server.parent = self
self._children_name_map["telnet_server"] = "telnet-server"

self.logging = System.Logging()
self.logging.parent = self
self._children_name_map["logging"] = "logging"

self.aaa = System.Aaa()
self.aaa.parent = self
self._children_name_map["aaa"] = "aaa"
self.memory = System.Memory()
self.memory.parent = self
self._children_name_map["memory"] = "memory"

self.cpus = System.Cpus()
self.cpus.parent = self
self._children_name_map["cpus"] = "cpus"

self.processes = System.Processes()
self.processes.parent = self
self._children_name_map["processes"] = "processes"

self.alarms = System.Alarms()
self.alarms.parent = self
self._children_name_map["alarms"] = "alarms"
self._segment_path = lambda: "openconfig-system:system"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System, [], name, value)

class Config(_Entity_):
    """
    Global configuration data for the system
    .. attribute:: hostname

    The hostname of the device \-\- should be a single domain label, without the domain
    **type**\: str

    **length**:\ 1..253

    .. attribute:: domain_name

    Specifies the domain name used to form fully qualified name for unqualified hostnames
    **type**\: str

    **length**:\ 1..253

    .. attribute:: login_banner

    The console login message displayed before the login prompt, i.e., before a user logs into the system
    **type**\: str

    .. attribute:: motd_banner

    The console message displayed after a user logs into the system. They system may append additional standard
information such as the current system date and time, uptime, last login timestamp, etc

**type**: str

---

_**prefix** = 'oc-sys'
_**revision** = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Config, self).__init__()

self.yang_name = "config"
self.yang_parent_name = "system"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([(
    'hostname', (YLeaf(YType.str, 'hostname'), ['str'])),
    ('domain_name', (YLeaf(YType.str, 'domain-name'), ['str'])),
    ('login_banner', (YLeaf(YType.str, 'login-banner'), ['str'])),
    ('motd_banner', (YLeaf(YType.str, 'motd-banner'), ['str'])),
])
self.hostname = None
self.domain_name = None
self.login_banner = None
self.motd_banner = None
self._segment_path = lambda: "config"
self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Config, ['hostname', 'domain_name', 'login_banner', 'motd_banner'], name,
value)

class State(_Entity_):
    """
    Global operational state data for the system

    .. attribute:: hostname

    """
The hostname of the device — should be a single domain label, without the domain

**type**

str

**length:** 1..253

**config**

False

.. attribute:: domain_name

Specifies the domain name used to form fully qualified name for unqualified hostnames

**type**

str

**length:** 1..253

**config**

False

.. attribute:: login_banner

The console login message displayed before the login prompt, i.e., before a user logs into the system

**type**

str

**config**

False

.. attribute:: motd_banner

The console message displayed after a user logs into the system. They system may append additional standard information such as the current system date and time, uptime, last login timestamp, etc

**type**

str

**config**

False

.. attribute:: current_datetime

The current system date and time

**type**

str

**pattern:** ^\[0-9]{4}[-][0-9]{2}[-][0-9]{2}\[T\[0-9]{2}[:][0-9]{2}\[2]\:[0-9]{2}\[2]\:[0-9]{2}(\.[0-9]+)?Z\[\+-][0-9]{2}\:[0-9]{2}$

**config**

False

.. attribute:: boot_time

This timestamp indicates the time that the system was last restarted. The value is the timestamp in seconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**

int

**range:** 0..18446744073709551615
**config**: False

```
*_prefix = 'oc-sys'
*_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.State, self).__init__()

self.yang_name = "state"
self.yang_parent_name = "system"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([
    ('hostname', (YLeaf(YType.str, 'hostname'), ['str'])),
    ('domain_name', (YLeaf(YType.str, 'domain-name'), ['str'])),
    ('login_banner', (YLeaf(YType.str, 'login-banner'), ['str'])),
    ('motd_banner', (YLeaf(YType.str, 'motd-banner'), ['str'])),
    ('current_datetime', (YLeaf(YType.str, 'current-datetime'), ['str'])),
    ('boot_time', (YLeaf(YType.uint64, 'boot-time'), ['int'])),
])

self.hostname = None
self.domain_name = None
self.login_banner = None
self.motd_banner = None
self.current_datetime = None
self.boot_time = None
self._segment_path = lambda: "state"
self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.State, ['hostname', 'domain_name', 'login_banner', 'motd_banner',
                                            'current_datetime', 'boot_time'], name, value)

class Clock(_Entity_):
    """
```
Top-level container for clock configuration data

.. attribute:: config

Configuration data for system clock
**type**: :py:class:`Config <ydk.models.openconfig.openconfig_system.System.Clock.Config>`

.. attribute:: state

Operational state data for system clock
**type**: :py:class:`State <ydk.models.openconfig.openconfig_system.System.Clock.State>`

**config**: False


_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):  
        super().__init__()  
    else:
        super(System.Clock, self).__init__()

    self.yang_name = "clock"
    self.yang_parent_name = "system"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []

    self._leafs = OrderedDict()

    self.config = System.Clock.Config()
    self.config.parent = self

    self._children_name_map["config"] = "config"

    self.state = System.Clock.State()
    self.state.parent = self

    self._children_name_map["state"] = "state"

    self._segment_path = lambda: "clock"
    self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()

    self._is_frozen = True

def __setattr__(self, name, value):
class Config(_Entity_):
    """
    Configuration data for system clock
    """
    .. attribute:: timezone_name
    
The TZ database name to use for the system, such as 'Europe/Stockholm'
    **type**: str

    ""

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Clock.Config, self).__init__()

    self.yang_name = "config"
    self.yang_parent_name = "clock"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([

        ('timezone_name', (YLeaf(YType.str, 'timezone-name'), ['str']))
    ])
    self.timezone_name = None
    self._segment_path = lambda: "config"
    self._absolute_path = lambda: "openconfig-system:system/clock/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Clock.Config, ['timezone_name'], name, value)

class State(_Entity_):
    """
    Operational state data for system clock
    """
.. attribute:: timezone_name

The TZ database name to use for the system, such as 'Europe/Stockholm'

**type**: str

**config**: False

```
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Clock.State, self).__init__()

    self.yang_name = "state"
    self.yang_parent_name = "clock"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'timezone_name': (YLeaf(YType.str, 'timezone-name'), ['str'])
    })
    self.timezone_name = None
    self._segment_path = lambda: "state"
    self._absolute_path = lambda: "openconfig-system:system/clock/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Clock.State, ['timezone_name'], name, value)

class Dns(_Entity_):
    """
    Enclosing container for DNS resolver data
    """

    .. attribute:: config

    Configuration data for the DNS resolver

    **type**: :py:class:`Config <ydk.models.openconfig.openconfig_system.System.Dns.Config>`
.. attribute:: state

Operational state data for the DNS resolver

**config**: False

.. attribute:: servers

Enclosing container for DNS resolver list
**type**: :py:class:`Servers <ydk.models.openconfig.openconfig_system.System.Dns.Servers>`

.. attribute:: host_entries

Enclosing container for list of static host entries

```
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Dns, self).__init__()

    self.yang_name = "dns"
    self.yang_parent_name = "system"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        ("config", ("config", System.Dns.Config)),
        ("state", ("state", System.Dns.State)),
        ("servers", ("servers", System.Dns.Servers)),
        ("host-entries", ("host_entries", System.Dns.HostEntries)))
    self._leafs = OrderedDict()

    self.config = System.Dns.Config()
    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state = System.Dns.State()
    self.state.parent = self
    self._children_name_map["state"] = "state"
```
self.servers = System.Dns.Servers()
self.servers.parent = self
self._children_name_map["servers"] = "servers"

self.host_entries = System.Dns.HostEntries()
self.host_entries.parent = self
self._children_name_map["host_entries"] = "host-entries"
self._segment_path = lambda: "dns"
self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Dns, [], name, value)


class Config(_Entity_):
    """
    Configuration data for the DNS resolver
    """
    .. attribute:: search

    An ordered list of domains to search when resolving a host name
    **type**: list of str

    **length**: **1..253

    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Dns.Config, self).__init__()

    self.yang_name = "config"
    self.yang_parent_name = "dns"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict({
        'search': (YLeafList(YType.str, 'search'), ['str']),
    })
    self._children_names = []

    def __setattr__(self, name, value):
        self._perform_setattr(System.Dns, [], name, value)
class State(_Entity_):
    """
    Operational state data for the DNS resolver
    .. attribute:: search

    An ordered list of domains to search when resolving a host name
    
    **type**: list of str
    **length**: 1..253
    **config**: False
    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:
            super(System.Dns.State, self).__init__()

        self.yang_name = "state"
        self.yang_parent_name = "dns"
        self.is_top_level_class = False
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._child_classes = OrderedDict()
        self._leafs = OrderedDict(
            (YLeafList(YType.str, 'search'), ['str'])),
        )
        self.search = []
        self._segment_path = lambda: "state"
class Servers(_Entity_):
    
    Enclosing container for DNS resolver list
    .. attribute:: server

    List of the DNS servers that the resolver should query. When the resolver is invoked by a calling application, it sends the query to the first name server in this list. If no response has been received within 'timeout' seconds, the resolver continues with the next server in the list. If no response is received from any server, the resolver continues with the first server again. When the resolver has traversed the list 'attempts' times without receiving any response, it gives up and returns an error to the calling application. Implementations MAY limit the number of entries in this list

    .. py:class:: Server

    List of :py:class:`Server`

    ..

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:
            super(System.Dns.Servers, self).__init__()

        self.yang_name = "servers"
        self.yang_parent_name = "dns"
        self.is_top_level_class = False
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._leafs = OrderedDict()

        self.server = YList(self)
        self._segment_path = lambda: "servers"
        self._absolute_path = lambda: "openconfig-system:system/dns/%s" % self._segment_path()
        self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(System.Dns.Servers, [], name, value)

class Server(_Entity_):
    
    List of the DNS servers that the resolver should query.

    When the resolver is invoked by a calling application, it
    sends the query to the first name server in this list. If
    no response has been received within 'timeout' seconds,
    the resolver continues with the next server in the list.
    If no response is received from any server, the resolver
    continues with the first server again. When the resolver
    has traversed the list 'attempts' times without receiving
    any response, it gives up and returns an error to the
    calling application.

    Implementations MAY limit the number of entries in this
    list.

    .. attribute:: address (key)

    References the configured address of the DNS server
    **type**: union of the below types:

    **type**: str

    **pattern**: ^((\[0-9a-fA-F\]{1,4}:){7}(\[0-9a-fA-F\]{1,4}:)|((\[0-9a-fA-F\]{1,4}:){1,7}:|((\[0-9a-fA-F\]{1,4}:){1,6}:|((\[0-9a-fA-F\]{1,4}:){1,5}:|((\[0-9a-fA-F\]{1,4}:){1,4}:|((\[0-9a-fA-F\]{1,4}:){1,3}:|((\[0-9a-fA-F\]{1,4}:){1,2}:|\[0-9a-fA-F\]{1,4}:|:\[0-9a-fA-F\]{1,4}:|:\))|:\))|:\))$**

    .. attribute:: config

    Configuration data for each DNS resolver
    **type**: :py:class:`Config`

.. attribute:: state

Operational state data for each DNS resolver

**type**:: :py:class:`State`


**config**:: False

....

_ prefix = 'oc-sys'
_ revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Dns.Servers.Server, self).__init__()

    self.yang_name = "server"
    self.yang_parent_name = "servers"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yang_key_names = ['address']
    self._leafs = OrderedDict([('address', YLeaf(YType.str, 'address'), ['str']),
                                ])
    self.address = None

    self.config.parent = self
    self._children_name_map['config'] = "config"

    self.state.parent = self
    self._children_name_map['state'] = "state"
    self._segment_path = lambda: "server" + "[address='" + str(self.address) + "]"
    self._absolute_path = lambda: "openconfig-system:system/dns/servers/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Dns.Servers.Server, ['address'], name, value)
class Config(_Entity_):
    
    Configuration data for each DNS resolver
    
    .. attribute:: address

    The address of the DNS server, can be either IPv4 or IPv6
    **type**: union of the below types:
    **type**: str
    **pattern**: ^((\[0-9a-fA-F\]{1,4}\:){7}\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){6}\:\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){5}\:\:\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){4}\:\:\:\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){3}\:\:\:\:\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){2}\:\:\:\:\:\[0-9a-fA-F\]{1,4}\|\[0-9a-fA-F\]{1,4}\:((\:\[0-9a-fA-F\]{1,4}){1,6})\|:\((\:\[0-9a-fA-F\]{1,4}){1,7}\|:\))$
    **type**: str
    **pattern**: ^((\[0-9a-fA-F\]{1,4}\:){7}\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){6}\:\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){5}\:\:\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){4}\:\:\:\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){3}\:\:\:\:\[0-9a-fA-F\]{1,4}\|\(\[0-9a-fA-F\]{1,4}\:){2}\:\:\:\:\:\[0-9a-fA-F\]{1,4}\|\[0-9a-fA-F\]{1,4}\:((\:\[0-9a-fA-F\]{1,4}){1,6})\|:\((\:\[0-9a-fA-F\]{1,4}){1,7}\|:\))$

    .. attribute:: port

    The port number of the DNS server
    **type**: int
    **range**: 0..65535
    **default value**: 53

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "config"
    self.yang_parent_name = "server"
    self.is_top_level_class = False
self.has_list_ancestor = True
self.yang_keys = []
self._child_classes = OrderedDict(
    (address, (YLeaf(YType.str, 'address'), ['str', 'str'])),
    (port, (YLeaf(YType.uint16, 'port'), ['int'])),
)
self.address = None
self.port = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Dns.Servers.Server.Config, ['address', 'port'], name, value)

class State(_Entity_):
    """
    Operational state data for each DNS resolver
    """

    .. attribute:: address

    The address of the DNS server, can be either IPv4 or IPv6
    **type**: union of the below types:

    **type**: str

    **pattern**: 
    ^((\d\d\d\d)\.(\d\d\d\d)\.(\d\d\d\d)\.(\d\d) )\(, )\((\d\d\d\d)\.(\d\d\d\d)\.(\d\d\d\d)\.(\d\d) )\$ \n
    **type**: str

    **pattern**: 
    ^(([0-9a-fA-F]{1,4})\.(\d\d\d\d)\.(\d\d\d\d)\.(\d\d) )\(, )\(([0-9a-fA-F]{1,4})\.(\d\d\d\d)\.(\d\d\d\d)\.(\d\d) )\$ \n
    **config**: False

    .. attribute:: port

    The port number of the DNS server
    **type**: int

    **range**: 0..65535

    ---
**config**: False

**default value**: 53

```python
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Dns.Servers.Server.State, self).__init__()

    self.yang_name = "state"
    self.yang_parent_name = "server"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(["address", "port"])

    self.address = None
    self.port = None
    self._segment_path = lambda: "state"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Dns.Servers.Server.State, ['address', 'port'], name, value)

class HostEntries(_Entity_):
    ...
    Enclosing container for list of static host entries

    .. attribute:: host_entry

    List of static host entries

    **type**: list of :py:class:`HostEntry`

    <ydk.models.openconfig.openconfig_system.System.Dns.Class.HostEntry>"
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Dns.HostEntries, self).__init__()

    self.yang_name = "host-entries"
    self.yang_parent_name = "dns"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict([("host-entry", "host_entry")])
    self._leafs = OrderedDict()

    self.host_entry = YList(self)
    self._segment_path = lambda: "host-entries"
    self._absolute_path = lambda: "openconfig-system:system/dns/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Dns.HostEntries, [], name, value)

class HostEntry(_Entity_):
    ""
    List of static host entries
    ""

    .. attribute:: hostname  (key)

       Reference to the hostname list key

       **type**: str


    .. attribute:: config

       Configuration data for static host entries

.. attribute:: state

Operational state data for static host entries

**type**: :py:class:`State


**config**: False

.....

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Dns.HostEntries.HostEntry, self).__init__()

    self.yang_name = "host-entry"
    self.yang_parent_name = "host-entries"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yang_classifiers = ['hostname']
    self._child_classes = OrderedDict([("config", (YLeaf(YType.str, 'hostname'), ['str'])),
                          ("state", (YLeaf(YType.str, 'hostname'), ['str'])
                          )])
    self.hostname = None

    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state.parent = self
    self._children_name_map["state"] = "state"
    self._segment_path = lambda: "host-entry" + "[hostname='" + str(self.hostname) + "']"
    self._absolute_path = lambda: "openconfig-system:system/dns/host-entries/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Dns.HostEntries.HostEntry, ['hostname'], name, value)
class Config(_Entity_):
    
    Configuration data for static host entries

    .. attribute:: hostname

    Hostname for the static DNS entry
    **type**: str

    .. attribute:: alias

    Additional aliases for the hostname
    **type**: list of str

    .. attribute:: ipv4_address

    List of IPv4 addresses for the host entry
    **type**: list of str

    **pattern:** ^((\[0-9\]|1\[0-9\]|1[0-9]\.\[0-9\]|2\[0-4]\.\[0-9\]|25\[0-5]\)\.\{3\}(\[0-9\]|1\[0-9\]|1[0-9]\.\[0-9\]|2\[0-4]\.\[0-9\]|25\[0-5]\)\$)

    .. attribute:: ipv6_address

    List of IPv6 addresses for the host entry
    **type**: list of str

    **pattern:** ^((\[0-9a-fA-F]\[1,4]\|7\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F]\[1,4]\|\[0-9a-fA-F\]}}\$)

    ..

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:
            super(System.Dns.HostEntries.HostEntry.Config, self).__init__()

        self.yang_name = "config"
self.yang_parent_name = \"host-entry\"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([(
\'hostname\', (YLeaf(YType.str, \'hostname\'), [\'str\'])),
\'alias\', (YLeafList(YType.str, \'alias\'), [\'str\'])),
\'ipv4_address\', (YLeafList(YType.str, \'ipv4-address\'), [\'str\'])),
\'ipv6_address\', (YLeafList(YType.str, \'ipv6-address\'), [\'str\'])),
])
self.hostname = None
self.alias = []
self.ipv4_address = []
self.ipv6_address = []
self._segment_path = lambda: \"config\"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Dns.HostEntries.HostEntry.Config, [\'hostname\', \'alias\', \'ipv4_address\', \'ipv6_address\'], name, value)

class State(_Entity_):
    
    Operational state data for static host entries

    .. attribute:: hostname

    Hostname for the static DNS entry

    **type**:: str

    **config**:: False

    .. attribute:: alias

    Additional aliases for the hostname

    **type**:: list of str

    **config**:: False

    .. attribute:: ipv4_address

    List of IPv4 addresses for the host entry

    **type**:: list of str

    **pattern**:: ^((\[0-9\]|\[1-9]\[0-9\]|1[0-9]\[0-9\]|2[0-4]\[0-9\]|25[0-5]\.)\{3\})(\[0-9\]|\[1-9]\[0-9\]|1[0-9]-
**config**: False

.. attribute:: ipv6_address

List of IPv6 addresses for the host entry

**type**: list of str

**pattern**: ^((\[0-9a-fA-F]{1,4}\:){1,7}\[0-9a-fA-F]{1,4}\|\([0-9a-fA-F]{1,4}\:){1,7}\|\([0-9a-fA-F]{1,4}\:){1,6}\:\[0-9a-fA-F]{1,4}\|\([0-9a-fA-F]{1,4}\:){1,5}\:\[0-9a-fA-F]{1,4}\|\([0-9a-fA-F]{1,4}\:){1,5}\:\[0-9a-fA-F]{1,4}\|\([0-9a-fA-F]{1,4}\:){1,4}\:\[0-9a-fA-F]{1,4}\|\([0-9a-fA-F]{1,4}\:){1,3}\:\[0-9a-fA-F]{1,4}\|\([0-9a-fA-F]{1,4}\:){1,2}\:\[0-9a-fA-F]{1,4}\|\[0-9a-fA-F]{1,4}\:((\:\[0-9a-fA-F]{1,4}){1,6})\|:\((\:\[0-9a-fA-F]{1,4}){1,7}\|:\))$**

**config**: False

****

__prefix = 'oc-sys'
__revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Dns.HostEntries.HostEntry.State, self).__init__()

    self.yang_name = "state"
    self.yang_parent_name = "host-entry"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('hostname', (YLeaf(YType.str, 'hostname'), ['str'])),
        ('alias', (YLeafList(YType.str, 'alias'), ['str'])),
        ('ipv4_address', (YLeafList(YType.str, 'ipv4-address'), ['str'])),
        ('ipv6_address', (YLeafList(YType.str, 'ipv6-address'), ['str'])),
    )

    self.hostname = None
    self.alias = []
    self.ipv4_address = []
    self.ipv6_address = []

    self._segment_path = lambda: "state"
    self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(System.Dns.HostEntries.HostEntry.State, ['hostname', 'alias', 'ipv4_address', 'ipv6_address'], name, value)

class Ntp(_Entity_):
    # Top-level container for NTP configuration and state
    .. attribute:: config
        Configuration data for NTP client
    .. attribute:: state
        Operational state data for NTP services
        **config**: False
    .. attribute:: ntp_keys
        Enclosing container for list of NTP authentication keys
    .. attribute:: servers
        Enclosing container for the list of NTP servers

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Ntp, self).__init__()}
self.yang_name = "ntp"
self.yang_parent_name = "system"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._leafs = OrderedDict()

self.config = System.Ntp.Config()
self.config.parent = self
self._children_name_map["config"] = "config"

self.state = System.Ntp.State()
self.state.parent = self
self._children_name_map["state"] = "state"

self.ntp_keys.parent = self
self._children_name_map["ntp_keys"] = "ntp-keys"

self.servers = System.Ntp.Servers()
self.servers.parent = self
self._children_name_map["servers"] = "servers"
self._segment_path = lambda: "servers"
self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Ntp, [], name, value)

class Config(_Entity_):
    
    Configuration data for NTP client.

    .. attribute:: enabled

    Enables the NTP protocol and indicates that the system should attempt to synchronize the system clock with
    an NTP server from the servers defined in the 'ntp/server' list
    **type**:
    bool

    **default value**:
    false

    .. attribute:: ntp_source_address

    Source address to use on outgoing NTP packets
**type**:: union of the below types:

**type**:: str

**pattern:**^((\[0\-9\]|(1\-9)|(0\-9)|1\(0\-9)|(0\-9)|2\(0\-4)|(0\-9)|25\(0\-5\))\.){3}(\[0\-9\]|(1\-9)|(0\-9)|1\(0\-9)|(0\-9)|2\(0\-4)|(0\-9)|25\(0\-5\))$

**type**:: str

**pattern:**^((\[0\-9a\-fA\-fF\]{1,4}\:\){7}\[0\-9a\-fA\-fF\]{1,4}\:\){1,7}\[0\-9a\-fA\-fF\]{1,4}\:\){1,16}\[0\-9a\-fA\-fF\]{1,4}\:\){1,32}\[0\-9a\-fA\-fF\]{1,4}\:\){1,64}\[0\-9a\-fA\-fF\]{1,4}\:\){1,128}\[0\-9a\-fA\-fF\]{1,4}\:\){1,256}\[0\-9a\-fA\-fF\]{1,4}\:\){1,512}\[0\-9a\-fA\-fF\]{1,4}\:\){1,1024}\[0\-9a\-fA\-fF\]{1,4}\:\){1,2048}\[0\-9a\-fA\-fF\]{1,4}\:\){1,4096}\[0\-9a\-fA\-fF\]{1,4}\:\){1,8192}$

.. attribute:: enable_ntp_auth

Enable or disable NTP authentication - when enabled, the system will only use packets containing a trusted authentication key to synchronize the time

**type**:: bool

**default value**:: false

.....

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Ntp.Config, self).__init__()

self.yang_name = "config"
self.yang_parent_name = "ntp"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([ ('enabled', (YLeaf(YType.boolean, 'enabled'), ['bool'])), ('ntp_source_address', (YLeaf(YType.str, 'ntp-source-address'), ['str','str'])), ('enable_ntp_auth', (YLeaf(YType.boolean, 'enable-ntp-auth'), ['bool'])), ])
self.enabled = None
self.ntp_source_address = None
self.enable_ntp_auth = None
self._segment_path = lambda: "config"
self._absolute_path = lambda: "openconfig-system:system/ntp/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Ntp.Config, ['enabled', 'ntp_source_address', 'enable_ntp_auth'], name, value)

class State(_Entity_):
    ""
    Operational state data for NTP services.
    ""

    .. attribute:: enabled

    Enables the NTP protocol and indicates that the system should attempt to synchronize the system clock with
    an NTP server from the servers defined in the 'ntp/server' list
    **type**: bool
    **config**: False
    **default value**: false

    .. attribute:: ntp_source_address

    Source address to use on outgoing NTP packets
    **type**: union of the below types:
    **type**: str
    **pattern**: ^((\d\.|\d\d\.|\d+\d\d\.|\d+\d\d\d\.)\d+)\d+$
    **type**: str
    **pattern**: ^((\d\.|\d\d\.|\d+\d\d\.|\d+\d\d\d\.)\d+)\d+$
    **config**: False

    .. attribute:: enable_ntp_auth

    Enable or disable NTP authentication \
    when enabled, the system will only use packets containing a trusted
authentication key to synchronize the time

**type**: bool

**config**: False

**default value**: false

.. attribute:: auth_mismatch

Count of the number of NTP packets received that were not processed due to authentication mismatch

**type**: int

**range**: 0..18446744073709551615

**config**: False

```
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Ntp.State, self).__init__()

self.yang_name = "state"
self.yang_parent_name = "ntp"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict()
self._leafs = OrderedDict(
    (('enabled', (YLeaf(YType.boolean, 'enabled'), ['bool'])),
     ('ntp_source_address', (YLeaf(YType.str, 'ntp-source-address'), ['str','str'])),
     ('enable_ntp_auth', (YLeaf(YType.boolean, 'enable-ntp-auth'), ['bool'])),
     ('auth_mismatch', (YLeaf(YType.uint64, 'auth-mismatch'), ['int'])),
))
self.enabled = None
self.ntp_source_address = None
self.enable_ntp_auth = None
self.auth_mismatch = None
self._segment_path = lambda: "state"
self._absolute_path = lambda: "openconfig-system:system/ntp/%s" % self._segment_path()
self._is_frozen = True
def __setattr__(self, name, value):
    self._perform_setattr(System.Ntp.State, ['enabled', 'ntp_source_address', 'enable_ntp_auth', 'auth_mismatch'], name, value)

class NtpKeys(_Entity_):
    
    Enclosing container for list of NTP authentication keys

    .. attribute:: ntp_key

    List of NTP authentication keys
    **type**: list of :py:class:`NtpKey`


    ..

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:
            super(System.Ntp.NtpKeys, self).__init__()

        self.yang_name = "ntp-keys"
        self.yang_parent_name = "ntp"
        self.is_top_level_class = False
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._leafs = OrderedDict()

        self.ntp_key = YList(self)

        self._segment_path = lambda: "ntp-keys"
        self._absolute_path = lambda: "openconfig-system:system/ntp/%s" % self._segment_path()
        self._is_frozen = True

        def __setattr__(self, name, value):
            self._perform_setattr(System.Ntp.NtpKeys, [], name, value)

    class NtpKey(_Entity_):
List of NTP authentication keys

.. attribute:: key_id (key)

Reference to auth key-id list key
**type**: int
**range**: 0..65535

.. attribute:: config

Configuration data for NTP auth keys

.. attribute:: state

Operational state data for NTP auth keys

**config**: False
def __setattr__(self, name, value):
    self._perform_setattr(System.Ntp.NtpKeys.NtpKey, ['key_id'], name, value)

class Config(_Entity_):
    """
    Configuration data for NTP auth keys
    
    .. attribute:: key_id

    Integer identifier used by the client and server to designate a secret key. The client and server must use the same key id
    **type**:: int
    
    **range**: 0..65535
    
    .. attribute:: key_type

    Encryption type used for the NTP authentication key
    **type**: :py:class: NTPAUTHTYPE
    <ydk.models.openconfig.openconfig_system.NTPAUTHTYPE>
    
    .. attribute:: key_value

    NTP authentication key value
    **type**:: str
    """

_prefix = 'oc-sys'
_revision = '2018-07-17'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

self.yang_name = "config"
self.yang_parent_name = "ntp-key"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict(
    [(YLeaf(YType.uint16, 'key-id'), ['int']),
     (YLeaf(YType.identityref, 'key-type'), ['ydk.models.openconfig.openconfig_system', 'NTPAUTHTYPE']),
     (YLeaf(YType.str, 'key-value'), ['str'])])
self.key_id = None
self.key_type = None
self.key_value = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):

class State(_Entity_):
    # Operational state data for NTP auth keys

    .. attribute:: key_id

        Integer identifier used by the client and server to designate a secret key. The client and server must use the same key id
        **type**: int
        **range**: 0..65535
        **config**: False

    .. attribute:: key_type

        Encryption type used for the NTP authentication key
**type**: :py:class:`NTPAUTHTYPE`<ydk.models.openconfig.openconfig_system.NTPAUTHTYPE>

**config**: False

.. attribute:: key_value

NTP authentication key value

**type**: str

**config**: False

```
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "state"
    self.yang_parent_name = "ntp-key"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        []
    )
    self._leafs = OrderedDict(
        [('key_id', (YLeaf(YType.uint16, 'key-id'), ['int'])),
         ('key_type', (YLeaf(YType.identityref, 'key-type'), [('ydk.models.openconfig.openconfig_system', 'NTPAUTHTYPE')])),
         ('key_value', (YLeaf(YType.str, 'key-value'), ['str']))
    )
    self.key_id = None
    self.key_type = None
    self.key_value = None
    self._segment_path = lambda: "state"
    self._is_frozen = True

def __setattr__(self, name, value):
```
class Servers(_Entity_):
    ""
    Enclosing container for the list of NTP servers
    .. attribute:: server

    List of NTP servers to use for system clock synchronization. If `/system/ntp/enabled` is 'true', then the system will attempt to contact and utilize the specified NTP servers
    *
    **type**: list of  
is 'true', then the system will attempt to 
contact and utilize the specified NTP servers.

.. attribute:: address (key)

References the configured address or hostname of the NTP server

**type**: \union\ of the below types:

**type**: str

**pattern**: **^((\[0-9\]|1\-9|0\-9|1[0-9]|0\-9|2[0-4]|0\-9|25|0\-5])\(\.|\))(3)(\[0-9\]|1\-9|0\-9|\[1-9]|0\-9|2[0-4]|0\-9|25|0\-5])$**

**type**: str

**pattern**: **^((\[0-9a-fA-F]\{1,4\}\:\){7}\[0-9a-fA-F]\{1,4\}\:\){1,7}\:\\:\:\:\\:\:\:\:\|((\[0-9a-fA-F]\{1,4\}\:\){1,6}\:\|((\[0-9a-fA-F]\{1,4\}\:\){1,5}\:\|((\[0-9a-fA-F]\{1,4\}\:\){1,4}\:\|((\[0-9a-fA-F]\{1,4\}\:\){1,3}\:\|((\[0-9a-fA-F]\{1,4\}\:\){1,2}\:\|((\[0-9a-fA-F]\{1,4\}\:\){1,1}\:\\:\:\:\\:\:\:\:\|((\[0-9a-fA-F]\{1,4\}\:\){1,0}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-1}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-2}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-3}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-4}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-5}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-6}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-7}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-8}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-9}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-10}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-11}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-12}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-13}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-14}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-15}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-16}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-17}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-18}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-19}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-20}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-21}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-22}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-23}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-24}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-25}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-26}\:\\:\:\:\:\:\:\:\\|((\[0-9a-fA-F]\{1,4\}\:\){-27}\:\\:\:\:\:\:\\)\$**

**type**: str

**length**: **1..253**


.. attribute:: config

Configuration data for an NTP server


.. attribute:: state

Operational state data for an NTP server


**config**: False

```
_prefix = 'oc-sys'
_revision = '2018-07-17'
```
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Ntp.Servers.Server, self).__init__()

self.yang_name = "server"
self.yang_parent_name = "servers"
self.is_top_level_class = False
self.has_list_ancestor = False
self.yang_key_names = ['address']
self._leafs = OrderedDict([('address', (YLeaf(YType.str, 'address'), ['str']))])
self.address = None
self.config.parent = self
self._children_name_map['config'] = 'config'
self.state.parent = self
self._children_name_map['state'] = 'state'
self._segment_path = lambda: "server" + '[address=' + str(self.address) + ']'
self._absolute_path = lambda: "openconfig-system:system/ntp/servers/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Ntp.Servers.Server, ['address'], name, value)

class Config(_Entity_):
    ***
    Configuration data for an NTP server.

    .. attribute:: address

    The address or hostname of the NTP server
    **type**:: union of the below types:

    **type**:: str

    **pattern**:: ^(([0-9]?[1-9][0-9]?|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)\(3\)([0-9]?[1-9][0-9]|1[0-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$
The port number of the NTP server
   **type**: int

   **range**: 0..65535

   **default value**: 123

.. attribute:: version

   Version number to put in outgoing NTP packets
   **type**: int

   **range**: 1..4

   **default value**: 4

.. attribute:: association_type

   The desired association type for this NTP server
   **type**: :py:class:`AssociationType`


   **default value**: SERVER

.. attribute:: iburst

   Indicates whether this server should enable burst synchronization or not
   **type**: bool

   **default value**: false

.. attribute:: prefer

   Indicates whether this server should be preferred or not
**type**: bool

**default value**: false

```python
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

self.yang_name = "config"
self.yang_parent_name = "server"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict({})
self._leafs = OrderedDict({
    'address': (YLeaf(YType.str, 'address'), ['str', 'str', 'str']),
    'port': (YLeaf(YType.uint16, 'port'), ['int']),
    'version': (YLeaf(YType.uint8, 'version'), ['int']),
    'association_type': (YLeaf(YType.enumeration, 'association-type'),
    'iburst': (YLeaf(YType.boolean, 'iburst'), ['bool']),
    'prefer': (YLeaf(YType.boolean, 'prefer'), ['bool'])
})
self.address = None
self.port = None
self.version = None
self.association_type = None
self.iburst = None
self.prefer = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):

class AssociationType(Enum):
    ...
The desired association type for this NTP server.

```
.. data:: SERVER = 0

Use client association mode. This device
will not provide synchronization to the
configured NTP server.
```

```
.. data:: PEER = 1

Use symmetric active association mode.
This device may provide synchronization
to the configured NTP server.
```

```
.. data:: POOL = 2

Use client association mode with one or
more of the NTP servers found by DNS
resolution of the domain name given by
the 'address' leaf. This device will not
provide synchronization to the servers.
```

```
SERVER = Enum.YLeaf(0, "SERVER")
PEER = Enum.YLeaf(1, "PEER")
POOL = Enum.YLeaf(2, "POOL")
```

```
class State(_Entity_):
    ""
    Operational state data for an NTP server.
    ""
    .. attribute:: address
```
The address or hostname of the NTP server
**type**: union of the below types:

**type**: str

**pattern**: ^((\[0-9\]|(1\-[9]\[0-9]\]|(1[\-9]\[0-9]\]|2\[0-4]\[0-9]\]|2\[5]\[0-5]))\(3\)|((0-9\[1\-9]\[0-9]\|1[\-0-9]\[0-9]\]|2\[0-4]\[0-9]\]|2\[5]\[0-5]))$}

**type**: str

**pattern**: ^((\[0-9a-fA-F]\[1,4]\(7\]|(0-9a-fA-F]\[1,4]\)|((9\-9a-fA-F]\[1,4]\)|((9\-9a-fA-F]\[1,4]\)|((9\-9a-fA-F]\[1,4]\))\(1,7\)|((9\-9a-fA-F]\|1,4\))\(1,6\)|((9\-9a-fA-F]\|1,4\))\(1,5\)|((9\-9a-fA-F]\|1,4\))\(1,5\)|((9\-9a-fA-F]\|1,4\))\(1,4\)|((9\-9a-fA-F]\|1,4\))\(1,4\)|((9\-9a-fA-F]\|1,4\))\(1,4\)|((9\-9a-fA-F]\|1,4\))\(1,3\)|((9\-9a-fA-F]\|1,4\))\(1,3\)|((9\-9a-fA-F]\|1,4\))\(1,2\)|((9\-9a-fA-F]\|1,4\))\(1,2\)|((9\-9a-fA-F]\|1,4\))\(1,1\)|((9\-9a-fA-F]\|1,4\))\(1,1\)|((9\-9a-fA-F]\|1,4\)|((9\-9a-fA-F]\|1,4\))\(1,0\)|((9\-9a-fA-F]\|1,4\))\(1,0\)|((9\-9a-fA-F]\|1,4\))\(1,0\))))\$}

**type**: str

**length**: 1..253

**config**: False

...

The port number of the NTP server
**type**: int

**range**: 0..65535

**config**: False

**default value**: 123

...

Version number to put in outgoing NTP packets
**type**: int

**range**: 1..4

**config**: False

**default value**: 4

...

The desired association type for this NTP server
**type**: :py:func:`AssociationType`
**config**: False

**default value**: SERVER

.. attribute:: iburst

Indicates whether this server should enable burst synchronization or not

**type**: bool

**config**: False

**default value**: false

.. attribute:: prefer

Indicates whether this server should be preferred or not

**type**: bool

**config**: False

**default value**: false

.. attribute:: stratum

Indicates the level of the server in the NTP hierarchy. As stratum number increases, the accuracy is degraded. Primary servers are stratum 1 while a maximum value of 16 indicates unsynchronized. The values have the following specific semantics:

<table>
<thead>
<tr>
<th>Value</th>
<th>Semantics</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>unspecified or invalid</td>
</tr>
<tr>
<td>1</td>
<td>primary server (e.g., equipped with a GPS receiver)</td>
</tr>
<tr>
<td>2-15</td>
<td>secondary server (via NTP)</td>
</tr>
<tr>
<td>16</td>
<td>unsynchronized</td>
</tr>
<tr>
<td>17-255</td>
<td>reserved</td>
</tr>
</tbody>
</table>

**type**: int

**range**: 0..255

**config**: False

.. attribute:: root_delay

The round-trip delay to the server, in milliseconds

**type**: int

**range**: 0..4294967295

**config**: False

**units**: milliseconds

.. attribute:: root_dispersion
Dispersion (epsilon) represents the maximum error inherent in the measurement
**type**:: int

**range:** 0..18446744073709551615

**config**:: False

**units**:: milliseconds

.. attribute:: offset

Estimate of the current time offset from the peer. This is the time difference between the local and reference clock
**type**:: int

**range:** 0..18446744073709551615

**config**:: False

**units**:: milliseconds

.. attribute:: poll_interval

Polling interval of the peer
**type**:: int

**range:** 0..4294967295

**config**:: False

**units**:: seconds

....

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "state"
    self.yang_parent_name = "server"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([('address', (YLeaf(YType.str, 'address'), ['str','str','str'])),
('port', (YLeaf(YType.uint16, 'port'), ['int'])),
('version', (YLeaf(YType.uint8, 'version'), ['int'])),
('association_type', (YLeaf(YType.enumeration, 'association-type'), (['ydk.models.openconfig.openconfig_system', 'System', 'Ntp.Servers.Server.State.AssociationType']))),
('iburst', (YLeaf(YType.boolean, 'iburst'), ['bool'])),
('prefer', (YLeaf(YType.boolean, 'prefer'), ['bool'])),
('stratum', (YLeaf(YType.uint8, 'stratum'), ['int'])),
('root_delay', (YLeaf(YType.uint32, 'root-delay'), ['int'])),
('root_dispersion', (YLeaf(YType.uint64, 'root-dispersion'), ['int'])),
('offset', (YLeaf(YType.uint64, 'offset'), ['int'])),
('poll_interval', (YLeaf(YType.uint32, 'poll-interval'), ['int']))])
self.address = None
self.port = None
self.version = None
self.association_type = None
self.iburst = None
self.prefer = None
self.stratum = None
self.root_delay = None
self.root_dispersion = None
self.offset = None
self.poll_interval = None
self._segment_path = lambda: "state"
self._is_frozen = True

def __setattr__(self, name, value):

class AssociationType(Enum):
    SERVER = 0

    AssociationType (Enum Class)

    The desired association type for this NTP server.

    .. data:: SERVER = 0

    Use client association mode. This device

    will not provide synchronization to the
configured NTP server.

.. data:: PEER = 1

Use symmetric active association mode.

This device may provide synchronization to the configured NTP server.

.. data:: POOL = 2

Use client association mode with one or more of the NTP servers found by DNS resolution of the domain name given by the 'address' leaf. This device will not provide synchronization to the servers.

```python
SERVER = Enum.YLeaf(0, "SERVER")

PEER = Enum.YLeaf(1, "PEER")

POOL = Enum.YLeaf(2, "POOL")
```

class GrpcServer(_Entity_):
    
    Top-level container for the gRPC server

    .. attribute:: config

    Configuration data for the system gRPC server


    .. attribute:: state

    Operational state data for the system gRPC server

**config**: False

```python
...

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.GrpcServer, self).__init__()

    self.yang_name = "grpc-server"
    self.yang_parent_name = "system"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        ("config", (System.GrpcServer.Config)),
        ("state", (System.GrpcServer.State)))
    self._leafs = OrderedDict()
    self.config = System.GrpcServer.Config()
    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state = System.GrpcServer.State()
    self.state.parent = self
    self._children_name_map["state"] = "state"
    self._segment_path = lambda: "grpc-server"
    self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.GrpcServer, [], name, value)

class Config(_Entity_):
    """
    Configuration data for the system gRPC server
    """

    .. attribute:: enable

    Enables the gRPC server. The gRPC server is enabled by default
```
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.GrpcServer.Config, self).__init__()

self.yang_name = "config"
self.yang_parent_name = "grpc-server"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([
    ('enable', (YLeaf(YType.boolean, 'enable'), ['bool'])),
    ('port', (YLeaf(YType.uint16, 'port'), ['int'])),
    ('transport_security', (YLeaf(YType.boolean, 'transport-security'), ['bool'])),
    ('certificate_id', (YLeaf(YType.str, 'certificate-id'), ['str'])),
    ('listen_addresses', (YLeafList(YType.str, 'listen-addresses'), ['str', 'str', ('ydk.models.openconfig.openconfig_system', 'System', 'GrpcServer.State.ListenAddresses')]))],
)

self.enable = None
self.port = None
self.transport_security = None
self.certificate_id = None
self.listen_addresses = []
self._segment_path = lambda: "config"
self._absolute_path = lambda: "openconfig-system:system/grpc-server/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.GrpcServer.Config, ['enable', 'port', 'transport_security', 'certificate_id', 'listen_addresses'], name, value)

class ListenAddresses(Enum):
    ANY = 0

ListenAddresses (Enum Class)

The IP addresses that the gRPC server should listen on. This may be an IPv4 or an IPv6 address

.. data:: ANY = 0

The gRPC daemon should listen on any address

bound to an interface on the system.
class State(_Entity_):
    
    Operational state data for the system gRPC server

    .. attribute:: enable

    Enables the gRPC server. The gRPC server is enabled by default
    **type**:: bool

    **config**:: False

    **default value**:: true

    .. attribute:: port

    TCP port on which the gRPC server should listen
    **type**:: int

    **range:** 0..65535

    **config**:: False

    .. attribute:: transport_security

    Enables gRPC transport security (e.g., TLS or SSL)
    **type**:: bool

    **config**:: False

    .. attribute:: certificate_id

    The certificate ID to be used for authentication
    **type**:: str

    **config**:: False

    .. attribute:: listen_addresses

    The IP addresses that the gRPC server should listen on. This may be an IPv4 or an IPv6 address
    **type**:: union of the below types:
**type**\*\*\*: list of str

**pattern**\*\*\*: ^((\([0-9]\|\[1-9][0-9]\|1[0-9][0-9]\|0[0-9][0-9]\|2[0-4][0-9][0-9]\|25[0-5]\])\.)\{3\}(\([0-9]\|\[1-9][0-9]\|1[0-9][0-9]\|0[0-9][0-9]\|2[0-4][0-9][0-9]\|25[0-5]\))$
self.certificate_id = None
self.listen_addresses = []
self._segment_path = lambda: "state"
self._absolute_path = lambda: "openconfig-system:system/grpc-server/\%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.GrpcServer.State, ['enable', 'port', 'transport_security', 'certificate_id', 'listen_addresses'], name, value)

class ListenAddresses(Enum):
    """
    ListenAddresses (Enum Class)
    
The IP addresses that the gRPC server should listen
    on. This may be an IPv4 or an IPv6 address
    
    .. data:: ANY = 0
    
The gRPC daemon should listen on any address
    bound to an interface on the system.
    """

    ANY = Enum.YLeaf(0, "ANY")

class SshServer(_Entity_):
    """
    Top-level container for ssh server
    """

    .. attribute:: config

    Configuration data for the system ssh server

    .. attribute:: state

    Operational state data for the system ssh server

    **config**: False
```python
__prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.SshServer, self).__init__()

    self.yang_name = "ssh-server"
    self.yang_parent_name = "system"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict()
    self._children_name_map["config"] = "config"

    self.config = System.SshServer.Config()
    self.config.parent = self

    self._children_name_map["state"] = "state"
    self.state = System.SshServer.State()
    self.state.parent = self

    self._segment_path = lambda: "ssh-server"
    self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()

    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.SshServer, [], name, value)

class Config(_Entity_):
    """
    Configuration data for the system ssh server
    .. attribute:: enable

    Enables the ssh server. The ssh server is enabled by default
    **type** bool
    **default value** true
```
.. attribute:: protocol_version

Set the protocol version for SSH connections to the system
**type**: :py:class:`ProtocolVersion`

**default value**: V2

.. attribute:: timeout

Set the idle timeout in seconds on terminal connections to the system for the protocol
**type**: int

**range**: 0..65535

**units**: seconds

.. attribute:: rate_limit

Set a limit on the number of connection attempts per minute to the system for the protocol
**type**: int

**range**: 0..65535

**units**: conn/min

.. attribute:: session_limit

Set a limit on the number of simultaneous active terminal sessions to the system for the protocol (e.g., ssh, telnet, ...)
**type**: int

**range**: 0..65535

```
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.SshServer.Config, self).__init__()

    self.yang_name = "config"
```
self.yang_parent_name = "ssh-server"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict()
self._leafs = OrderedDict(
    ("enable", (YLeaf(YType.boolean, 'enable'), ['bool'])),
    ("protocol_version", (YLeaf(YType.enumeration, 'protocol-version'),
    ("timeout", (YLeaf(YType.uint16, 'timeout'), ['int'])),
    ("rate_limit", (YLeaf(YType.uint16, 'rate-limit'), ['int'])),
    ("session_limit", (YLeaf(YType.uint16, 'session-limit'), ['int'])),
)
self.enable = None
self.protocol_version = None
self.timeout = None
self.rate_limit = None
self.session_limit = None
self._segment_path = lambda: "config"
self._absolute_path = lambda: "openconfig-system:system/ssh-server/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.SshServer.Config, ['enable', 'protocol_version', 'timeout', 'rate_limit',
    'session_limit'], name, value)

class ProtocolVersion(Enum):
    ...
    V2 = Enum.YLeaf(0, "V2")

Set the protocol version for SSH connections to the system

.. data:: V2 = 0

Use SSH v2 only

.. data:: V1 = 1

Use SSH v1 only

.. data:: V1_V2 = 2

Use either SSH v1 or v2

V2 = Enum.YLeaf(0, "V2")
class State(_Entity_):
    
    Operational state data for the system ssh server

    .. attribute:: enable

    Enables the ssh server. The ssh server is enabled by default
    **type**: bool

    **config**: False

    **default value**: true

    .. attribute:: protocol_version

    Set the protocol version for SSH connections to the system
    **type**: :py:class:`ProtocolVersion`

    **config**: False

    **default value**: V2

    .. attribute:: timeout

    Set the idle timeout in seconds on terminal connections to the system for the protocol
    **type**: int

    **range**: 0..65535

    **config**: False

    **units**: seconds

    .. attribute:: rate_limit

    Set a limit on the number of connection attempts per minute to the system for the protocol
    **type**: int

    **range**: 0..65535
.. attribute:: session_limit

Set a limit on the number of simultaneous active terminal sessions to the system for the protocol (e.g., ssh, telnet, ...)

**type**: int

**range**: 0..65535

**config**: False

```python
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.SshServer.State, self).__init__()

self.yang_name = "state"
self.yang_parent_name = "ssh-server"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict({})
self._leafs = OrderedDict({
    'enable': (YLeaf(YType.boolean, 'enable'), ['bool']),
    'protocol_version': (YLeaf(YType.enumeration, 'protocol-version'),
                         (YLeaf(YType.enumeration, 'protocol-version'),
                          (YLeaf(YType.enumeration, 'protocol-version'),
                           (YLeaf(YType.enumeration, 'protocol-version'),
                            (YLeaf(YType.enumeration, 'protocol-version'),
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                                                                         (YLeaf(YType.enumeration, 'protocol-version'),
                                                                          (YLeaf(YType.enumeration, 'protocol-version'),
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                                                                             (YLeaf(YType.enumeration, 'protocol-version'),
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                                                                                        (YLeaf(YType.enumeration, 'protocol-version'),
                                                                                         (YLeaf(YType.enumeration, 'protocol-version'),
                                                                                          (YLeaf(YType.enumeration, 'protocol-version'),
                                                                                           (YLeaf(YType.enumeration, 'protocol-version'),
                                                                                             (YLeaf(YType.enumeration, 'protocol-version'),
                                                                                              (YLeaf(YType.enumeration, 'protocol-version'),
                                                                                               (YLeaf(YType.enumeration, 'protocol-version'),
                                                                                               'timeout', (YLeaf(YType.uint16, 'timeout'), ['int'])),
                                                                                               ('rate_limit', (YLeaf(YType.uint16, 'rate-limit'), ['int'])),
                                                                                               ('session_limit', (YLeaf(YType.uint16, 'session-limit'), ['int'])),
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                    )
                )
            )
        )
    )

self.enable = None
self.protocol_version = None
self.timeout = None
self.rate_limit = None
self.session_limit = None
self._segment_path = lambda: "state"
self._absolute_path = lambda: "openconfig-system:system/ssh-server/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.SshServer.State, ['enable', 'protocol_version', 'timeout', 'rate_limit', 'session_limit'], name, value)

class ProtocolVersion(Enum):
    
    ProtocolVersion (Enum Class)

    Set the protocol version for SSH connections to the system

    .. data:: V2 = 0

    Use SSH v2 only

    .. data:: V1 = 1

    Use SSH v1 only

    .. data:: V1_V2 = 2

    Use either SSH v1 or v2

    V2 = Enum.YLeaf(0, "V2")

    V1 = Enum.YLeaf(1, "V1")

    V1_V2 = Enum.YLeaf(2, "V1_V2")

class TelnetServer(_Entity_):
    
    Top-level container for telnet terminal servers

    .. attribute:: config

    Configuration data for telnet

    **type**: :py:class:`Config <ydk.models.openconfig.openconfig_system.System.TelnetServer.Config>`

    .. attribute:: state

    Operational state data for telnet

**config**: False

```python
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.TelnetServer, self).__init__()

    self.yang_name = "telnet-server"
    self.yang_parent_name = "system"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict()

    self.config = System.TelnetServer.Config()
    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state = System.TelnetServer.State()
    self.state.parent = self
    self._children_name_map["state"] = "state"
    self._segment_path = lambda: "telnet-server"
    self._absolute_path = lambda: "openconfig-system:system/%s/%s" % self._segment_path()
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.TelnetServer, [], name, value)

class Config(_Entity_):
    """
    Configuration data for telnet
    """

    .. attribute:: enable

    Enables the telnet server. Telnet is disabled by default
```
**type**: bool
**default value**: false

.. attribute:: timeout

Set the idle timeout in seconds on terminal connections to the system for the protocol

**type**: int

**range**: **0..65535**

**units**: seconds

.. attribute:: rate_limit

Set a limit on the number of connection attempts per minute to the system for the protocol

**type**: int

**range**: **0..65535**

**units**: conn/min

.. attribute:: session_limit

Set a limit on the number of simultaneous active terminal sessions to the system for the protocol (e.g., ssh, telnet, ...)

**type**: int

**range**: **0..65535**

```
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()  
    else:
        super(System.TelnetServer.Config, self).__init__()

    self.yang_name = "config"
    self.yang_parent_name = "telnet-server"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
```
self._child_classes = OrderedDict([  
('enable', (YLeaf(YType.boolean, 'enable'), ['bool'])),  
('timeout', (YLeaf(YType.uint16, 'timeout'), ['int'])),  
('rate_limit', (YLeaf(YType.uint16, 'rate-limit'), ['int'])),  
('session_limit', (YLeaf(YType.uint16, 'session-limit'), ['int']))  
])
self.enable = None
self.timeout = None
self.rate_limit = None
self.session_limit = None
self._segment_path = lambda: "config"
self._absolute_path = lambda: "openconfig-system:system/telnet-server/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.TelnetServer.Config, ['enable', 'timeout', 'rate_limit', 'session_limit'], name, value)


class State(_Entity_):
    """
    Operational state data for telnet
    """
    .. attribute:: enable

    Enables the telnet server. Telnet is disabled by default
    **type**: bool
    
    **config**: False
    
    **default value**: false

    .. attribute:: timeout

    Set the idle timeout in seconds on terminal connections to the system for the protocol
    **type**: int
    
    **range:** 0..65535
    
    **config**: False
    
    **units**: seconds

    .. attribute:: rate_limit

    Set a limit on the number of connection attempts per minute to the system for the protocol
.. attribute:: session_limit

Set a limit on the number of simultaneous active terminal sessions to the system for the protocol (e.g., ssh, telnet, ...)

.. code-block:: python

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:
            super(System.TelnetServer.State, self).__init__()

        self.yang_name = "state"
        self.yang_parent_name = "telnet-server"
        self.is_top_level_class = False
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict(
            (('enable', (YLeaf(YType.boolean, 'enable'), ['bool'])),
             ('timeout', (YLeaf(YType.uint16, 'timeout'), ['int'])),
             ('rate_limit', (YLeaf(YType.uint16, 'rate-limit'), ['int'])),
             ('session_limit', (YLeaf(YType.uint16, 'session-limit'), ['int'])),
            ))
        self.enable = None
        self.timeout = None
        self.rate_limit = None
        self.session_limit = None
        self._segment_path = lambda: "state"
class System:
    expand_location = lambda: "openconfig-system:system/telnet-server/%s" % self._segment_path()
    is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.TelnetServer.State, ['enable', 'timeout', 'rate_limit', 'session_limit'], name, value)

    class TelnetServer(_Entity_):
        """
        Top-level container for data related to Telnet Server
        """
        enable = None
        timeout = None
        rate_limit = None
        session_limit = None

    class Console(Base):
        """
        Top-level container for data related to console-based logging
        """
        _prefix = 'oc-system'
        _revision = '2018-07-17'

        def __init__(self):
            if sys.version_info > (3,):
                super().__init__()
            else:
                super(System.Logging, self).__init__()

            self.yang_name = "logging"
            self.yang_parent_name = "system"
            self.is_top_level_class = False
            self.has_list_ancestor = False
            self.yang_list_key_names = []


            self._leaves = OrderedDict()

            self.console = System.Logging.Console()
self.console.parent = self
self._children_name_map["console"] = "console"

self.remote_servers = System.Logging.RemoteServers()
self.remote_servers.parent = self
self._children_name_map["remote_servers"] = "remote-servers"
self._segment_path = lambda: "logging"
self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Logging, [], name, value)

class Console(_Entity_):
    """
    Top-level container for data related to console-based logging
    .. attribute:: config

    Configuration data for console logging
    **type**: :py:class:`Config`
    
    .. attribute:: state

    Operational state data for console logging
    
    **config**: False

    .. attribute:: selectors

    Enclosing container
    **type**: :py:class:`Selectors`
    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init()
else:
    super(System.Logging.Console, self).__init__()

self.yang_name = "console"
sel.fyang_parent_name = "logging"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ym_key_names = []
self._leafs = OrderedDict()

sel.config.parent = self
self._children_name_map["config"] = "config"

self.state = System.Logging.Console.State()
sel.state.parent = self
self._children_name_map["state"] = "state"

self.selectors = System.Logging.Console.Selectors()
sel.selectors.parent = self
self._children_name_map["selectors"] = "selectors"
self._segment_path = lambda: "console"
self._absolute_path = lambda: "openconfig-system:system/logging/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Logging.Console, [], name, value)

class Config(_Entity_):
    """
    Configuration data for console logging
    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super()
        else:
            super(System.Logging.Console.Config, self).__init__()}
class State(_Entity_):
    
    Operational state data for console logging

    

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:
            super(System.Logging.Console.State, self).__init__()

        self.yang_name = "state"
        self.yang_parent_name = "console"
        self.is_top_level_class = False
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict()
        self._segment_path = lambda: "state"
        self._absolute_path = lambda: "openconfig-system:system/logging/console/%s" % self._segment_path()
        self.is_frozen = True

    class Selectors(_Entity_):
        
        Enclosing container

        .. attribute:: selector
List of selectors for log messages

**type**: list of :py:class:`Selector`

```python
<ydks.models.openconfig.openconfig_system_logging.Selector>
```
Reference to severity list key
**type**: :py:class:`SyslogSeverity
<ydk.models.openconfig.openconfig_system_logging.SyslogSeverity>`

.. attribute:: config

Configuration data
**type**: :py:class:`Config

.. attribute:: state

Operational state data
**type**: :py:class:`State

**config**: False

```

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Logging.Console.Selectors.Selector, self).__init__()

    self.yang_name = "selector"
    self.yang_parent_name = "selectors"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yang_key_names = ['facility', 'severity']
    self._child_classes = OrderedDict({
        'config': (YLeaf(YType.identityref, 'facility'),
        [('ydk.models.openconfig.openconfig_system_logging', 'SYSLOGFACILITY')]),
        'state': (YLeaf(YType.enumeration, 'severity'),
        [('ydk.models.openconfig.openconfig_system_logging', 'SyslogSeverity', '')])
    )

    self.facility = None
    self.severity = None
```
self.config.parent = self
self._children_name_map["config"] = "config"

self.state.parent = self
self._children_name_map["state"] = "state"
self._segment_path = lambda: "selector" + "[facility='" + str(self.facility) + "']" + "[severity='" + str(self.severity) + "]"
self._absolute_path = lambda: "openconfig-system:system/logging/console/selectors/%s" %
self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Logging.Console.Selectors.Selector, ['facility', 'severity'], name, value)

class Config(_Entity_):
    
    Configuration data

    .. attribute:: facility

    Specifies the facility, or class of messages to log

    .. type:: :py:class:`SYSLOGFACILITY`

    .. attribute:: severity

    Specifies that only messages of the given severity (or greater severity) for the corresponding facility are logged

    .. type:: :py:class:`SyslogSeverity`

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "config"
self.yang_parent_name = "selector"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([
    ('facility', (YLeaf(YType.identityref, 'facility'),
        ['ydk.models.openconfig.openconfig_system_logging', 'SYSLOGFACILITY'])),
    ('severity', (YLeaf(YType.enumeration, 'severity'),
        ['ydk.models.openconfig.openconfig_system_logging', 'SyslogSeverity', ''])),
])
self.facility = None
self.severity = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):

class State(_Entity_):
    
    Operational state data

    .. attribute:: facility

    Specifies the facility, or class of messages to log

    **type**: :py:class:`SYSLOGFACILITY

    \[ydk.models.openconfig.openconfig_system_logging.SYSLOGFACILITY\]`

    **config**: False

    .. attribute:: severity

    Specifies that only messages of the given severity (or greater severity) for the corresponding facility are logged

    **type**: :py:class:`SyslogSeverity

    \[ydk.models.openconfig.openconfig_system_logging.SyslogSeverity\]`

    **config**: False

    

_prefix = 'oc-sys'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "state"
    self.yang_parent_name = "selector"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
        [('facility', (YLeaf(YType.identityref, 'facility'), [YeLink(YType.identityref, 'facility'),
            [YLeaf(YType.openconfig.openconfig_system_logging.SyslogFacility, 'SYSLOGFACILITY')])]),
        ('severity', (YLeaf(YType.enumeration, 'severity'), [YeLink(YType.enumeration, 'severity'),
            [YLeaf(YType.openconfig.openconfig_system_logging.SyslogSeverity, 'SyslogSeverity', '')])]))
    self.facility = None
    self.severity = None
    self._segment_path = lambda: "state"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Logging.Console.Selectors.Selector.State, ['facility', 'severity'], name,
            value)

class RemoteServers(_Entity_):
    """
    Enclosing container for the list of remote log servers

    .. attribute:: remote_server

        List of remote log servers

        **type**:: list of :py:class:`RemoteServer`
    """
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Logging.RemoteServers, self).__init__()

    self.yang_name = "remote-servers"
    self.yang_parent_name = "logging"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.leafs_key_names = []
    self._leafs = OrderedDict()

    self.remote_server = YList(self)
    self._segment_path = lambda: "remote-servers"
    self._absolute_path = lambda: "openconfig-system:system/logging/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Logging.RemoteServers, [], name, value)

class RemoteServer(_Entity):
    
    List of remote log servers

      .. attribute:: host (key)

      Reference to the host list key

      **type**:: union of the below types:

      **type**:: str

      **pattern**:^((\[0\-9\]|\[1\-9\]|0\-9\]|1[0\-9]|0\-9\]|2[0\-4]|0\-9\]|25[0\-5]|\.)\(\\.|(\[0\-9\]|\[1\-9\]|0\-9\]|1[0\-9]|0\-9\]|1[0\-9]|0\-9\]|2[0\-4]|0\-9\]|25[0\-5]|$"}

      **type**:: str

      **pattern**:^((\[0\-9\]|\[1\-9\]|0\-9\]|1[0\-9]|0\-9\]|2[0\-4]|0\-9\]|25[0\-5]|$|)
**type**: str

**length**: 1..253


.. attribute:: config

Configuration data for remote log servers


.. attribute:: state

Operational state data for remote log servers


**config**: False

.. attribute:: selectors

Enclosing container

class Config(_Entity_):
    ...,
    Configuration data for remote log servers
    .. attribute:: host

    IP address or hostname of the remote log server
    **type**: union of the below types:
    **type**: str
    **pattern**: ^([0-9a-fA-F][1,4]\.){3}([0-9a-fA-F][1,4]\.){3}([0-9a-fA-F][1,4]\.){3}$
    **type**: str
    **pattern**: ^([0-9a-fA-F][1,4]\.){3}([0-9a-fA-F][1,4]\.){3}([0-9a-fA-F][1,4]\.){3}$
.. attribute:: source_address

Source IP address for packets to the log server

.. attribute:: remote_port

Sets the destination port number for syslog UDP messages to the server. The default for syslog is 514
self.has_list_ancestor = True
self.yang_key_names = []
self._child_classes = OrderedDict()
self._leafs = OrderedDict(
    (’host’, (YLeaf(YType.str, ’host’), [’str’,’str’,’str’])),
    (’source_address’, (YLeaf(YType.str, ’source-address’), [’str’,’str’])),
    (’remote_port’, (YLeaf(YType.uint16, ’remote-port’), [’int’])),
)
self.host = None
self.source_address = None
self.remote_port = None
self._segment_path = lambda: “config”
self._is_frozen = True

def __setattr__(self, name, value):

class State(_Entity_):
    
    Operational state data for remote log servers

    .. attribute:: host

    IP address or hostname of the remote log server

    **type**: union of the below types:

    **type**: str

    **pattern**: ^((\[0-9a-fA-F\]{1,4}\.|\[\d\]{1,256})\.)\{3\}((\[0-9a-fA-F\]{1,4}\.|\[\d\]{1,256})\.)\{2\}((\[0-9a-fA-F\]{1,4}\.|\[\d\]{1,256})\.)\{1\}|((\[0-9a-fA-F\]{1,4}\.|\[\d\]{1,256})\.)\{0\}$

    **type**: str

    **length**: 1..253

    **config**: False
.. attribute:: source_address

Source IP address for packets to the log server

**type**: union of the below types:

**type**: str

**pattern**: ^((\[0-9\]|\[0-9\]|1\[0-9]|0\-9))[0-4][0-9][25][0-5]\{3\}(\[0-9\]|1\[0-9]|0\-9)[-9][0\-9][2|0-4][0-9][0\-9]|1\[0-9]|0\-9][-9]|2|0-4][0-9]|25|0-5])$

**type**: str

**pattern**: ^((\[0-9a-fA-F]{1,4}\:){7}(\[0-9a-fA-F]{1,4}\:){1,7}\:|\:((\[0-9a-fA-F]{1,4}\:){1,6}\:|\:((\[0-9a-fA-F]{1,4}\:){1,5}\:|\:((\[0-9a-fA-F]{1,4}\:){1,4}\:|\:((\[0-9a-fA-F]{1,4}\:){1,3}\:|\:((\[0-9a-fA-F]{1,4}\:){1,2}\:|\:((\[0-9a-fA-F]{1,4}\:)(\:7{|(\:)(\:7})$\n
**config**: False

.. attribute:: remote_port

Sets the destination port number for syslog UDP messages to the server. The default for syslog is 514

**type**: int

**range**: 0..65535

**config**: False

**default value**: 514

```python
_\_prefix = 'oc-sys'
_\_revision = '2018-07-17'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

self.yang_name = "state"
self.yang_parent_name = "remote-server"
self.is_top_level_class = False
self.has_list_ancestor = True
```
class Selectors(_Entity_):
    """
    Enclosing container
    .. attribute:: selector

        List of selectors for log messages
        **type**: list of :py:class:`Selector`

        .. listitems::
            :class: py-class

    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__
    else:

    self.yang_name = "selectors"
    self.yang_parent_name = "remote-server"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(["selector", "selector",}
self._leafs = OrderedDict()

    self.selector = YList(self)
    self._segment_path = lambda: "selectors"
    self._is_frozen = True

def __setattr__(self, name, value):

class Selector(_Entity_):
    """
    List of selectors for log messages
    """

    .. attribute:: facility  (key)

        Reference to facility list key
        **type**: :py:class:`SYSLOGFACILITY
<ydk.models.openconfig.openconfig_system_logging(SYSLOGFACILITY>)`

    .. attribute:: severity  (key)

        Reference to severity list key
        **type**: :py:class:`SyslogSeverity
<ydk.models.openconfig.openconfig_system_logging.SyslogSeverity>`

    .. attribute:: config

        Configuration data
        **type**: :py:class:`Config
fig>`

    .. attribute:: state

        Operational state data
        **type**: :py:class:`State
e>`

        **config**: False

***

_prefix = 'oc-sys'
Revision: '2018-07-17'

def __init__(self):
  if sys.version_info > (3,):
    super().__init__()
  else:

self.yang_name = "selector"
self.yang_parent_name = "selectors"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['facility', 'severity']
self._child_classes = OrderedDict(["config", "state",
self._leafs = OrderedDict([('facility', (YLeaf(YType.identityref, 'facility'),
[("ydk.models.openconfig.openconfig_system_logging", 'SYSLOGFACILITY')]),
('severity', (YLeaf(YType.enumeration, 'severity'),
[("ydk.models.openconfig.openconfig_system_logging", 'SyslogSeverity', '')]),
]))
self.facility = None
self.severity = None

self.config.parent = self
self._children_name_map["config"] = "config"

self.state.parent = self
self._children_name_map["state"] = "state"
self._segment_path = lambda: "selector" + "[facility='" + str(self.facility) + "']" + "[severity='" + str(self.severity) + "]" + "]"
self.is_frozen = True

def __setattr__(self, name, value):
  'severity'], name, value)

class Config(_Entity_):
  ---
  Configuration data

  . attribute:: facility

  Specifies the facility, or class of messages to log
.. attribute:: severity

Specifies that only messages of the given severity (or greater severity) for the corresponding facility
are logged

.. type:: :py:class:`SyslogSeverity

<ydk.models.openconfig.openconfig_system_logging.SyslogSeverity>`

```python
self.facility = None
self.severity = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):
                           ['facility', 'severity'], name, value)
```

class State(_Entity_):
Operational state data

.. attribute:: facility

Specifies the facility, or class of messages to log

**type**: :py:class:`SYSLOGFACILITY`<ydk.models.openconfig.openconfig_system_logging.SYSLOGFACILITY>

**config**: False

.. attribute:: severity

Specifies that only messages of the given severity (or greater severity) for the corresponding facility are logged

**type**: :py:class:`SyslogSeverity`<ydk.models.openconfig.openconfig_system_logging.SyslogSeverity>

**config**: False

_backend = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "state"
    self.yang_parent_name = "selector"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict(["facility", "severity"])

    self.facility = None
    self.severity = None

    self._segment_path = lambda: "state"

___
self._is_frozen = True

def __setattr__(self, name, value):
    ['facility', 'severity'], name, value)

class Aaa(_Entity_):
    """
    Top-level container for AAA services
    
    .. attribute:: config
        Configuration data for top level AAA services
        **type**: :py:class:`Config <ydk.models.openconfig.openconfig_system.System.Aaa.Config>`

    .. attribute:: state
        Operational state data for top level AAA services

        **config**: False

    .. attribute:: authentication
        Top-level container for global authentication data

    .. attribute:: authorization
        Top-level container for AAA authorization configuration and operational state data

    .. attribute:: accounting
        Top-level container for AAA accounting
        **type**: :py:class:`Accounting <ydk.models.openconfig.openconfig_system.System.Aaa.Accounting>`

    .. attribute:: server_groups
        Enclosing container for AAA server groups

...  

_prefix = 'oc-sys'
_revision = '2018-07-17'


def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa, self).__init__()

self.yang_name = "aaa"
self.yang_parent_name = "system"
self.is_top_level_class = False
self.has_list ancestor = False
self.ylist_key_names = []
self._leafs = OrderedDict()

self.config = System.Aaa.Config()
self.config.parent = self
self._children_name_map["config"] = "config"

self.state = System.Aaa.State()
self.state.parent = self
self._children_name_map["state"] = "state"

self.authentication = System.Aaa.Authentication()
self.authentication.parent = self
self._children_name_map["authentication"] = "authentication"

self.authorization = System.Aaa.Authorization()
self.authorization.parent = self
self._children_name_map["authorization"] = "authorization"

self.accounting = System.Aaa.Accounting()
self.accounting.parent = self
self._children_name_map["accounting"] = "accounting"

self.server_groups = System.Aaa.ServerGroups()
self.server_groups.parent = self
self._children_name_map["server_groups"] = "server-groups"
self._segment_path = lambda: "aaa"
self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa, [], name, value)

class Config(_Entity_):
    """
    Configuration data for top level AAA services
    """

    """
    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:
            super(System.Aaa.Config, self).__init__()

        self.yang_name = "config"
        self.yang_parent_name = "aaa"
        self.is_top_level_class = False
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._child_classes = OrderedDict(

        self._leafs = OrderedDict()
        self._segment_path = lambda: "config"
        self._absolute_path = lambda: "openconfig-system:system/aaa/%s" % self._segment_path()
        self._is_frozen = True

    class State(_Entity_):
        """
        Operational state data for top level AAA services
        """

        """
        _prefix = 'oc-sys'
class Authentication(_Entity_):
    """
    Top-level container for global authentication data
    
    .. attribute:: config

    Configuration data for global authentication services
    **type**: :py:class:`Config`

    .. attribute:: state

    Operational state data for global authentication services

    **config**: False

    .. attribute:: admin_user

    Top-level container for the system root or admin user configuration and operational state
    **type**: :py:class:`AdminUser`

    .. attribute:: users

    Enclosing container list of local users
    **type**: :py:class:`Users`
```python
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Authentication, self).__init__()

    self.yang_name = "authentication"
    self.yang_parent_name = "aaa"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.terminal_key_names = []
    self._leafs = OrderedDict()

    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state = System.Aaa.Authentication.State()
    self.state.parent = self
    self._children_name_map["state"] = "state"

    self.admin_user.parent = self
    self._children_name_map["admin-user"] = "admin-user"

    self.users.parent = self
    self._children_name_map["users"] = "users"
    self._segment_path = lambda: "authentication"
    self._absolute_path = lambda: "openconfig-system:system/aaa/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Aaa.Authentication, [], name, value)
```

```
class Config(_Entity_):
    """
    Configuration data for global authentication services
    
    .. attribute:: authentication_method

    Ordered list of authentication methods for users. This can be either a reference to a server group, or a well-defined designation in the AAA\_METHOD\_TYPE identity. If authentication fails with one method, the next defined method is tried failure of all methods results in the user being denied access

    **type**: union of the below types:

    **type**: list of :py:class:`AAAMETHODTYPE
    <ydk.models.openconfig.openconfig_aaa_types.AAAMETHODTYPE>`

    **type**: list of str

    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Authentication.Config, self).__init__()

    self.yang_name = "config"
    self.yang_parent_name = "authentication"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'authentication_method': (YLeafList(YType.str, 'authentication-method'),
                             [('ydk.models.openconfig.openconfig_aaa_types', 'AAAMETHODTYPE'), 'str'])
    })
    self.authentication_method = []
    self._segment_path = lambda: "config"
    self._absolute_path = lambda: "openconfig-system:system/aaa/authentication/%s" %
    self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Aaa.Authentication.Config, ['authentication_method'], name, value)
class State(_Entity_):
    
    Operational state data for global authentication services

    .. attribute:: authentication_method

    Ordered list of authentication methods for users. This can be either a reference to a server group, or a well-defined designation in the AAA\_METHOD\_TYPE identity. If authentication fails with one method, the next defined method is tried \- failure of all methods results in the user being denied access

    **type**: union of the below types:

    **type**: list of :py:class:`AAAMETHODTYPE
     <ydk.models.openconfig.openconfig_aaa_types.AAAMETHODTYPE>`

    **type**: list of str

    **config**: False

    

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Authentication.State, self).__init__()

    self.yang_name = "state"
    self.yang_parent_name = "authentication"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    )
    self._leafs = OrderedDict(
        ('authentication_method', (YLeafList(YType.str, 'authentication-method'),
        [('ydk.models.openconfig.openconfig_aaa_types', 'AAAMETHODTYPE'),'str']))
    )
    self.authentication_method = []
    self._segment_path = lambda: "state"
    self._absolute_path = lambda: "openconfig-system:system/aaa/authentication/%s" %
    self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa.Authentication.State, ['authentication_method'], name, value)

class AdminUser(_Entity_):
    ""
    Top-level container for the system root or admin user
    configuration and operational state
    ""
    .. attribute:: config

    Configuration data for the root user account
    **type**: :py:class:`Config

    .. attribute:: state

    Operational state data for the root user account
    **type**: :py:class:`State

    **config**: False

    ..

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Authentication.AdminUser, self).__init__()

    self.yang_name = "admin-user"
    self.yang_parent_name = "authentication"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    self._leafs =OrderedDict()
self.config.parent = self
self._children_name_map["config"] = "config"

self.state.parent = self
self._children_name_map["state"] = "state"
self._segment_path = lambda: "admin-user"
self._absolute_path = lambda: "openconfig-system:system/aaa/authentication/%s" %
self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa.Authentication.AdminUser, [], name, value)

class Config(_Entity_):
    '''
    Configuration data for the root user account

    .. attribute:: admin_password

        The admin/root password, supplied as a cleartext string. The system should hash and only store the password as a hashed value
        **type**: str

    .. attribute:: admin_password_hashed

        The admin/root password, supplied as a hashed value using the notation described in the definition of the crypt\-password\-type
        **type**: str
    '''

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "config"
    self.yang_parent_name = "admin-user"
    self.is_top_level_class = False
self.has_list_ancestor = False
self._list_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([  
    ('admin_password', (YLeaf(YType.str, 'admin-password'), ['str']))),
    ('admin_password_hashed', (YLeaf(YType.str, 'admin-password-hashed'), ['str']))),
])
self.admin_password = None
self.admin_password_hashed = None
self._segment_path = lambda: "config"
self._absolute_path = lambda: "openconfig-system:system/aaa/authentication/admin-user/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):

class State(_Entity_):
    """
    Operational state data for the root user account
    """

    .. attribute:: admin_password

        The admin/root password, supplied as a cleartext string. The system should hash and only store the password as a hashed value
        **type**: str
        **config**: False

    .. attribute:: admin_password_hashed

        The admin/root password, supplied as a hashed value using the notation described in the definition of the crypt-password-type
        **type**: str
        **config**: False

    .. attribute:: admin_username

        Name of the administrator user account, e.g., admin, root, etc
        **type**: str
        **config**: False
```python
__prefix = 'oc-sys'
__revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

self.yang_name = "state"
self.yang_parent_name = "admin-user"
sel.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict(
)
self._leafs = OrderedDict(
    ('admin_password', (YLeaf(YType.str, 'admin-password'), ['str'])),
    ('admin_password_hashed', (YLeaf(YType.str, 'admin-password-hashed'), ['str'])),
    ('admin_username', (YLeaf(YType.str, 'admin-username'), ['str'])),
)
self.admin_password = None
self.admin_password_hashed = None
self.admin_username = None
self._segment_path = lambda: "state"
self._absolute_path = lambda: "openconfig-system:system/aaa/authentication/admin-user/%s" %
self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
        'admin_password_hashed', 'admin_username'], name, value)

class Users(_Entity_):
    """
    Enclosing container list of local users
    """

    .. attribute:: user

    List of local users on the system
    
    .. attribute:: user

        List of local users on the system
        
```
```
.. _prefix = 'oc-sys'
.. _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Authentication.Users, self).__init__()

self.yang_name = "users"
self.yang_parent_name = "authentication"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._leafs = OrderedDict()
self.user = YList(self)

self._segment_path = lambda: "users"
self._absolute_path = lambda: "openconfig-system:system/aaa/authentication/%s" %

    self._segment_path()

self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa.Authentication.Users, [], name, value)

class User(_Entity_):
    .. _prefix = 'oc-sys'
    .. _revision = '2018-07-17'

    List of local users on the system

    .. attribute:: username  (key)
        References the configured username for the user

        **type**:: str

        **refers to**:: :py:class:`username

    .. attribute:: config

        Configuration data for local users

        **type**:: :py:class:`Config
.. attribute:: state

Operational state data for local users

**type**: :py:class:`State`


**config**: False

```
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "user"
    self.yang_parent_name = "users"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.leaf_key_names = ["username"]

    self.leafs = OrderedDict(["username", YLeaf(YType.str, 'username'), [str]])

    self.username = None

    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state.parent = self
    self._children_name_map["state"] = "state"

    self.segment_path = lambda: "user" + [username="" + str(self.username) + "]"

    self.absolute_path = lambda: "openconfig-system:system/aaa/authentication/users/%s" %

    self.segment_path()

    self.is_frozen = True

    def __setattr__(self, name, value):
class Config(_Entity_):
    
    Configuration data for local users

    .. attribute:: username

    Assigned username for this user
    **type**: str

    .. attribute:: password

    The user password, supplied as cleartext. The system must hash the value and only store the hashed value
    **type**: str

    .. attribute:: password_hashed

    The user password, supplied as a hashed value using the notation described in the definition of the crypt-password-type
    **type**: str

    .. attribute:: ssh_key

    SSH public key for the user (RSA or DSA)
    **type**: str

    .. attribute:: role

    Role assigned to the user. The role may be supplied as a string or a role defined by the SYSTEM\_DEFINED\_ROLES identity
    **type**: union of the below types:

    **type**: str

    **type**: :py:class:`SYSTEMDEFINEDROLES`<ydk.models.openconfig.openconfig_aaa_types.SYSTEMDEFINEDROLES>`

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
super().__init__()
else:

self.yang_name = "config"
self.yang_parent_name = "user"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict({})
self._leafs = OrderedDict({
    'username': (YLeaf(YType.str, 'username'), ['str']),
    'password': (YLeaf(YType.str, 'password'), ['str']),
    'password_hashed': (YLeaf(YType.str, 'password-hashed'), ['str']),
    'ssh_key': (YLeaf(YType.str, 'ssh-key'), ['str']),
    'role': (YLeaf(YType.str, 'role'), ['str', ('ydk.models.openconfig.openconfig.aaa_types', 'SYSTEMDEFINEDROLES')]),
})

self.username = None
self.password = None
self.password_hashed = None
self.ssh_key = None
self.role = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):

class State(_Entity_):
    ```
    Operational state data for local users
    .. attribute:: username

    Assigned username for this user
    **type**: str
    **config**: False
    .. attribute:: password

    The user password, supplied as cleartext. The system must hash the value and only store the hashed value
    **type**: str
    ```
**config**: False

.. attribute:: password_hashed

The user password, supplied as a hashed value using the notation described in the definition of the crypt-password-type

**type**: str

**config**: False

.. attribute:: ssh_key

SSH public key for the user (RSA or DSA)

**type**: str

**config**: False

.. attribute:: role

Role assigned to the user. The role may be supplied as a string or a role defined by the SYSTEMDEFINED_ROLES identity

**type**: union of the below types:

**type**: str

**type**: :py:class:`SYSTEMDEFINEDROLES`

<\py:class:`SYSTEMDEFINEDROLES`>

**config**: False

```
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "state"
    self.yang_parent_name = "user"
    self.is_top_level_class = False
    self.has_list_ancestor = True
```
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([  
    ('username', (YLeaf(YType.str, 'username'), ['str'])),  
    ('password', (YLeaf(YType.str, 'password'), ['str'])),  
    ('password_hashed', (YLeaf(YType.str, 'password-hashed'), ['str'])),  
    ('ssh_key', (YLeaf(YType.str, 'ssh-key'), ['str'])),  
    ('role', (YLeaf(YType.str, 'role'), ['str'],('ydk.models.openconfig.openconfig_aaa_types', 'SYSTEMDEFINEDROLES')))],
)
self.username = None
self.password = None
self.password_hashed = None
self.ssh_key = None
self.role = None
self._segment_path = lambda: "state"
self._is_frozen = True

def __setattr__(self, name, value):

class Authorization(_Entity_):
    
    Top-level container for AAA authorization configuration and operational state data
    .. attribute:: config

    Configuration data for authorization based on AAA methods
    **type**: Config

    .. attribute:: state

    Operational state data for authorization based on AAA

    **config**: False

    .. attribute:: events

    Enclosing container for the set of events subject to authorization
**type**: :py:class:`Events`  

```python

""

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Authorization, self).__init__()

    self.yang_name = "authorization"
    self.yang_parent_name = "aaa"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._leafs = OrderedDict()

    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state.parent = self
    self._children_name_map["state"] = "state"

    self.events.parent = self
    self._children_name_map["events"] = "events"
    self._segment_path = lambda: "authorization"
    self._absolute_path = lambda: "openconfig-system:system/aaa/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Aaa.Authorization, [], name, value)

    class Config(_Entity_):
        ""
        Configuration data for authorization based on AAA methods
```
Ordered list of methods for authorizing commands. The first method that provides a response (positive or negative) should be used. The list may contain a well-defined method such as the set of all TACACS or RADIUS servers, or the name of a defined AAA server group. The system must validate that the named server group exists.

**type**: union of the below types:

**type**: list of :py:class:`AAAMETHODTYPE
<ydk.models.openconfig.openconfig_aaa_types.AAAMETHODTYPE>`

**type**: list of str
Operational state data for authorization based on AAA

.. attribute:: authorization_method

Ordered list of methods for authorizing commands. The first method that provides a response (positive or negative) should be used. The list may contain a well-defined method such as the set of all TACACS or RADIUS servers, or the name of a defined AAA server group. The system must validate that the named server group exists

**type**: union of the below types:

**type**: list of :py:class:`AAAMETHODTYPE`

<ydk.models.openconfig.openconfig_aaa_types.AAAMETHODTYPE>`

**type**: list of str

**config**: False

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Authorization.State, self).__init__()

    self.yang_name = "state"
    self.yang_parent_name = "authorization"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict({})
    self._leafs = OrderedDict({
        'authorization_method': (YLeafList(YType.str, 'authorization-method'),
        [('ydk.models.openconfig.openconfig_aaa_types', 'AAAMETHODTYPE'), 'str'])),
    })
    self.authorization_method = []
    self._segment_path = lambda: "state"
    self._absolute_path = lambda: "openconfig-system:system/aaa/authorization/%s" %\n        self._segment_path()
    self.is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Aaa.Authorization.State, ['authorization_method'], name, value)
class Events(_Entity_):
    ""
    Enclosing container for the set of events subject to authorization
    .. attribute:: event

    List of events subject to AAA authorization
    
    ""

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:
            super(System.Aaa.Authorization.Events, self).__init__()

        self.yang_name = "events"
        self.yang_parent_name = "authorization"
        self.is_top_level_class = False
        self.has_list_ancestor = False
        self.ylist_key_names = []
        self._child_classes = OrderedDict(
        self._leafs = OrderedDict()

        self.event = YList(self)

        self._segment_path = lambda: "events"
        self._absolute_path = lambda: "openconfig-system:system/aaa/authorization/%s" % self._segment_path()
        self._is_frozen = True

        def __setattr__(self, name, value):
            self._perform_setattr(System.Aaa.Authorization.Events, [], name, value)

    class Event(_Entity_):
        ""
        List of events subject to AAA authorization
        
        ""
.. attribute:: event_type (key)

Reference to the event-type list key

**type**: :py:class:`AAAAUTHORIZATIONEVENTTYPE
<ydk.models.openconfig.openconfig_aaa_types.AAAAUTHORIZATIONEVENTTYPE>`

.. attribute:: config

Configuration data for each authorized event

**type**: :py:class:`Config

.. attribute:: state

Operational state data for each authorized activity

**type**: :py:class:`State

**config**: False

""

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "event"
    self.yang_parent_name = "events"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yang_list_key_names = ["event_type"]
    self.leafs = OrderedDict([
        ("event_type", YLeaf(YType.identityref, 'event-type'),
        [('ydk.models.openconfig.openconfig_aaa_types', 'AAAAUTHORIZATIONEVENTTYPE'),
        ])
    ])
    self.event_type = None
self.config.parent = self
self._children_name_map["config"] = "config"

self.state.parent = self
self._children_name_map["state"] = "state"
self._segment_path = lambda: "event" + "[event-type=" + str(self.event_type) + "]"
self._absolute_path = lambda: "openconfig-system:system/aaa/authorization/events/%s" %
self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa.Authorization.Events.Event, ['event_type'], name, value)

class Config(_Entity_):
    
    Configuration data for each authorized event

    .. attribute:: event_type

    The type of event to record at the AAA authorization server

    **type**: :py:class:`AAAAUTHORIZATIONEVENTTYPE`<ydk.models.openconfig.openconfig_aaa_types.AAAAUTHORIZATIONEVENTTYPE>

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:

        self.yang_name = "config"
        self.yang_parent_name = "event"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.ylist_key_names = []
        self._child_classes = OrderedDict([])
        self._leafs = OrderedDict([('event_type', (YLeaf(YType.identityref, 'event-type'),
            ['ydk.models.openconfig.openconfig_aaa_types', 'AAAAUTHORIZATIONEVENTTYPE']))])

        self.ylist_key_names = []

        _prefix = 'oc-sys'
        _revision = '2018-07-17'

        def __init__(self):
            if sys.version_info > (3,):
                super().__init__()
            else:

            self.yang_name = "config"
            self.yang_parent_name = "event"
            self.is_top_level_class = False
            self.has_list_ancestor = True
            self.ylist_key_names = []
            self._child_classes = OrderedDict([])
            self._leafs = OrderedDict([('event_type', (YLeaf(YType.identityref, 'event-type'),
                ['ydk.models.openconfig.openconfig_aaa_types', 'AAAAUTHORIZATIONEVENTTYPE'])),])

            self.ylist_key_names = []
self.event_type = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):

class State(_Entity_):
    '''
    Operational state data for each authorized activity
    
    .. attribute:: event_type

    The type of event to record at the AAA authorization server
    
    **type**: :py:class:`AAAAUTHORIZATIONEVENTTYPE`<ydk.models.openconfig.openconfig_aaa_types.AAAAUTHORIZATIONEVENTTYPE>''

    **config**: False

    '''

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:

        self.yang_name = "state"
        self.yang_parent_name = "event"
        self.is_top_level_class = False
        self.has_list_ancestor = True
        self.yang_list_key_names = []
        self._child_classes = OrderedDict(
            [('event_type', (YLeaf(YType.identityref, 'event-type'),
                [('ydk.models.openconfig.openconfig_aaa_types', 'AAAAUTHORIZATIONEVENTTYPE')]))
            ])
        self.event_type = None
        self._segment_path = lambda: "state"
        self._is_frozen = True
def __setattr__(self, name, value):

class Accounting(_Entity_):
    """
    Top-level container for AAA accounting

    .. attribute:: config

    Configuration data for user activity accounting

    .. attribute:: state

    Operational state data for user accounting

    **config**: False

    .. attribute:: events

    Enclosing container for defining handling of events for accounting

    """

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Accounting, self).__init__()

    self.yang_name = "accounting"
    self.yang_parent_name = "aaa"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
self._leafs = OrderedDict()

self.config = System.Aaa.Accounting.Config()
self.config.parent = self
self._children_name_map["config"] = "config"

self.state = System.Aaa.Accounting.State()
self.state.parent = self
self._children_name_map["state"] = "state"

self.events = System.Aaa.Accounting.Events()
self.events.parent = self
self._children_name_map["events"] = "events"
self._segment_path = lambda: "accounting"
self._absolute_path = lambda: "openconfig-system:system/aaa/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa.Accounting, [], name, value)

class Config(_Entity_):
    
    Configuration data for user activity accounting.

    .. attribute:: accounting_method

    An ordered list of methods used for AAA accounting for this event type. The method is defined by the
destination for accounting data, which may be specified as the group of all TACACS+/RADIUS servers, a defined
server group, or the local system

    **type**: union of the below types:

    **type**: list of :py:class:`AAAMETHODTYPE`
<ydk.models.openconfig.openconfig_aaa_types.AAAMETHODTYPE>`

    **type**: list of str

    

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
super().__init__()
else:
    super(System.Aaa.Accounting.Config, self).__init__()

self.yang_name = "config"
self.yang_parent_name = "accounting"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([
    ('accounting_method', (YLeafList(YType.str, 'accounting-method'),
        ['ydk.models.openconfig.openconfig_aaa_types', 'AAAMETHODTYPE'], 'str'))])

self.accounting_method = []
self._segment_path = lambda: "config"
self._absolute_path = lambda: "openconfig-system:system/aaa/accounting/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa.Accounting.Config, ['accounting_method'], name, value)

class State(_Entity_):
    """
    Operational state data for user accounting.

    .. attribute:: accounting_method

        An ordered list of methods used for AAA accounting for this event type. The method is defined by the
destination for accounting data, which may be specified as the group of all TACACS+/RADIUS servers, a defined
server group, or the local system
**type**: union of the below types:

**type**: list of :py:class:`AAAMETHODTYPE`

\<ydk.models.openconfig.openconfig_aaa_types.AAAMETHODTYPE>\`

**type**: list of str

**config**: False

    """

_prefix = 'oc-sys'
_revision = '2018-07-17'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Accounting.State, self).__init__()

    self.yang_name = "state"
    self.yang_parent_name = "accounting"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
    )
    self._leafs = OrderedDict(
        (YLeafList(YType.str, 'accounting-method'),
        [('ydk.models.openconfig.openconfig_aaa_types', 'AAAMETHODTYPE'), 'str'])
    )
    self.accounting_method = []
    self._segment_path = lambda: "state"
    self._absolute_path = lambda: "openconfig-system:system/aaa/accounting/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Aaa.Accounting.State, ['accounting_method'], name, value)

class Events(_Entity_):
    ...
    Enclosing container for defining handling of events
    for accounting

    .. attribute:: event

    List of events subject to accounting

    *type*:*type*: list of :py:class:`Event`


    ..

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()}
else:
    super(System.Aaa.Accounting.Events, self).__init__()

self.yang_name = "events"
self.yang_parent_name = "accounting"
self.is_top_level_class = False
self.has_list_ancestor = False
self.isti_key_names = []
self._leafs = OrderedDict()

self.event = YList(self)
self._segment_path = lambda: "events"
self._absolute_path = lambda: "openconfig-system:system/aaa/accounting/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa.Accounting.Events, [], name, value)

class Event(_Entity_):
    """
    List of events subject to accounting

    .. attribute:: event_type  (key)

    Reference to the event-type being logged at the accounting server
    **type**:  :py:class:`AAAACCOUNTINGEVENTTYPE
    `<ydk.models.openconfig.openconfig_aaa_types.AAAACCOUNTINGEVENTTYPE>`

    .. attribute:: config

    Configuration data for accounting events
    **type**:  :py:class:`Config

    .. attribute:: state

    Operational state data for accounting events
    **type**:  :py:class:`State

    **config**: False
    """
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.Accounting.Events.Event, self).__init__()

    self.yang_name = "event"
    self.yang_parent_name = "events"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = [event_type]
    self._child_classes = OrderedDict(["config", "state")
    self._leafs = OrderedDict([event_type, (YLeaf(YType.identityref, 'event-type'),
    ["ydk.models.openconfig.openconfig_aaa_types", 'AAAACCOUNTINGEVENTTYPE'])]),
    ]
    self.event_type = None

    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state.parent = self
    self._children_name_map["state"] = "state"
    self.segment_path = lambda: "event" + [event_type="" + str(self.event_type) + "]"
    self.absolute_path = lambda: "openconfig-system:system/aaa/accounting/events/%s" %
    self._segment_path()
    self.is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa.Accounting.Events.Event, [event_type], name, value)

class Config(_Entity_):
    
    Configuration data for accounting events

    .. attribute:: event_type

    The type of activity to record at the AAA accounting server
    
    *py:class:* AAAACCOUNTINGEVENTTYPE
    "ydk.models.openconfig.openconfig_aaa_types.AAAACCOUNTINGEVENTTYPE"
.. attribute:: record

Type of record to send to the accounting server for this activity type

**type**: :py:class:`Record

```python

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "config"
    self.yang_parent_name = "event"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([
    ('event_type', (YLeaf(YType.identityref, 'event-type'),
        ([('ydk.models.openconfig.openconfig_aaa_types', 'AAAACCOUNTINGEVENTTYPE')]),
    ('record', (YLeaf(YType.enumeration, 'record'),
        ]) )
    ])
    self.event_type = None
    self.record = None
    self._segment_path = lambda: "config"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Aaa.Accounting.Events.Event.Config, ['event_type', 'record'], name,
        value)

class Record(Enum):

```Record (Enum Class)

Type of record to send to the accounting server for this

activity type
.. data:: START_STOP = 0

Send START record to the accounting server at the
beginning of the activity, and STOP record at the
end of the activity.

.. data:: STOP = 1

Send STOP record to the accounting server when the
user activity completes

```
START_STOP = Enum.YLeaf(0, "START_STOP")
STOP = Enum.YLeaf(1, "STOP")
```

class State(_Entity_):
    
    Operational state data for accounting events

    .. attribute:: event_type

    The type of activity to record at the AAA accounting server
    
    **type**: :py:class:`AAAACCOUNTINGEVENTTYPE`<ydk.models.openconfig.openconfig_aaa_types.AAAACCOUNTINGEVENTTYPE>

    **config**: False

    .. attribute:: record

    Type of record to send to the accounting server for this activity type
    

    **config**: False

    

_prefix = 'oc-sys'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "state"
    self.yang_parent_name = "event"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict()

    self.event_type = None
    self.record = None
    self._segment_path = lambda: "state"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Aaa.Accounting.Events.Event.State, ['event_type', 'record'], name, value)

    class Record(Enum):
        ...
        Record (Enum Class)

        Type of record to send to the accounting server for this
        activity type

        .. data:: START_STOP = 0

        Send START record to the accounting server at the
        beginning of the activity, and STOP record at the
        end of the activity.

        .. data:: STOP = 1

        Send STOP record to the accounting server when the
user activity completes

```python
START_STOP = Enum.YLeaf(0, "START_STOP")

STOP = Enum.YLeaf(1, "STOP")
```

class ServerGroups(_Entity_):
    
    Enclosing container for AAA server groups

    .. attribute:: server_group

    List of AAA server groups. All servers in a group must have the same type as indicated by the server type
    **type**; list of :py:class:`ServerGroup

    
```

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.ServerGroups, self).__init__()

    self.yang_name = "server-groups"
    self.yang_parent_name = "aaa"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.leaf_key_names = []
    self._child_classes = OrderedDict([("server-group", "server_group",
    self._leafs =OrderedDict()

    self.server_group = YList(self)
class ServerGroup(_Entity_):

    """
    List of AAA server groups. All servers in a group
    must have the same type as indicated by the server
    type.

    .. attribute:: name (key)

    Reference to configured name of the server group
    **type**: str

    **refers to**: :py:class:`name`

    .. attribute:: config

    Configuration data for each server group
    **type**: :py:class:`Config`

    .. attribute:: state

    Operational state data for each server group
    **type**: :py:class:`State`

    **config**: False

    .. attribute:: servers

    Enclosing container the list of servers
    **type**: :py:class:`Servers`

    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Aaa.ServerGroups.ServerGroup, self).__init__()

    self.yang_name = "server-group"
    self.yang_parent_name = "server-groups"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = ['name']
    self._leafs = OrderedDict([('name', (YLeaf(YType.str, 'name'), ['str']))])
    self.name = None

    self.config.parent = self
    self._children_name_map['config'] = "config"

    self.state.parent = self
    self._children_name_map['state'] = "state"

    self.servers.parent = self
    self._children_name_map['servers'] = "servers"

    self._segment_path = lambda: "server-group" + "[name='{}']" % self.name
    self._absolute_path = lambda: "openconfig-system:system/aaa/server-groups/%s" % self._segment_path()
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Aaa.ServerGroups.ServerGroup, ['name'], name, value)

class Config(_Entity_):
    """
    Configuration data for each server group
    
    .. attribute:: name

    Name for the server group
    
    **type**: str
.. attribute:: type

AAA server type \-\- all servers in the group must be of this type

**type**: \:py:class:`AAASERVERTYPE`

<ydk.models.openconfig.openconfig_aaa_types.AAASERVERTYPE>

....

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

self.yang_name = "config"
self.yang_parent_name = "server-group"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([
    ('name', (YLeaf(YType.str, 'name'), ['str'])),
    ('type', (YLeaf(YType.identityref, 'type'), [('ydk.models.openconfig.openconfig_aaa_types', 'AAASERVERTYPE')]))],
)'
self.name = None
self.type = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):

class State(_Entity_):
    ""
    Operational state data for each server group
    ""

    .. attribute:: name

    Name for the server group
**type**: str

**config**: False

.. attribute:: type

AAA server type - all servers in the group must be of this type

**type**: :py:class:`AAASERVERTYPE`

<ydk.models.openconfig.openconfig_aaa_types.AAASERVERTYPE>

**config**: False

------

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

self.yang_name = "state"
self.yang_parent_name = "server-group"
self.is_top_level_class = False
self.has_list_ancestor = True
self.yang_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict([ ('name', (YLeaf(YType.str, 'name'), ['str'])), ('type', (YLeaf(YType.identityref, 'type'), [('ydk.models.openconfig.openconfig_aaa_types.AAASERVERTYPE')])) ])
self.name = None
self.type = None
self._segment_path = lambda: "state"
self.is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Aaa.ServerGroups.ServerGroup.State, ['name', 'type'], name, value)

class Servers(_Entity_):

    **type**: str

    **config**: False
Enclosing container the list of servers

.. attribute:: server

List of AAA servers

**type**: list of :py:class:`Server`

@example:

```py
```

---

.. _prefix = 'oc-sys'
.. _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "servers"
    self.yang_parent_name = "server-group"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self._list_key_names = []
    self._child_classes = OrderedDict(["server", "server")

    self._leafs = pydict()

    self.server = YList(self)
    self._segment_path = lambda: "servers"
    self._is_frozen = True

    def __setattr__(self, name, value):

class Server(_Entity_):
    **
    List of AAA servers
    **

    .. attribute:: address (key)

    Reference to the configured address of the AAA server

    **type**: union of the below types:

    **type**: str
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

self.yang_name = "server"
self.yang_parent_name = "servers"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = ['address']
self._child_classes = OrderedDict(
self._leafs = OrderedDict(
    [('address', (YLeaf(YType.str, 'address'), ['str']))],
)
self.address = None

self.config.parent = self
self._children_name_map['config'] = "config"

self.state.parent = self
self._children_name_map['state'] = "state"

self.tacacs.parent = self
self._children_name_map['tacacs'] = "tacacs"

self.radius.parent = self
self._children_name_map['radius'] = "radius"
self._segment_path = lambda: "server" + "[address='" + str(self.address) + "']"
self._is_frozen = True

def __setattr__(self, name, value):

class Config(_Entity_):
    """
    Configuration data"""

    Configuration data
.. attribute:: name

Name assigned to the server
**type**: str

.. attribute:: address

Address of the authentication server
**type**: union of the below types:
**type**: str

**pattern**: ^(([0-9.9-9][0-9.9-9][0-9.9-9][0-9.9-9][2(0-4)][0-9.9-9][25(0-5))]\.)\(3\)([0-9.9-9][0-9.9-9][0-9.9-9][2(0-4)][0-9.9-9][25(0-5))]$**

**type**: str

**pattern**: ^(([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}::|([0-9a-fA-F]{1,4}:){1,6}::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:))$**

.. attribute:: timeout

Set the timeout in seconds on responses from the AAA server
**type**: int

**range**: 0..65535

**units**: seconds

__init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "config"
    self.yang_parent_name = "server"
    self.is_top_level_class = False

_prefix = 'oc-sys'
_revision = '2018-07-17'
self.has_list_ancestor = True
self.ys_list_key_names = [
self._child_classes = OrderedDict(
    (name', (YLeaf(YType.str, 'name'), ['str'])),
    (address', (YLeaf(YType.str, 'address'), ['str','str'])),
    (timeout', (YLeaf(YType.uint16, 'timeout'), ['int'])),
}
self.name = None
self.address = None
self.timeout = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):
        'address', 'timeout'], name, value)

class State(_Entity_):
    """
    Operational state data
    """
    .. attribute:: name

    Name assigned to the server
    
    *type*:** str
    
    **config****: False

    .. attribute:: address

    Address of the authentication server
    
    *type*:** union of the below types:

    *type*:** str

    **pattern:** ^(([0-9][1-9]([0-9][0-9]|[1-9][0-9]|2[0-4][0-9]|25[0-5])\.)\{3\}(25[0-5]|2[0-4][0-9]|1\d|[0-9])$
**config**: False

.. attribute:: timeout

Set the timeout in seconds on responses from the AAA server

**type**: int

**range**: 0..65535

**config**: False

**units**: seconds

.. attribute:: connection_opens

Number of new connection requests sent to the server, e.g. socket open

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: connection_closes

Number of connection close requests sent to the server, e.g. socket close

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: connection_aborts

Number of aborted connections to the server. These do not include connections that are close gracefully

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: connection_failures

Number of connection failures to the server

**type**: int

**range**: 0..18446744073709551615
.. attribute:: connection_timeouts

Number of connection timeouts to the server
**type**: int
**range**: 0..18446744073709551615

.. attribute:: messages_sent

Number of messages sent to the server
**type**: int
**range**: 0..18446744073709551615

.. attribute:: messages_received

Number of messages received by the server
**type**: int
**range**: 0..18446744073709551615

.. attribute:: errors_received

Number of error messages received from the server
**type**: int
**range**: 0..18446744073709551615

...=

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
super().__init__()
else:

self.yang_name = "state"
self.yang_parent_name = "server"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict({})
self._leafs = OrderedDict(
    ('name', (YLeaf(YType.str, 'name'), ['str'])),
    ('address', (YLeaf(YType.str, 'address'), ['str', 'str'])),
    ('timeout', (YLeaf(YType.uint16, 'timeout'), ['int'])),
    ('connection_opens', (YLeaf(YType.uint64, 'connection-opens'), ['int'])),
    ('connection_closes', (YLeaf(YType.uint64, 'connection-closes'), ['int'])),
    ('connection_aborts', (YLeaf(YType.uint64, 'connection-aborts'), ['int'])),
    ('connection_failures', (YLeaf(YType.uint64, 'connection-failures'), ['int'])),
    ('connection_timeouts', (YLeaf(YType.uint64, 'connection-timeouts'), ['int'])),
    ('messages_sent', (YLeaf(YType.uint64, 'messages-sent'), ['int'])),
    ('messages_received', (YLeaf(YType.uint64, 'messages-received'), ['int'])),
    ('errors_received', (YLeaf(YType.uint64, 'errors-received'), ['int'])),
)

self.name = None
self.address = None
self.timeout = None
self.connection_opens = None
self.connection_closes = None
self.connection_aborts = None
self.connection_failures = None
self.connection_timeouts = None
self.messages_sent = None
self.messages_received = None
self.errors_received = None
self._segment_path = lambda: "state"
self._is_frozen = True

def __setattr__(self, name, value):


class Tacacs(_Entity_):
    
    Top-level container for TACACS+ server data
.. attribute:: config

    Configuration data for TACACS+ server
    **type**: :py:class:`Config

.. attribute:: state

    Operational state data for TACACS+ server
    **type**: :py:class:`State

    **config**: False

""

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "tacacs"
    self.yang_parent_name = "server"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict(["config", "state")
    self._leafs = OrderedDict()

    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state.parent = self
    self._children_name_map["state"] = "state"
    self._segment_path = lambda: "tacacs"
    self._is_frozen = True
def __setattr__(self, name, value):

class Config(_Entity_):
    
    Configuration data for TACACS+ server

    .. attribute:: port

    The port number on which to contact the TACACS server
    **type**: int
    **range**: 0..65535
    **default value**: 49

    .. attribute:: secret_key

    The unencrypted shared key used between the authentication server and the device
    **type**: str

    .. attribute:: source_address

    Source IP address to use in messages to the TACACS server
    **type**: union of the below types:

    **pattern**: ^((\[0-9\]|1\-9\|1[0-9]\|2[0-4]\|25[0-5])\.)\{3\}((\[0-9\]|1\-9\|1[0-9]\|2[0-4]\|25[0-5])\|1\(0-9\|1[0-9]\|2[0-4]\|25[0-5])$}
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "config"
    self.yang_parent_name = "tacacs"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict([])
    self._leafs = OrderedDict([('port', (YLeaf(YType.uint16, 'port'), ['int'])),
                                ('secret_key', (YLeaf(YType.str, 'secret-key'), ['str'])),
                                ('source_address', (YLeaf(YType.str, 'source-address'), ['str','str']))])

    self.port = None
    self.secret_key = None
    self.source_address = None

    self._segment_path = lambda: "config"
    self._is_frozen = True

    def __setattr__(self, name, value):

class State(_Entity_):
    """
    Operational state data for TACACS+ server
    """

    .. attribute:: port

        The port number on which to contact the TACACS server
        
        **type**: int
        
        **range**: 0..65535
        
        **config**: False
        
        **default value**: 49

    .. attribute:: secret_key

        The unencrypted shared key used between the authentication server and the device
.. attribute:: source_address

Source IP address to use in messages to the TACACS server

**type**: union of the below types:

**type**: str

**pattern**: ^((\[0-9\]|1\-9|1[0-9]|2[0-4]|25[0-5])\.){3}((\[0-9\]|1\-9|1[0-9]|2[0-4]|25[0-5])\.)\{3\}\((\[0-9\]|1\-9|1[0-9]|2[0-4]|25[0-5])\)$

**type**: str

**pattern**: ^((\[0-9a-fA-F]\[1,4]\)|\{7\}\[0-9a-fA-F]\[1,4]\)|\{0-9a-fA-F\[1,4]\}|((0-9a-fA-F\[1,4]\)|\{1,7\}\{0-9a-fA-F\[1,4]\}|\{0-9a-fA-F\[1,4]\}|\{0-9a-fA-F\[1,4]\}|(1,5|1(1,5))|((0-9a-fA-F\[1,4]\)|\{1,2\}|((0-9a-fA-F\[1,4]\)|\{1,3\}|(0-9a-fA-F\[1,4]\)|\{1,4\}|(0-9a-fA-F\[1,4]\)|\{1,5\}|(0-9a-fA-F\[1,4]\)|\{1,6\}|(0-9a-fA-F\[1,4]\)|\{1,7\}))$**

**config**: False

```python

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "state"
    self.yang_parent_name = "tacacs"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "oc-sys"
    selfyang_parent_name = "tacacs"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self阳县_key_names = []
    self_child_classes = OrderedDict()
    self._leafs = OrderedDict({
        'port', (YLeaf(YType.uint16, 'port'), ['int'])),
        'secret_key', (YLeaf(YType.str, 'secret-key'), ['str'])),
        'source_address', (YLeaf(YType.str, 'source-address'), ['str', 'str'])})
```
def __setattr__(self, name, value):
    ['port', 'secret_key', 'source_address'], name, value)

class Radius(_Entity_):
    
    Top-level container for RADIUS server data

    .. attribute:: config

        Configuration data for RADIUS servers
        
        **type**: :py:class:`Config`
        

    .. attribute:: state

        Operational state data for RADIUS servers
        
        **type**: :py:class:`State`
        

        **config**: False

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

    def __init__(self):
        if sys.version_info > (3,):
            super().__init__()
        else:

        self.yang_name = "radius"
        self.yang_parent_name = "server"
        self.is_top_level_class = False
self.has_list_ancestor = True
self.ys_list_key_names = []
self._child_classes = OrderedDict([("config", "config",
("state", "state",
self._leafs = OrderedDict()

self.config.parent = self
self._children_name_map["config"] = "config"

self.state.parent = self
self._children_name_map["state"] = "state"
self._segment_path = lambda: "radius"
self.is_frozen = True

def __setattr__(self, name, value):
value)

class Config(_Entity_):
    """
    Configuration data for RADIUS servers
    .. attribute:: auth_port

    Port number for authentication requests
    **type**: int

    **range**: 0..65535

    **default value**: 1812

    .. attribute:: acct_port

    Port number for accounting requests
    **type**: int

    **range**: 0..65535

    **default value**: 1813

    .. attribute:: secret_key

    The unencrypted shared key used between the authentication server and the device
    **type**: str
.. attribute:: source_address

Source IP address to use in messages to the RADIUS server

**type**: union of the below types:

**type**: str


**type**: str

**pattern**: ^((\[0-9a-fA-F]{1,4}\:){7}\[0-9a-fA-F]{1,4}\|\[0-9a-fA-F]{1,4}\:){7}\[0-9a-fA-F]{1,4}\|\[0-9a-fA-F]{1,4}\:){1,7}\|\[0-9a-fA-F]{1,4}\|\[0-9a-fA-F]{1,4}\|\[0-9a-fA-F]{1,4}\|\[0-9a-fA-F]{1,4}\|\[0-9a-fA-F]{1,4}\|\[0-9a-fA-F]{1,4}\|\[0-9a-fA-F]{1,4}\$}

.. attribute:: retransmit_attempts

Number of times the system may resend a request to the RADIUS server when it is unresponsive

**type**: int

**range**: 0..255

....

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_name = "config"
    self.yang_parent_name = "radius"
    self.is_top_level_class = False
    self.has_list_ance
('acct_port', (YLeaf(YType.uint16, 'acct-port'), ['int'])),
('secret_key', (YLeaf(YType.str, 'secret-key'), ['str'])),
('source_address', (YLeaf(YType.str, 'source-address'), ['str', 'str'])),
('retransmit_attempts', (YLeaf(YType.uint8, 'retransmit-attempts'), ['int']))
]
self.auth_port = None
self.acct_port = None
self.secret_key = None
self.source_address = None
self.retransmit_attempts = None
self._segment_path = lambda: "config"
self._is_frozen = True

def __setattr__(self, name, value):
['auth_port', 'acct_port', 'secret_key', 'source_address', 'retransmit_attempts'], name, value)

class State(_Entity_):
    """
    Operational state data for RADIUS servers
    """
    .. attribute:: auth_port

    Port number for authentication requests
    ***type***: int
    **range:** 0..65535

    **config**: False

    **default value**: 1812

    .. attribute:: acct_port

    Port number for accounting requests
    ***type***: int
    **range:** 0..65535

    **config**: False

    **default value**: 1813

    .. attribute:: secret_key

    The unencrypted shared key used between the authentication server and the device
.. attribute:: source_address

Source IP address to use in messages to the RADIUS server

**type**: union of the below types:

**type**: str

**pattern**: ^((\[0-9]\|[1-9]\[0-9]\|1[0-9]\[0-9]\|2[0-4]\[0-9]\|25[0-5])\.|(\[1-9]\|[1-9]\[0-9]\|1[0-9]\[0-9]\|2[0-4]\[0-9]\|25[0-5]))$**

**type**: str

**pattern**: ^((\[0-9a-fA-F]\{1,4\})\.|(7)|\[0-9a-fA-F]\{1,4\})\.|((\[0-9a-fA-F]\{1,4\})\.|(7)|\[0-9a-fA-F]\{1,4\})\.|(1,7)\.|((\[0-9a-fA-F]\{1,4\})\.|(7)|\[0-9a-fA-F]\{1,4\})\.|(1,7)\.|((\[0-9a-fA-F]\{1,4\})\.|(7)|\[0-9a-fA-F]\{1,4\})\.|(1,7)\.|((\[0-9a-fA-F]\{1,4\})\.|(7)|\[0-9a-fA-F]\{1,4\})\.|(1,7))$**

**config**: False

.. attribute:: retransmit_attempts

Number of times the system may resend a request to the RADIUS server when it is unresponsive

**type**: int

**range**: 0..255

**config**: False

.. attribute:: counters

A collection of RADIUS related state objects

**type**: :py:class:`Counters`


**config**: False

.. _prefix = 'oc-sys'

.. _revision = '2018-07-17'
class Counters(_Entity_):
    """
    A collection of RADIUS related state objects.
    
    .. attribute:: retried_access_requests
        Retransmitted Access\Request messages
        type: int
    """
.. attribute:: access_accepts

Received Access-Accept messages

.. attribute:: access_rejects

Received Access-Reject messages

.. attribute:: timeout_access_requests

Access-Request messages that have timed-out, requiring retransmission

```python
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:

    self.yang_name = "counters"
    self.yang_parent_name = "state"
    self.is_top_level_class = False
```
class Memory(_Entity_):
    
    Top-level container for system memory data
    .. attribute:: config

    Configuration data for system memory
    **type**: :py:class:`Config <ydk.models.openconfig.openconfig_system.System.Memory.Config>`

    .. attribute:: state

    Operational state data for system memory
    **type**: :py:class:`State <ydk.models.openconfig.openconfig_system.System.Memory.State>`

    **config**: False

    **_setattr_**(self, name, value):
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Memory, self).__init__()

    self.yang_name = "memory"
    self.yang_parent_name = "system"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._leafs = OrderedDict()

    self.config = System.Memory.Config()
    self.config.parent = self
    self._children_name_map["config"] = "config"

    self.state = System.Memory.State()
    self.state.parent = self
    self._children_name_map["state"] = "state"
    self._segment_path = lambda: "memory"
    self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Memory, [], name, value)

class Config(_Entity_):
    """
    Configuration data for system memory
    """

    """
    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
else:
    super(System.Memory.Config, self).__init__()

self.yang_name = "config"
self.yang_parent_name = "memory"
self.is_top_level_class = False
self.has_list_ancestor = False
self.yang_key_names = []
self.child_classes = OrderedDict()
self.leafs = OrderedDict()
self.segment_path = lambda: "config"
self.leafs["config"] = lambda: "openconfig-system:system/memory/%s" % self.segment_path()
self.is_frozen = True

class State(_Entity_):
    
    Operational state data for system memory

    .. attribute:: physical

        Reports the total physical memory available on the system
        **type**: int
        **range**: 0..18446744073709551615
        **config**: False
        **units**: bytes

    .. attribute:: reserved

        Memory reserved for system use
        **type**: int
        **range**: 0..18446744073709551615
        **config**: False
        **units**: bytes

_prefix = 'oc-sys'
_revision = '2018-07-17'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Memory.State, self).__init__()

self.yang_name = "state"
self.yang_parent_name = "memory"
self.is_top_level_class = False
self.has_list_ancestor = False
self.yang_keys_names = []
self._child_classes = OrderedDict({})
self._leafs = OrderedDict({
    ('physical', (YLeaf(YType.uint64, 'physical'), ['int'])),
    ('reserved', (YLeaf(YType.uint64, 'reserved'), ['int'])),
})
self.physical = None
self.reserved = None
self._segment_path = lambda: "state"
self._absolute_path = lambda: "openconfig-system:system/memory/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Memory.State, ['physical', 'reserved'], name, value)

class Cpus(_Entity_):
    '''
    Enclosing container for the list of CPU cores on the system
    
    .. attribute:: cpu

    List of CPU cores on the system (including logical CPUs on hyperthreaded systems), keyed by either a numerical index, or the ALL value for an entry representing the aggregation across all CPUs
    
    **type**: list of :py:class:`Cpu <ydk.models.openconfig.openconfig_system.System.Cpus.Cpu>`

    **config**: False

    '''

    _prefix = 'oc-sys'
    _revision = '2018-07-17'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Cpus, self).__init__()

self.yang_name = "cpus"
self.yang_parent_name = "system"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = []
self._child_classes = OrderedDict([(
    "cpu", ("cpu", System.Cpus.Cpu))])
self._leafs = OrderedDict()

self.cpu = YList(self)

self._segment_path = lambda: "cpus"
self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Cpus, [], name, value)

class Cpu(_Entity_):
    """
    List of CPU cores on the system (including logical CPUs
    on hyperthreaded systems), keyed by either a numerical
    index, or the ALL value for an entry representing the
    aggregation across all CPUs.

    .. attribute:: index  (key)

    Reference to list key
    **type**: union of the below types:


    **type**: int

    **range**: 0..4294967295


    **config**: False

    .. attribute:: state
Operational state data for the system CPU(s)


**config**: False

.. _prefix = 'oc-sys'
.. _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Cpus.Cpu, self).__init__()

    self.yang_name = "cpu"
    self.yang_parent_name = "cpus"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.leaflet_names = ["index"]
    self._leafs = OrderedDict([(
        'index', YLeaf(YType.str, 'index'), ['str'])
    ])
    self.index = None

    self.state = System.Cpus.Cpu.State()
    self.state.parent = self
    self._children_name_map["state"] = "state"
    self.segment_path = lambda: "cpu" + "[index=" + str(self.index) + "]"
    self.absolute_path = lambda: "openconfig-system:syste" + "%s" % self.segment_path()
    self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Cpus.Cpu, ['index'], name, value)

class State(_Entity_):
    """
    Operational state data for the system CPU(s)
    .. attribute:: index

    The CPU index for each processor core on the system. On a single-core system, the index should be zero.
    The ALL index signifies an aggregation of the CPU utilization statistics over all cores in the system
**type**

**type**

**type**

**range:** 0..4294967295

**config**

.. attribute:: total

Total CPU utilization

**type**

**type**

**config**

.. attribute:: user

Percentage of CPU time spent running in user space

**type**

**type**

**config**

.. attribute:: kernel

Percentage of CPU time spent running in kernel space

**type**

**type**

**config**

.. attribute:: idle

Percentage of CPU time spent idle

**type**

**type**

**config**

.. attribute:: wait
Percentage of CPU time spent waiting for I/O


**config**: False

.. attribute:: hardware_interrupt

Percentage of CPU time spent servicing hardware interrupts


**config**: False

.. attribute:: software_interrupt

Percentage of CPU time spent servicing software interrupts


**config**: False

""

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Cpus.Cpu.State, self).__init__()

    self.yang_name = "state"
    self.yang_parent_name = "cpu"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self._child_classes = OrderedDict(
        [('total', ('total', System.Cpus.Cpu.State.Total)),
    self._leafs = OrderedDict(
        [('index', (YLeaf(YType.str, 'index'),
                      ['ydk.models.openconfig.openconfig_system'], 'System', 'Cpus.Cpu.State.Index', 'index'))])
self.index = None

self.total.parent = self
self._children_name_map["total"] = "total"

self.user.parent = self
self._children_name_map["user"] = "user"

self.kernel.parent = self
self._children_name_map["kernel"] = "kernel"

self.nice.parent = self
self._children_name_map["nice"] = "nice"

self.idle.parent = self
self._children_name_map["idle"] = "idle"

self.wait.parent = self
self._children_name_map["wait"] = "wait"

self.hardware_interrupt.parent = self
self._children_name_map["hardware_interrupt"] = "hardware-interrupt"

self.software_interrupt.parent = self
self._children_name_map["software_interrupt"] = "software-interrupt"
self._segment_path = lambda: "state"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Cpus.Cpu.State, ['index'], name, value)

class Index(Enum):
    """
    Index (Enum Class)
    """
    Index (Enum Class)

    The CPU index for each processor core on the system. On a

    single-core system, the index should be zero. The ALL
index signifies an aggregation of the CPU utilization statistics over all cores in the system.

.. data:: ALL = 0

Index value indicating all CPUs in the system

```
ALL = Enum.YLeaf(0, "ALL")
```

class Total(_Entity_):
    ""
    Total CPU utilization.
    ""
    .. attribute:: instant

    The instantaneous percentage value

    **type**: int

    **range**: 0..100

    **config**: False

    .. attribute:: avg

    The arithmetic mean value of the percentage measure of the statistic over the time interval

    **type**: int

    **range**: 0..100

    **config**: False

    .. attribute:: min

    The minimum value of the percentage measure of the statistic over the time interval

    **type**: int

    **range**: 0..100

    **config**: False

    .. attribute:: max

    The maximum value of the percentage measure of the statistic over the time interval
**type**: int

**range**: 0..100

**config**: False

.. attribute:: interval

If supported by the system, this reports the time interval over which the min/max/average statistics are computed by the system

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: min_time

The absolute time at which the minimum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: max_time

The absolute time at which the maximum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**: int

**range**: 0..18446744073709551615

**config**: False

```python
__prefix = 'oc-sys'
__revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Cpus.Cpu.State.Total, self).__init__()
```
self.yang_name = "total"
self.yang_parent_name = "state"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict(["instant", 'int'], ['avg', 'int'], ['min', 'int'], ['max', 'int'], ['interval', 'int'], ['min_time', 'int'], ['max_time', 'int'])

self.instant = None
self.avg = None
self.min = None
self.max = None
self.interval = None
self.min_time = None
self.max_time = None
self._segment_path = lambda: "total"
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Cpus.Cpu.State.Total, ["instant", "avg", "min", "max", "interval", "min_time", "max_time"], name, value)

class User(_Entity_):
    
    Percentage of CPU time spent running in user space.

def __setattr__(self, name, value):
    self._perform_setattr(System.Cpus.Cpu.State.Total, ["instant", "avg", "min", "max", "interval", "min_time", "max_time"], name, value)
.. attribute:: min

The minimum value of the percentage measure of the statistic over the time interval

.. attribute:: max

The maximum value of the percentage measure of the statistic over the time interval

.. attribute:: interval

If supported by the system, this reports the time interval over which the min/max/average statistics are computed by the system

.. attribute:: min_time

The absolute time at which the minimum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

.. attribute:: max_time

The absolute time at which the maximum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)
**type**: int

**range**: 0..18446744073709551615

**config**: False

```python
_def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Cpus.Cpu.State.User, self).__init__()

    self.yang_name = "user"
    self.yang_parent_name = "state"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict(
        ('instant', (YLeaf(YType.uint8, 'instant'), ['int'])),
        ('avg', (YLeaf(YType.uint8, 'avg'), ['int'])),
        ('min', (YLeaf(YType.uint8, 'min'), ['int'])),
        ('max', (YLeaf(YType.uint8, 'max'), ['int'])),
        ('interval', (YLeaf(YType.uint64, 'interval'), ['int'])),
        ('min_time', (YLeaf(YType.uint64, 'min-time'), ['int'])),
        ('max_time', (YLeaf(YType.uint64, 'max-time'), ['int'])),
    )
    self.instant = None
    self.avg = None
    self.min = None
    self.max = None
    self.interval = None
    self.min_time = None
    self.max_time = None
    self._segment_path = lambda: "user"
    self._is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Cpus.Cpu.State.User, ['instant', 'avg', 'min', 'max', 'interval', 'min_time', 'max_time'], name, value)
```
class Kernel(_Entity_):
    
    Percentage of CPU time spent running in kernel space.

    .. attribute:: instant

    The instantaneous percentage value
    **type**: int

    **range**: 0..100

    **config**: False

    .. attribute:: avg

    The arithmetic mean value of the percentage measure of the statistic over the time interval
    **type**: int

    **range**: 0..100

    **config**: False

    .. attribute:: min

    The minimum value of the percentage measure of the statistic over the time interval
    **type**: int

    **range**: 0..100

    **config**: False

    .. attribute:: max

    The maximum value of the percentage measure of the statistic over the time interval
    **type**: int

    **range**: 0..100

    **config**: False

    .. attribute:: interval

    If supported by the system, this reports the time interval over which the min/max/average statistics are computed by the system
    **type**: int
.. attribute:: min_time

The absolute time at which the minimum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

.. attribute:: max_time

The absolute time at which the maximum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

```python
self.yang_name = "kernel"
self.yang_parent_name = "state"
self.is_top_level_class = False
self.has_list_ancestor = True
self.yang_key_names = []
self._child_classes = OrderedDict({})
self._leafs = OrderedDict({
    'instant', (YLeaf(YType.uint8, 'instant'), ['int']),
    'avg', (YLeaf(YType.uint8, 'avg'), ['int']),
    'min', (YLeaf(YType.uint8, 'min'), ['int']),
    'max', (YLeaf(YType.uint8, 'max'), ['int'])},
..
```
class Nice(_Entity_):
    
    Percentage of CPU time spent running low-priority (niced) user processes.
    .. attribute:: instant

    The instantaneous percentage value
    **type**: int
    **range**: 0..100
    **config**: False
    
    .. attribute:: avg

    The arithmetic mean value of the percentage measure of the statistic over the time interval
    **type**: int
    **range**: 0..100
    **config**: False
    
    .. attribute:: min

    The minimum value of the percentage measure of the statistic over the time interval
    **type**: int
**range:** 0..100

**config**: False

.. attribute:: max

The maximum value of the percentage measure of the statistic over the time interval

**type**: int

**range:** 0..100

**config**: False

.. attribute:: interval

If supported by the system, this reports the time interval over which the min/max/average statistics are computed by the system

**type**: int

**range:** 0..18446744073709551615

**config**: False

.. attribute:: min_time

The absolute time at which the minimum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**: int

**range:** 0..18446744073709551615

**config**: False

.. attribute:: max_time

The absolute time at which the maximum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**: int

**range:** 0..18446744073709551615

**config**: False

```
_prefix = 'oc-sys'
```
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Cpus.Cpu.State.Nice, self).__init__()

self.yang_name = "nice"
self.yang_parent_name = "state"
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict(
    [('instant', (YLeaf(YType.uint8, 'instant'), ['int']))],
    [('avg', (YLeaf(YType.uint8, 'avg'), ['int']))],
    [('min', (YLeaf(YType.uint8, 'min'), ['int']))],
    [('max', (YLeaf(YType.uint8, 'max'), ['int']))],
    [('interval', (YLeaf(YType.uint64, 'interval'), ['int']))],
    [('min_time', (YLeaf(YType.uint64, 'min-time'), ['int']))],
    [('max_time', (YLeaf(YType.uint64, 'max-time'), ['int']))]
)
self.instant = None
self.avg = None
self.min = None
self.max = None
self.interval = None
self.min_time = None
self.max_time = None
self._segment_path = lambda: "nice"
self._is_frozen = True

def _setattr_(self, name, value):
    self._perform_setattr(System.Cpus.Cpu.State.Nice, ['instant', 'avg', 'min', 'max', 'interval', 'min_time', 'max_time'], name, value)

class Idle(_Entity_):
    """
    Percentage of CPU time spent idle.
    .. attribute:: instant

    The instantaneous percentage value

    **type**: int
.. attribute:: avg

The arithmetic mean value of the percentage measure of the statistic over the time interval

.. attribute:: min

The minimum value of the percentage measure of the statistic over the time interval

.. attribute:: max

The maximum value of the percentage measure of the statistic over the time interval

.. attribute:: interval

If supported by the system, this reports the time interval over which the min/max/average statistics are computed by the system

.. attribute:: min_time

The absolute time at which the minimum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)
**config**: False

.. attribute:: max_time

The absolute time at which the maximum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**: int

**range**: 0..18446744073709551615

**config**: False

```python
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Cpus.Cpu.State.Idle, self).__init__()

    self.yang_name = "idle"
    self.yang_parent_name = "state"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_key_names = []
    self._child_classes = OrderedDict(
    self._leafs = OrderedDict(
        ('instant', (YLeaf(YType.uint8, 'instant'), ['int'])),
        ('avg', (YLeaf(YType.uint8, 'avg'), ['int'])),
        ('min', (YLeaf(YType.uint8, 'min'), ['int'])),
        ('max', (YLeaf(YType.uint8, 'max'), ['int'])),
        ('interval', (YLeaf(YType.uint64, 'interval'), ['int'])),
        ('min_time', (YLeaf(YType.uint64, 'min-time'), ['int'])),
        ('max_time', (YLeaf(YType.uint64, 'max-time'), ['int'])),
    )

    self.instant = None
    self.avg = None
    self.min = None
    self.max = None
    self.interval = None
    self.min_time = None
    self.max_time = None
```
def __setattr__(self, name, value):
    self._perform_setattr(System.Cpus.Cpu.State.Idle, ['instant', 'avg', 'min', 'max', 'interval', 'min_time',
    'max_time'], name, value)

class Wait(_Entity_):
    """
    Percentage of CPU time spent waiting for I/O.
    .. attribute:: instant

    The instantaneous percentage value
    **type**: int
    **range**: 0..100
    **config**: False
    .. attribute:: avg

    The arithmetic mean value of the percentage measure of the statistic over the time interval
    **type**: int
    **range**: 0..100
    **config**: False
    .. attribute:: min

    The minimum value of the percentage measure of the statistic over the time interval
    **type**: int
    **range**: 0..100
    **config**: False
    .. attribute:: max

    The maximum value of the percentage measure of the statistic over the time interval
    **type**: int
    **range**: 0..100
    **config**: False
.. attribute:: interval

If supported by the system, this reports the time interval over which the min/max/average statistics are computed by the system

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: min_time

The absolute time at which the minimum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: max_time

The absolute time at which the maximum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**: int

**range**: 0..18446744073709551615

**config**: False

```python
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Cpus.Cpu.State.Wait, self).__init__()

    self.yang_name = "wait"
    self.yang_parent_name = "state"
    self.is_top_level_class = False
    self.has_list_ancestor = True
```
class HardwareInterrupt(_Entity_):
    """
    Percentage of CPU time spent servicing hardware interrupts.
    .. attribute:: instant

    The instantaneous percentage value
    **type**: int
    **range**: 0..100
    **config**: False

    .. attribute:: avg

    The arithmetic mean value of the percentage measure of the statistic over the time interval
    **type**: int
    **range**: 0..100
    **config**: False
.. attribute:: min

The minimum value of the percentage measure of the statistic over the time interval

**type**: int

**range**: 0..100

**config**: False

.. attribute:: max

The maximum value of the percentage measure of the statistic over the time interval

**type**: int

**range**: 0..100

**config**: False

.. attribute:: interval

If supported by the system, this reports the time interval over which the min/max/average statistics are computed by the system

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: min_time

The absolute time at which the minimum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: max_time

The absolute time at which the maximum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)

**type**: int

**range**: 0..18446744073709551615

**config**: False
class SoftwareInterrupt(_Entity_):
    
    Percentage of CPU time spent servicing software interrupts
.. attribute:: instant

The instantaneous percentage value
**type**: int

**range**: 0..100

**config**: False

.. attribute:: avg

The arithmetic mean value of the percentage measure of the statistic over the time interval
**type**: int

**range**: 0..100

**config**: False

.. attribute:: min

The minimum value of the percentage measure of the statistic over the time interval
**type**: int

**range**: 0..100

**config**: False

.. attribute:: max

The maximum value of the percentage measure of the statistic over the time interval
**type**: int

**range**: 0..100

**config**: False

.. attribute:: interval

If supported by the system, this reports the time interval over which the min/max/average statistics are computed by the system
**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: min_time
The absolute time at which the minimum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)
**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: max_time

The absolute time at which the maximum value occurred. The value is the timestamp in nanoseconds relative to the Unix Epoch (Jan 1, 1970 00:00:00 UTC)
**type**: int

**range**: 0..18446744073709551615

**config**: False

_

_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Cpus.Cpu.State.SoftwareInterrupt, self).__init__()

    self.yang_name = "software-interrupt"
    self.yang_parent_name = "state"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self._list_key_names = []
    self._child_classes = OrderedDict([(
        'instant', (YLeaf(YType.uint8, 'instant'), ['int']),),
        ('avg', (YLeaf(YType.uint8, 'avg'), ['int']),),
        ('min', (YLeaf(YType.uint8, 'min'), ['int']),),
        ('max', (YLeaf(YType.uint8, 'max'), ['int']),),
        ('interval', (YLeaf(YType.uint64, 'interval'), ['int']),),
        ('min_time', (YLeaf(YType.uint64, 'min-time'), ['int']),),
        ('max_time', (YLeaf(YType.uint64, 'max-time'), ['int']),),
    )]
    self.instant = None
self.avg = None
self.min = None
self.max = None
self.interval = None
self.min_time = None
self.max_time = None
self._segment_path = lambda: "software-interrupt"
self._is_frozen = True

def __setattr__(self, name, value):
        'instant', 'avg', 'min', 'max', 'interval', 'min_time', 'max_time'], name, value)

class Processes(_Entity_):
    ```
    Parameters related to all monitored processes

    .. attribute:: process

    List of monitored processes


    **config**: False
    ```

    ..

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Processes, self).__init__()

    self.yang_name = "processes"
    self.yang_parent_name = "system"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.ylist_key_names = []
    self._child_classes = OrderedDict(
self._leafs = OrderedDict()

self.process = YList(self)
sel._segment_path = lambda: "processes"
self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
sel._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Processes, [], name, value)

class Process(_Entity_):
    """
    List of monitored processes
    
    .. attribute:: pid  (key)
        Reference to the process pid key
        **type**: int
        **range**: 0..18446744073709551615
        **config**: False
    
    .. attribute:: state
        State parameters related to monitored processes
        **config**: False
    """
    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Processes.Process, self).__init__()

    self.yang_name = "process"
    self.yang_parent_name = "processes"
self.is_top_level_class = False
self.has_list_ancestor = False
self.ylist_key_names = ['pid']
self._leafs = OrderedDict([('pid', (YLeaf(YType.str, 'pid'), ['int']))])

self.pid = None

self.state.parent = self
self._children_name_map['state'] = 'state'
self._segment_path = lambda: 'process' + '[pid="{}"]'.format(self.pid)
self._absolute_path = lambda: 'openconfig-system:system/processes/' + self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Processes.Process, ['pid'], name, value)

class State(_Entity_):
    """
    State parameters related to monitored processes
    """

    .. attribute:: pid

        The process pid
        
        **type**: int
        
        **range**: 0..18446744073709551615
        
        **config**: False

    .. attribute:: name

        The process name
        
        **type**: str
        
        **config**: False

    .. attribute:: args

        Current process command line arguments. Arguments with a parameter (e.g., \-\-option 10 or \-option=10) should be represented as a single element of the list with the argument name and parameter together. Flag arguments, i.e., those without a parameter should also be in their own list element
        
        **type**: list of str

        **config**: False
.. attribute:: start_time

The time at which this process started, reported as nanoseconds since the UNIX epoch. The system must be synchronized such that the start-time can be reported accurately, otherwise it should not be reported

**type**: int

**range**: 0..18446744073709551615

**config**: False

**units**: ns

.. attribute:: uptime

Amount of time elapsed since this process started

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: cpu_usage_user

CPU time consumed by this process in user mode

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: cpu_usage_system

CPU time consumed by this process in kernel mode

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: cpu_utilization

The percentage of CPU that is being used by the process

**type**: int

**range**: 0..100

**config**: False
.. attribute:: memory_usage

Bytes allocated and still in use by the process
**type**: int

**range**: 0..18446744073709551615

**config**: False

**units**: bytes

.. attribute:: memory_utilization

The percentage of RAM that is being used by the process
**type**: int

**range**: 0..100

**config**: False

```python
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Processes.Process.State, self).__init__()

    self.yang_name = "state"
    self.yang_parent_name = "process"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.yang_list_key_names = []
    self._child_classes = None
    self._leafs = YLeafList(
        ('pid', YLeaf(YType.uint64, 'pid'), ['int'])),
        ('name', YLeaf(YType.str, 'name'), ['str'])),
        ('args', YLeafList(YType.str, 'args'), ['str'])),
        ('start_time', YLeaf(YType.uint64, 'start-time'), ['int'])),
        ('uptime', YLeaf(YType.uint64, 'uptime'), ['int'])),
        ('cpu_usage_user', YLeaf(YType.uint64, 'cpu-usage-user'), ['int'])),
        ('cpu_usage_system', YLeaf(YType.uint64, 'cpu-usage-system'), ['int'])),
```
('cpu_utilization', (YLeaf(YType.uint8, 'cpu-utilization'), ['int'])),
('memory_usage', (YLeaf(YType.uint64, 'memory-usage'), ['int'])),
('memory_utilization', (YLeaf(YType.uint8, 'memory-utilization'), ['int'])),
]

self.pid = None
self.name = None
self.args = []
self.start_time = None
self.uptime = None
self.cpu_usage_user = None
self.cpu_usage_system = None
self.cpu_utilization = None
self.memory_usage = None
self.memory_utilization = None
self._segment_path = lambda: "state"
self._is_frozen = True

def __setattr__(self, name, value):
'cpu_usage_user', 'cpu_usage_system', 'cpu_utilization', 'memory_usage', 'memory_utilization'], name, value)

class Alarms(_Entity_):
    """
    Top-level container for device alarms
    .. attribute:: alarm

    List of alarms, keyed by a unique id
    **config**: False

    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Alarms, self).__init__()}
self.yang_name = "alarms"
self.yang_parent_name = "system"
self.is_top_level_class = False
self.has_list_ancestor = False
self.yslist_key_names = []
self._child_classes = OrderedDict( ("alarm", System.Alarms.Alarm)))
self._leafs = OrderedDict()

self.alarm = YList(self)
self._segment_path = lambda: "alarms"
self._absolute_path = lambda: "openconfig-system:system/%s" % self._segment_path()
self._is_frozen = True

def __setattr__(self, name, value):
    self._perform_setattr(System.Alarms, [], name, value)

class Alarm(_Entity_):
    
    List of alarms, keyed by a unique id

    .. attribute:: id  (key)

    References the unique alarm id
    **type**: str


    **config**: False

    .. attribute:: config

    Configuration data for each alarm

    **config**: False

    .. attribute:: state

    Operational state data for a device alarm

    **config**: False

    ..
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Alarms.Alarm, self).__init__()

    self.yang_name = "alarm"
    self.yang_parent_name = "alarms"
    self.is_top_level_class = False
    self.has_list_ancestor = False
    self.yslist_key_names = [id']

    self.leafs = OrderedDict(["id", YLeaf(YType.str, 'id'), ['str'])
    self.id = None

    self.config.parent = self
    self.children_name_map["config"] = "config"

    self.state = System.Alarms.Alarm.State()
    self.state.parent = self
    self.children_name_map["state"] = "state"
    self.segment_path = lambda: "alarm" + [id=\" + str(self.id) + "]"
    self.absolute_path = lambda: "openconfig-system:system/alarms/%s" % self.segment_path()
    self.is_frozen = True

    def __setattr__(self, name, value):
        self._perform_setattr(System.Alarms.Alarm, ['id'], name, value)

class Config(_Entity_):
    """
    Configuration data for each alarm
    """

    """
    Configuration data for each alarm
    """

    _prefix = 'oc-sys'
    _revision = '2018-07-17'
def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Alarms.Alarm.Config, self).__init__()

    self.yang_name = "config"
    self.yang_parent_name = "alarm"
    self.is_top_level_class = False
    self.has_list_ancestor = True
    self.ylist_key_names = []
    self._child_classes = OrderedDict()
    self._leafs = OrderedDict()
    self._segment_path = lambda: "config"
    self._is_frozen = True

class State(_Entity_):
    ""
    Operational state data for a device alarm
    .. attribute:: id

    Unique ID for the alarm \(\text{\small this will not be a configurable parameter on many implementations}\)
    **type**: str
    **config**: False

    .. attribute:: resource

    The item that is under alarm within the device. The resource may be a reference to an item which is defined elsewhere in the model. For example, it may be a platform/component, interfaces/interface, terminal-device/logical-channels/channel, etc. In this case the system should match the name of the referenced item exactly. The referenced item could alternatively be the path of the item within the model
    **type**: str
    **config**: False

    .. attribute:: text

    The string used to inform operators about the alarm. This MUST contain enough information for an operator to be able to understand the problem. If this string contains structure, this format should be clearly documented for programs to be able to parse that information
    **type**: str
    **config**: False
.. attribute:: time_created

The time at which the alarm was raised by the system. This value is expressed as nanoseconds since the Unix Epoch

**type**: int

**range**: 0..18446744073709551615

**config**: False

.. attribute:: severity

The severity level indicating the criticality and impact of the alarm

**type**: openconfig_alarm_types.OPENCONFIGALARMSEVERITY

**config**: False

.. attribute:: type_id

The abbreviated name of the alarm, for example LOS, EQPT, or OTS. Also referred to in different systems as condition type, alarm identifier, or alarm mnemonic. It is recommended to use the OPENCONFIG_ALARM_TYPE_ID identities where possible and only use the string type when the desired identityref is not yet defined

**type**: union of the below types:

- str

**type**: openconfig_alarm_types.OPENCONFIGALARMTYPEID

**config**: False

```
_prefix = 'oc-sys'
_revision = '2018-07-17'

def __init__(self):
    if sys.version_info > (3,):
        super().__init__()
    else:
        super(System.Alarms.Alarm.State, self).__init__()

    self.yang_name = "state"
    self.yang_parent_name = "alarm"
```
self.is_top_level_class = False
self.has_list_ancestor = True
self.ylist_key_names = []
self._child_classes = OrderedDict([])
self._leafs = OrderedDict(
    (‘id’, (YLeaf(YType.str, ‘id’), [‘str’])),
    (‘resource’, (YLeaf(YType.str, ‘resource’), [‘str’])),
    (‘text’, (YLeaf(YType.str, ‘text’), [‘str’])),
    (‘time_created’, (YLeaf(YType.uint64, ‘time-created’), [‘int’])),
    (‘severity’, (YLeaf(YType.identityref, ‘severity’), [('ydk.models.openconfig.openconfig_alarm_types', 'OPENCONFIGALARMSEVERITY')])),
    (‘type_id’, (YLeaf(YType.str, ‘type-id’), [‘str’], ('ydk.models.openconfig.openconfig_alarm_types', 'OPENCONFIGALARMTYPEID'))),
)
self.id = None
self.resource = None
self.text = None
self.time_created = None
self.severity = None
self.type_id = None
self._segment_path = lambda: "state"
self._is_frozen = True

def __setattr__(self, name, value):

def clone_ptr(self):
    self._top_entity = System()
    return self._top_entity

class NTPAUTHMD5(NTPAUTHTYPE):
    ‘’’
    MD5 encryption method
    ‘’’

    _prefix = ‘oc-sys’
    _revision = ‘2018-07-17’

    def __init__(self, ns="http://openconfig.net.yang/system", pref="openconfig-system", tag="openconfig-"
system:NTP_AUTH_MD5“):
    if sys.version_info > (3,):
        super().__init__(ns, pref, tag)
    else:
        super(NTPAUTHMD5, self).__init__(ns, pref, tag)

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-
  0.1.8/ydk/models/openconfig/openconfig_system.py
No license file was found, but licenses were detected in source scan.

module ietf-yang-types {
    namespace "urn:ietf:params:xml:ns:yang:ietf-yang-types";
    prefix yang;

    organization
        "IETF NETMOD (NETCONF Data Modeling Language) Working Group";
    contact
        "WG Web:  <http://tools.ietf.org/wg/netmod/>
                 WG List:  <mailto:netmod@ietf.org>
                 WG Chair: David Kessens
                           <mailto:david.kessens@nsn.com>
                 WG Chair: Juergen Schoenwaelder
                           <mailto:j.schoenwaelder@jacobs-university.de>
                 Editor:  Juergen Schoenwaelder
                           <mailto:j.schoenwaelder@jacobs-university.de>";
    description
        "This module contains a collection of generally useful derived
         YANG data types.

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    authors of the code.  All rights reserved.

    Redistribution and use in source and binary forms, with or
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    Relating to IETF Documents
    (http://trustee.ietf.org/license-info).

    This version of this YANG module is part of RFC 6991; see
    the RFC itself for full legal notices.";

    revision 2013-07-15 {
    description
"This revision adds the following new data types:
- yang-identifier
- hex-string
- uuid
- dotted-quad"

reference "RFC 6991: Common YANG Data Types"
}
revision 2010-09-24 {
  description
  "Initial revision."
  reference "RFC 6021: Common YANG Data Types"
}

typedef counter32 {
  type uint32;
  description
  "The counter32 type represents a non-negative integer
  that monotonically increases until it reaches a
  maximum value of 2^32-1 (4294967295 decimal), when it
  wraps around and starts increasing again from zero.

  Counters have no defined 'initial' value, and thus, a
  single value of a counter has (in general) no information
  content. Discontinuities in the monotonically increasing
  value normally occur at re-initialization of the
  management system, and at other times as specified in the
  description of a schema node using this type. If such
  other times can occur, for example, the creation of
  a schema node of type counter32 at times other than
  re-initialization, then a corresponding schema node
  should be defined, with an appropriate type, to indicate
  the last discontinuity.

  The counter32 type should not be used for configuration
  schema nodes. A default statement SHOULD NOT be used in
  combination with the type counter32.

  In the value set and its semantics, this type is equivalent
  to the Counter32 type of the SMIv2."
  reference
  "RFC 2578: Structure of Management Information Version 2
  (SMIv2)"
}

typedef zero-based-counter32 {
  type yang:counter32;
  default "0";
  description

"The zero-based-counter32 type represents a counter32 that has the defined 'initial' value zero.

A schema node of this type will be set to zero (0) on creation and will thereafter increase monotonically until it reaches a maximum value of $2^{32}-1$ (4294967295 decimal), when it wraps around and starts increasing again from zero.

Provided that an application discovers a new schema node of this type within the minimum time to wrap, it can use the 'initial' value as a delta. It is important for a management station to be aware of this minimum time and the actual time between polls, and to discard data if the actual time is too long or there is no defined minimum time.

In the value set and its semantics, this type is equivalent to the ZeroBasedCounter32 textual convention of the SMIv2.";

reference
"RFC 4502: Remote Network Monitoring Management Information Base Version 2";

}\}

typedef counter64 {
    type uint64;
    description
        "The counter64 type represents a non-negative integer that monotonically increases until it reaches a maximum value of $2^{64}-1$ (18446744073709551615 decimal), when it wraps around and starts increasing again from zero.

Counters have no defined 'initial' value, and thus, a single value of a counter has (in general) no information content. Discontinuities in the monotonically increasing value normally occur at re-initialization of the management system, and at other times as specified in the description of a schema node using this type. If such other times can occur, for example, the creation of a schema node of type counter64 at times other than re-initialization, then a corresponding schema node should be defined, with an appropriate type, to indicate the last discontinuity.

The counter64 type should not be used for configuration schema nodes. A default statement SHOULD NOT be used in combination with the type counter64.

In the value set and its semantics, this type is equivalent to the Counter64 type of the SMIv2.";
typedef zero-based-counter64 {
  type yang:counter64;
  default "0";
  description
  "The zero-based-counter64 type represents a counter64 that has the defined 'initial' value zero."

  A schema node of this type will be set to zero (0) on creation and will thereafter increase monotonically until it reaches a maximum value of 2^64-1 (18446744073709551615 decimal), when it wraps around and starts increasing again from zero.

  Provided that an application discovers a new schema node of this type within the minimum time to wrap, it can use the 'initial' value as a delta. It is important for a management station to be aware of this minimum time and the actual time between polls, and to discard data if the actual time is too long or there is no defined minimum time.

  In the value set and its semantics, this type is equivalent to the ZeroBasedCounter64 textual convention of the SMIv2.";
  reference
  "RFC 2856: Textual Conventions for Additional High Capacity Data Types";
}

typedef gauge32 {
  type uint32;
  description
  "The gauge32 type represents a non-negative integer, which may increase or decrease, but shall never exceed a maximum value, nor fall below a minimum value. The maximum value cannot be greater than 2^32-1 (4294967295 decimal), and the minimum value cannot be smaller than 0. The value of a gauge32 has its maximum value whenever the information being modeled is greater than or equal to its maximum value, and has its minimum value whenever the information being modeled is smaller than or equal to its minimum value. If the information being modeled subsequently decreases below (increases above) the maximum (minimum) value, the gauge32 also decreases (increases).

  In the value set and its semantics, this type is equivalent
typedef gauge64 {
  type uint64;
  description
  "The gauge64 type represents a non-negative integer, which may increase or decrease, but shall never exceed a maximum value, nor fall below a minimum value. The maximum value cannot be greater than 2^64-1 (18446744073709551615), and the minimum value cannot be smaller than 0. The value of a gauge64 has its maximum value whenever the information being modeled is greater than or equal to its maximum value, and has its minimum value whenever the information being modeled is smaller than or equal to its minimum value. If the information being modeled subsequently decreases below (increases above) the maximum (minimum) value, the gauge64 also decreases (increases).

  In the value set and its semantics, this type is equivalent to the CounterBasedGauge64 SMIv2 textual convention defined in RFC 2856";
  reference
  "RFC 2856: Textual Conventions for Additional High Capacity Data Types";
}

typedef object-identifier {
  type string {
    pattern "(([0-1]\|[1-3]?[0-9]))(2\.(0|[1-9]\d*))((0\([1-9]\d*))))*";
  }
  description
  "The object-identifier type represents administratively assigned names in a registration-hierarchical-name tree.

  Values of this type are denoted as a sequence of numerical non-negative sub-identifier values. Each sub-identifier value MUST NOT exceed 2^32-1 (4294967295). Sub-identifiers are separated by single dots and without any intermediate whitespace.

  The ASN.1 standard restricts the value space of the first sub-identifier to 0, 1, or 2. Furthermore, the value space of the second sub-identifier is restricted to the range 0 to 39 if the first sub-identifier is 0 or 1. Finally,
the ASN.1 standard requires that an object identifier has always at least two sub-identifiers. The pattern captures these restrictions.

Although the number of sub-identifiers is not limited, module designers should realize that there may be implementations that stick with the SMIv2 limit of 128 sub-identifiers.

This type is a superset of the SMIv2 OBJECT IDENTIFIER type since it is not restricted to 128 sub-identifiers. Hence, this type SHOULD NOT be used to represent the SMIv2 OBJECT IDENTIFIER type; the object-identifier-128 type SHOULD be used instead.

reference
"ISO9834-1: Information technology -- Open Systems Interconnection -- Procedures for the operation of OSI Registration Authorities: General procedures and top arcs of the ASN.1 Object Identifier tree"

typedef object-identifier-128 {
    type object-identifier {
        pattern "\d*{1,127}";
    }
    description
    "This type represents object-identifiers restricted to 128 sub-identifiers.
    In the value set and its semantics, this type is equivalent to the OBJECT IDENTIFIER type of the SMIv2."
    reference
    "RFC 2578: Structure of Management Information Version 2 (SMIv2)"
}

typedef yang-identifier {
    type string {
        length "1..max";
        pattern "[^a-zA-Z_.][a-zA-Z0-9_\-_.]*";
        pattern "[^mM].*|[^lL].*";
    }
    description
    "A YANG identifier string as defined by the 'identifier' rule in Section 12 of RFC 6020. An identifier must start with an alphabetic character or an underscore followed by an arbitrary sequence of alphabetic or numeric characters, underscores, hyphens, or dots.
A YANG identifier MUST NOT start with any possible
combination of the lowercase or uppercase character
sequence 'xml'.

reference
"RFC 6020: YANG - A Data Modeling Language for the Network
Configuration Protocol (NETCONF)"

typedef date-and-time {
  type string {
    pattern "\d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}\.(\d+)?(Z|\+[\-]\d{2}:\d{2})";
  }
}

description
"The date-and-time type is a profile of the ISO 8601
standard for representation of dates and times using the
Gregorian calendar. The profile is defined by the
date-time production in Section 5.6 of RFC 3339.

The date-and-time type is compatible with the dateTime XML
schema type with the following notable exceptions:

(a) The date-and-time type does not allow negative years.

(b) The date-and-time time-offset -00:00 indicates an unknown
time zone (see RFC 3339) while -00:00 and +00:00 and Z
all represent the same time zone in dateTime.

(c) The canonical format (see below) of data-and-time values
differs from the canonical format used by the dateTime XML
schema type, which requires all times to be in UTC using
the time-offset 'Z'.

This type is not equivalent to the DateAndTime textual
convention of the SMIv2 since RFC 3339 uses a different
separator between full-date and full-time and provides
higher resolution of time-secfrac.

The canonical format for date-and-time values with a known time
zone uses a numeric time zone offset that is calculated using
the device's configured known offset to UTC time. A change of
the device's offset to UTC time will cause date-and-time values
to change accordingly. Such changes might happen periodically
in case a server follows automatically daylight saving time
(DST) time zone offset changes. The canonical format for
date-and-time values with an unknown time zone (usually
referring to the notion of local time) uses the time-offset
-00:00.";
typedef timeticks {
  type uint32;
  description
    "The timeticks type represents a non-negative integer that
     represents the time, modulo 2^32 (4294967296 decimal), in
     hundredths of a second between two epochs. When a schema
     node is defined that uses this type, the description of
     the schema node identifies both of the reference epochs.

     In the value set and its semantics, this type is equivalent
     to the TimeTicks type of the SMIv2.";
  reference
    "RFC 2578: Structure of Management Information Version 2
     (SMIv2)";
}

typedef timestamp {
  type yang:timeticks;
  description
    "The timestamp type represents the value of an associated
     timeticks schema node at which a specific occurrence
     happened. The specific occurrence must be defined in the
     description of any schema node defined using this type. When
     the specific occurrence occurred prior to the last time the
     associated timeticks attribute was zero, then the timestamp
     value is zero. Note that this requires all timestamp values
     to be reset to zero when the value of the associated timeticks
     attribute reaches 497+ days and wraps around to zero.

     The associated timeticks schema node must be specified
     in the description of any schema node using this type.

     In the value set and its semantics, this type is equivalent
     to the TimeStamp textual convention of the SMIv2.";
  reference
    "RFC 2579: Textual Conventions for SMIv2";
}

typedef phys-address {
  type string {
    pattern "((0-9a-fA-F)[2]:([0-9a-fA-F][2])+)?";
  }
  description
"Represents media- or physical-level addresses represented as a sequence octets, each octet represented by two hexadecimal numbers. Octets are separated by colons. The canonical representation uses lowercase characters.

In the value set and its semantics, this type is equivalent to the PhysAddress textual convention of the SMIv2."; reference "RFC 2579: Textual Conventions for SMIv2";
}
typedef mac-address {
  type string {
    pattern "[0-9a-fA-F]{2}(:[0-9a-fA-F]{2}){5}";
  }
  description
  "The mac-address type represents an IEEE 802 MAC address. The canonical representation uses lowercase characters.

In the value set and its semantics, this type is equivalent to the MacAddress textual convention of the SMIv2."; reference "IEEE 802: IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture
  RFC 2579: Textual Conventions for SMIv2";
}
typedef xpath1.0 {
  type string;
  description
  "This type represents an XPATH 1.0 expression.

When a schema node is defined that uses this type, the description of the schema node MUST specify the XPath context in which the XPath expression is evaluated."; reference "XPATH: XML Path Language (XPath) Version 1.0";
}
typedef hex-string {
  type string {
    pattern "((0-9a-fA-F)[2]:([0-9a-fA-F][2])+)?";
  }
  description
  "A hexadecimal string with octets represented as hex digits separated by colons. The canonical representation uses lowercase characters.";
}
typedef uuid {

type string {
    pattern "\[0-9a-fA-F\]{8}-\[0-9a-fA-F\]{4}-\[0-9a-fA-F\]{4}-\[0-9a-fA-F\]{4}-\[0-9a-fA-F\]{12}";
}

description
"A Universally Unique IDentifier in the string representation
defined in RFC 4122. The canonical representation uses
lowercase characters.

The following is an example of a UUID in string representation:
f81d4fae-7dec-11d0-a765-00a0c91e6bf6
"
eference
"RFC 4122: A Universally Unique IDentifier (UUID) URN
   Namespace"
}

typedef dotted-quad {
    type string {
        pattern "(([0-9]|1[0-9]|2[0-4]\d|25[0-5])\.){3}([0-9]|1[0-9]|2[0-4]\d|25[0-5])";
    }
    description
    "An unsigned 32-bit number expressed in the dotted-quad
       notation, i.e., four octets written as decimal numbers
       and separated with the '.' (full stop) character.";
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-yang-types.yang
No license file was found, but licenses were detected in source scan.

module openconfig-procmon {

    yang-version "1";

    // namespace
    namespace "http://openconfig.net/yang/system/procmon";

    prefix "oc-proc";

    // import some basic types
    import openconfig-extensions { prefix oc-ext; }
    import openconfig-types { prefix oc-types; }
// meta
organization "OpenConfig working group";

contact
"OpenConfig working group
www.openconfig.net";

description
"This module provides data definitions for process health
monitoring of one or more processes running on the system.";

oc-ext:openconfig-version "0.3.0";

revision "2017-09-18" {
  description
  "Updated to use OpenConfig types modules";
  reference "0.3.0";
}

revision "2017-07-06" {
  description
  "Move to oc-inet types, add IETF attribution, add RADIUS
counters, changed password leaf names to indicate hashed";
  reference "0.2.0";
}

revision "2017-01-29" {
  description
  "Initial public release";
  reference "0.1.0";
}

// grouping statements

grouping procmon-processes-top {
  description
  "Top level grouping for attributes for processes.";

  container processes {
    description
    "Parameters related to all monitored processes";

    list process {
      key "pid";
      config false;
      description
      "List of monitored processes";
    }
  }
}
leaf pid {
  type leafref {
    path "./state/pid";
  }
  description
  "Reference to the process pid key";
}

container state {
  config false;
  description
  "State parameters related to monitored processes";

  uses procmon-process-attributes-state;
}
}
}

grouping procmon-process-attributes-state {
  description
  "Attributes state definitions for a process";

  leaf pid {
    type uint64;
    description
    "The process pid";
  }

  leaf name {
    type string;
    description
    "The process name";
  }

  leaf-list args {
    type string;
    description
    "Current process command line arguments. Arguments with
    a parameter (e.g., --option 10 or -option=10) should be
    represented as a single element of the list with the
    argument name and parameter together. Flag arguments, i.e.,
    those without a parameter should also be in their own list
    element.";
  }

  leaf start-time {
}
type uint64;
units "ns";
description
"The time at which this process started, reported as nanoseconds since the UNIX epoch. The system must be synchronized such that the start-time can be reported accurately, otherwise it should not be reported."
}

leaf uptime {
  type oc-types:timeticks64;
description
  "Amount of time elapsed since this process started."
}

leaf cpu-usage-user {
  type oc-types:timeticks64;
description
  "CPU time consumed by this process in user mode."
}

leaf cpu-usage-system {
  type oc-types:timeticks64;
description
  "CPU time consumed by this process in kernel mode."
}

leaf cpu-utilization {
  type oc-types:percentage;
description
  "The percentage of CPU that is being used by the process."
}

leaf memory-usage {
  type uint64;
  units "bytes";
description
  "Bytes allocated and still in use by the process"
}

leaf memory-utilization {
  type oc-types:percentage;
description
  "The percentage of RAM that is being used by the process."
}
// augment statements

// rpc statements

// notification statements

}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/openconfig-procmon.yang

No license file was found, but licenses were detected in source scan.

module ietf-netconf-monitoring {
    prefix ncm;

    import ietf-yang-types {
        prefix yang;
    }
    import ietf-inet-types {
        prefix inet;
    }

    organization "IETF NETCONF (Network Configuration) Working Group";
    contact "WG Web: <http://tools.ietf.org/wg/netconf/>
    WG List: <mailto:netconf@ietf.org>

    WG Chair: Mehmet Ersue
    <mailto:mehmet.ersue@nsn.com>

    WG Chair: Bert Wijnen
    <mailto:bertietf@bwijnen.net>

    Editor: Mark Scott
    <mailto:mark.scott@ericsson.com>

    Editor: Martin Bjorklund
    <mailto:mbj@tail-f.com>

description "NETCONF Monitoring Module.
All elements in this module are read-only.

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This version of this YANG module is part of RFC 6022; see the RFC itself for full legal notices.

revision 2010-10-04 {
  description
    "Initial revision.";
  reference "RFC 6022: YANG Module for NETCONF Monitoring";
}

identity transport {
  description
    "Base identity for NETCONF transport types.";
}

identity netconf-ssh {
  base transport;
  description
    "NETCONF over Secure Shell (SSH).";
  reference
    "RFC 4742: Using the NETCONF Configuration Protocol over Secure SHell (SSH)";
}

identity netconf-soap-over-beep {
  base transport;
  description
    "NETCONF over Simple Object Access Protocol (SOAP) over Blocks Extensible Exchange Protocol (BEEP).";
  reference
    "RFC 4743: Using NETCONF over the Simple Object Access Protocol (SOAP)";
}

identity netconf-soap-over-https {
  base transport;
  description
    "NETCONF over Simple Object Access Protocol (SOAP) over Hypertext Transfer Protocol Secure (HTTPS).";
  reference
    "RFC 4743: Using NETCONF over the Simple Object Access Protocol (SOAP)";
}
identity netconf-beep {
  base transport;
  description "NETCONF over Blocks Extensible Exchange Protocol (BEEP).";
  reference "RFC 4744: Using the NETCONF Protocol over the Blocks Extensible Exchange Protocol (BEEP)";
}

identity netconf-tls {
  base transport;
  description "NETCONF over Transport Layer Security (TLS).";
  reference "RFC 5539: NETCONF over Transport Layer Security (TLS)";
}

identity schema-format {
  description "Base identity for data model schema languages.";
}

identity xsd {
  base schema-format;
  description "W3C XML Schema Definition.";
}

identity yang {
  base schema-format;
  description "The YANG data modeling language for NETCONF.";
  reference "RFC 6020: YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)";
}

identity yin {
  base schema-format;
  description "The YIN syntax for YANG.";
  reference "RFC 6020: YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)";
}
identity rng {
  base schema-format;
  description
    "Regular Language for XML Next Generation (RELAX NG).";
  reference "ISO/IEC 19757-2:2008: RELAX NG";
}

identity rnc {
  base schema-format;
  description
    "Relax NG Compact Syntax";
  reference "ISO/IEC 19757-2:2008: RELAX NG";
}

typedef netconf-datastore-type {
  type enumeration {
    enum "running";
    enum "candidate";
    enum "startup";
  }
  description
    "Enumeration of possible NETCONF datastore types.";
  reference "RFC 4741: NETCONF Configuration Protocol";
}

grouping common-counters {
  description
    "Counters that exist both per session, and also globally,"
    "accumulated from all sessions.";
  leaf in-rpcs {
    type yang:zero-based-counter32;
    description
      "Number of correct <rpc> messages received.";
  }
  leaf in-bad-rpcs {
    type yang:zero-based-counter32;
    description
      "Number of messages received when an <rpc> message was expected,"
      "that were not correct <rpc> messages. This includes XML parse "
      "errors and errors on the rpc layer.";
  }
  leaf out-rpc-errors {
    type yang:zero-based-counter32;
    description
      "Number of <rpc-reply> messages sent that contained an "
      "<rpc-error> element.";
  }
}
leaf out-notifications {
    type yang:zero-based-counter32;
    description
        "Number of <notification> messages sent."
    }
}

rpc get-schema {
    description
        "This operation is used to retrieve a schema from the
        NETCONF server.

        Positive Response:
        The NETCONF server returns the requested schema.

        Negative Response:
        If requested schema does not exist, the <error-tag> is
        'invalid-value'.

        If more than one schema matches the requested parameters, the
        <error-tag> is 'operation-failed', and <error-app-tag> is
        'data-not-unique'."
    input {
        leaf identifier {
            type string;
            mandatory true;
            description
                "Identifier for the schema list entry."
        }
        leaf version {
            type string;
            description
                "Version of the schema requested. If this parameter is not
                present, and more than one version of the schema exists on
                the server, a 'data-not-unique' error is returned, as
                described above."
        }
        leaf format {
            type identityref {
                base schema-format;
            }
            description
                "The data modeling language of the schema. If this
                parameter is not present, and more than one formats of
                the schema exists on the server, a 'data-not-unique' error
                is returned, as described above.";
        }
    }
}
output {  
  anyxml data {  
    description  
      "Contains the schema content.";
  }  
}  
}

container netconf-state {  
  config false;  
  description  
    "The netconf-state container is the root of the monitoring  
    data model.";
  container capabilities {  
    description  
      "Contains the list of NETCONF capabilities supported by the  
      server.";
    leaf-list capability {  
      type inet:uri;  
      description  
        "List of NETCONF capabilities supported by the server.";
    }  
  }
  container datastores {  
    description  
      "Contains the list of NETCONF configuration datastores.";
    list datastore {  
      key "name";
      description  
        "List of NETCONF configuration datastores supported by  
        the NETCONF server and related information.";
      leaf name {  
        type netconf-datastore-type;  
        description  
          "Name of the datastore associated with this list entry.";
      }  
    }
    container locks {  
      presence  
        "This container is present only if the datastore  
        is locked.";
      description  
        "The NETCONF <lock> and <partial-lock> operations allow  
        a client to lock specific resources in a datastore. The  
        NETCONF server will prevent changes to the locked  
        resources by all sessions except the one that acquired  
        the lock(s)."
    }
  }
}
the lock, the type of lock (global or partial) and the list of locked resources. Multiple locks per datastore are supported.

```ydk

grouping lock-info {
  description
  "Lock related parameters, common to both global and partial locks.";
  leaf locked-by-session {
    type uint32;
    mandatory true;
    description
    "The session ID of the session that has locked this resource. Both a global lock and a partial lock MUST contain the NETCONF session-id.

    If the lock is held by a session that is not managed by the NETCONF server (e.g., a CLI session), a session id of 0 (zero) is reported.";
    reference "RFC 4741: NETCONF Configuration Protocol";
  }
  leaf locked-time {
    type yang:date-and-time;
    mandatory true;
    description
    "The date and time of when the resource was locked.";
  }

  choice lock-type {
    description
    "Indicates if a global lock or a set of partial locks are set.";
    container global-lock {
      description
      "Present if the global lock is set.";
      uses lock-info;
    }
    list partial-lock {
      key "lock-id";
      description
      "List of partial locks.";
      reference
      "RFC 5717: Partial Lock Remote Procedure Call (RPC) for NETCONF";
      leaf lock-id {
        type uint32;
        description
      }
    }
  }
}
```

"This is the lock id returned in the <partial-lock> response.";
}
uses lock-info;
leaf-list select {
  type yang:xpath1.0;
  min-elements 1;
  description
  "The xpath expression that was used to request the lock. The select expression indicates the original intended scope of the lock.";
}
leaf-list locked-node {
  type instance-identifier;
  description
  "The list of instance-identifiers (i.e., the locked nodes).

The scope of the partial lock is defined by the list of locked nodes.”;
}
}
}
}
}
}
container schemas {
  description
  "Contains the list of data model schemas supported by the server.”;
  list schema {
    key "identifier version format";
    description
    "List of data model schemas supported by the server.”;
    leaf identifier {
      type string;
      description
      "Identifier to uniquely reference the schema. The identifier is used in the <get-schema> operation and may be used for other purposes such as file retrieval.

For modeling languages that support or require a data model name (e.g., YANG module name) the identifier MUST match that name. For YANG data models, the identifier is the name of the module or submodule. In other cases, an identifier such as a filename MAY be used instead.”;
    }
    leaf version {
type string;
description
"Version of the schema supported. Multiple versions MAY be
supported simultaneously by a NETCONF server. Each
version MUST be reported individually in the schema list,
i.e., with same identifier, possibly different location,
but different version.

For YANG data models, version is the value of the most
recent YANG 'revision' statement in the module or
submodule, or the empty string if no 'revision' statement
is present.";
}
leaf format {
type identityref {
  base schema-format;
}
description
"The data modeling language the schema is written
in (currently xsd, yang, yin, rng, or rnc).
For YANG data models, 'yang' format MUST be supported and
'yin' format MAY also be provided."
}
leaf namespace {
type inet:uri;
mandatory true;
description
"The XML namespace defined by the data model.

For YANG data models, this is the module's namespace.
If the list entry describes a submodule, this field
contains the namespace of the module to which the
submodule belongs."
}
leaf-list location {
type union {
  type enumeration {
    enum "NETCONF";
  }
  type inet:uri;
}
description
"One or more locations from which the schema can be
retrieved. This list SHOULD contain at least one
entry per schema.

A schema entry may be located on a remote file system
(e.g., reference to file system for ftp retrieval) or
retrieved directly from a server supporting the
<get-schema> operation (denoted by the value 'NETCONF').";
}
}
}
}
}
}
}
}
}
}
}

container sessions {
  description
  "The sessions container includes session-specific data for
  NETCONF management sessions. The session list MUST include
  all currently active NETCONF sessions."

list session {
  key "session-id";
  description
  "All NETCONF sessions managed by the NETCONF server
  MUST be reported in this list."

  leaf session-id {
    type uint32 {
      range "1..max";
    }
    description
    "Unique identifier for the session. This value is the
    NETCONF session identifier, as defined in RFC 4741."
    reference "RFC 4741: NETCONF Configuration Protocol"
  }

  leaf transport {
    type identityref {
      base transport;
    }
    mandatory true;
    description
    "Identifies the transport for each session, e.g.,
    'netconf-ssh', 'netconf-soap', etc."
  }

  leaf username {
    type string;
    mandatory true;
    description
    "The username is the client identity that was authenticated
    by the NETCONF transport protocol. The algorithm used to
derive the username is NETCONF transport protocol specific
and in addition specific to the authentication mechanism
used by the NETCONF transport protocol."
  }

  leaf source-host {
    type inet:host;
    description
    "Host identifier of the NETCONF client. The value
    returned is implementation specific (e.g., hostname,
IPv4 address, IPv6 address);"
}
leaf login-time {
    type yang:date-and-time;
  mandatory true;
  description
    "Time at the server at which the session was established.";
}
uses common-counters {
    description
    "Per-session counters. Zero based with following reset
     behaviour:
     - at start of a session
     - when max value is reached";
}
}
}
container statistics {
    description
    "Statistical data pertaining to the NETCONF server.";
leaf netconf-start-time {
    type yang:date-and-time;
  description
    "Date and time at which the management subsystem was
     started.";
}
leaf in-bad-hellos {
    type yang:zero-based-counter32;
  description
    "Number of sessions silently dropped because an
     invalid <hello> message was received. This includes <hello>
     messages with a 'session-id' attribute, bad namespace, and
     bad capability declarations.";
}
leaf in-sessions {
    type yang:zero-based-counter32;
  description
    "Number of sessions started. This counter is incremented
     when a <hello> message with a <session-id> is sent.

    'in-sessions' - 'in-bad-hellos' =
    'number of correctly started netconf sessions'';
}
leaf dropped-sessions {
    type yang:zero-based-counter32;
  description
    "Number of sessions that were abnormally terminated, e.g.,
     due to idle timeout or transport close. This counter is not
incremented when a session is properly closed by a <close-session> operation, or killed by a <kill-session> operation.”;
}

uses common-counters {
    description
    "Global counters, accumulated from all sessions. Zero based with following reset behaviour:
    - re-initialization of NETCONF server
    - when max value is reached”;
}

}

}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-netconf-monitoring.yang
No license file was found, but licenses were detected in source scan.

module openconfig-inet-types {

    yang-version "1";
    namespace "http://openconfig.net/yang/types/inet";
    prefix "oc-inet";

    import openconfig-extensions { prefix "oc-ext"; }

    organization
    "OpenConfig working group”;

    contact
    "OpenConfig working group
    www.openconfig.net";

    description
    "This module contains a set of Internet address related types for use in OpenConfig modules.

    Portions of this code were derived from IETF RFC 6021.
    Please reproduce this note if possible.

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Section 4.c of the IETF Trust’s Legal Provisions Relating
to IETF Documents (http://trustee.ietf.org/license-info).”;

oc-ext:openconfig-version "0.3.1";

revision 2017-08-24 {
  description
    "Minor formatting fixes.";
  reference "0.3.1";
}

revision 2017-07-06 {
  description
    "Add domain-name and host typedefs";
  reference "0.3.0";
}

revision 2017-04-03 {
  description
    "Add ip-version typedef.";
  reference "0.2.0";
}

revision 2017-04-03 {
  description
    "Update copyright notice.";
  reference "0.1.1";
}

revision 2017-01-26 {
  description
    "Initial module for inet types");
  reference "0.1.0";
}

// IPv4 and IPv6 types.

typedef ipv4-address {
  type string {
    pattern "^((\[0-9\]|(1\-9\[0-9\]|1\[0-9\]\[0-9\]|2\[0-4]\[0-9\]|25\[0-5\]))\.(\[0-9\]|(1\-9\[0-9\]|1\[0-9\]\[0-9\]|2\[0-4]\[0-9\]|25\[0-5\]))\.(\[0-9\]|(1\-9\[0-9\]|1\[0-9\]\[0-9\]|2\[0-4]\[0-9\]|25\[0-5\]))\.(\[0-9\]|(1\-9\[0-9\]|1\[0-9\]\[0-9\]|2\[0-4]\[0-9\]|25\[0-5\]))$";
    description
      "An IPv4 address in dotted quad notation using the default
      zone.";
  }
}
typedef ipv4-address-zoned {
  type string {
    pattern "^((\[0-9\]|1\-[9]\])\([0-9]\]|1\-[9]\][0-9]\]|2\-[0-4]\|[0-9]\]|25\-[0-5]\))\([0-9]-[a-zA-Z0-9_]+\);}
  description "An IPv4 address in dotted quad notation. This type allows specification of a zone index to disambiguate identical address values. For link-local addresses, the index is typically the interface index or interface name."
}

typedef ipv6-address {
  type string {
    pattern
      // Must support compression through different lengths // therefore this regexp is complex.
      "^((\[0-9a-fA-F]\{1,4\}:){7}\[0-9a-fA-F]\{1,4\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,7\}:\] +
       \([0-9a-fA-F]\{1,4\}:\{1,6\}:\[0-9a-fA-F]\{1,4\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,5\}:\([0-9a-fA-F]\{1,4\}\{1,2\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,4\}:\([0-9a-fA-F]\{1,4\}\{1,3\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,3\}:\([0-9a-fA-F]\{1,4\}\{1,4\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,2\}:\([0-9a-fA-F]\{1,4\}\{1,5\}] +
       \[0-9a-fA-F]\{1,4\}:\([0-9a-fA-F]\{1,4\}\{1,6\}] +
       \([0-9a-fA-F]\{1,4\}\{1,7\}]:\] +
       \)\$";
    description "An IPv6 address represented as either a full address; shortened or mixed-shortened formats, using the default zone."
}

typedef ipv6-address-zoned {
  type string {
    pattern
      // Must support compression through different lengths // therefore this regexp is complex.
      "^((\[0-9a-fA-F]\{1,4\}:){7}\[0-9a-fA-F]\{1,4\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,7\}:\] +
       \([0-9a-fA-F]\{1,4\}:\{1,6\}:\[0-9a-fA-F]\{1,4\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,5\}:\([0-9a-fA-F]\{1,4\}\{1,2\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,4\}:\([0-9a-fA-F]\{1,4\}\{1,3\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,3\}:\([0-9a-fA-F]\{1,4\}\{1,4\}] +
       \([0-9a-fA-F]\{1,4\}:\{1,2\}:\([0-9a-fA-F]\{1,4\}\{1,5\}] +
       \[0-9a-fA-F]\{1,4\}:\([0-9a-fA-F]\{1,4\}\{1,6\}] +
       \([0-9a-fA-F]\{1,4\}\{1,7\}]:\] +
       \)\$";
    description "An IPv6 address in dotted quad notation. This type allows specification of a zone index to disambiguate identical address values. For link-local addresses, the index is typically the interface index or interface name."
}
typedef ipv4-prefix {
    type string {
        pattern 'interpreted as either a full address; shortened or mixed-shortened formats. This type allows specification of a zone index to disambiguate identical address values. For link-local addresses, the index is typically the interface index or interface name."
    }

typedef ipv4-prefix {
    type string {
        pattern "An IPv4 prefix represented in dotted quad notation followed by a slash and a CIDR mask (0 <= mask <= 32)."
    }

typedef ipv6-prefix {
    type string {
        pattern "An IPv6 prefix represented in full, shortened, or mixed shortened format followed by a slash and CIDR mask (0 <= mask <= 128)."
    }

typedef ip-address {
    type union {
        type ipv4-address;
        type ipv6-address;
    }
}
typedef ip-prefix {
    type union {
        type ipv4-prefix;
        type ipv6-prefix;
    }
    description
    "An IPv4 or IPv6 prefix.";
}

typedef ip-version {
    type enumeration {
        enum UNKNOWN {
            value 0;
            description
            "An unknown or unspecified version of the Internet protocol.";
        }
        enum IPV4 {
            value 4;
            description
            "The IPv4 protocol as defined in RFC 791."
        }
        enum IPV6 {
            value 6;
            description
            "The IPv6 protocol as defined in RFC 2460."
        }
    }
    description
    "This value represents the version of the IP protocol. Note that integer representation of the enumerated values are not specified, and are not required to follow the InetVersion textual convention in SMIv2.";
    reference
    "RFC 791: Internet Protocol
    RFC 4001: Textual Conventions for Internet Network Addresses";
}

typedef domain-name {
    type string {
        length "1..253";
        pattern
        '(((a-zA-Z0-9_)[a-zA-Z0-9-_.]{0,61})?[a-zA-Z0-9]\.)*' +
'([a-zA-Z0-9-_.]{0,61})?\[a-zA-Z0-9\].?'} + ';
}
description
"The domain-name type represents a DNS domain name. Fully qualified left to the models which utilize this type.

Internet domain names are only loosely specified. Section 3.5 of RFC 1034 recommends a syntax (modified in Section 2.1 of RFC 1123). The pattern above is intended to allow for current practice in domain name use, and some possible future expansion. It is designed to hold various types of domain names, including names used for A or AAAA records (host names) and other records, such as SRV records. Note that Internet host names have a stricter syntax (described in RFC 952) than the DNS recommendations in RFCs 1034 and 1123, and that systems that want to store host names in schema nodes using the domain-name type are recommended to adhere to this stricter standard to ensure interoperability.

The encoding of DNS names in the DNS protocol is limited to 255 characters. Since the encoding consists of labels prefixed by a length bytes and there is a trailing NULL byte, only 253 characters can appear in the textual dotted notation.

Domain-name values use the US-ASCII encoding. Their canonical format uses lowercase US-ASCII characters. Internationalized domain names MUST be encoded in punycode as described in RFC 3492;"
}
typedef host {
type union {
type ip-address;
type domain-name;
}
description
"The host type represents either an unzoned IP address or a DNS domain name."
}
typedef as-number {
type uint32;
description
"A numeric identifier for an autonomous system (AS). An AS is a single domain, under common administrative control, which forms a unit of routing policy. Autonomous systems can be assigned a
2-byte identifier, or a 4-byte identifier which may have public or private scope. Private ASNs are assigned from dedicated ranges. Public ASNs are assigned from ranges allocated by IANA to the regional internet registries (RIRs)."
reference
"RFC 1930 Guidelines for creation, selection, and registration of an Autonomous System (AS)
RFC 4271 A Border Gateway Protocol 4 (BGP-4)"

```{typedef dscp {
type uint8 {
    range "0..63";
}
description
    "A differentiated services code point (DSCP) marking within the IP header.";
reference
    "RFC 2474 Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers";
}
typedef ipv6-flow-label {
type uint32 {
    range "0..1048575";
}
description
    "The IPv6 flow-label is a 20-bit value within the IPv6 header which is optionally used by the source of the IPv6 packet to label sets of packets for which special handling may be required.";
reference
    "RFC 2460 Internet Protocol, Version 6 (IPv6) Specification";
}
typedef port-number {
type uint16;
description
    "A 16-bit port number used by a transport protocol such as TCP or UDP.";
reference
    "RFC 768 User Datagram Protocol
    RFC 793 Transmission Control Protocol";
}
typedef uri {
type string;
description
    "A Uniform Resource Identifier (URI) is a string used to identify a specific resource or a service on the internet.
reference
    "RFC 3986 Uniform Resource Identifier (URI) Reference";
```
"An ASCII-encoded Uniform Resource Identifier (URI) as defined in RFC 3986."
reference
"RFC 3986 Uniform Resource Identifier (URI): Generic Syntax";
}
typedef url {
  type string;
  description
  "An ASCII-encoded Uniform Resource Locator (URL) as defined in RFC 3986, section 1.1.3";
  reference
  "RFC 3986, paragraph 1.1.3";
}
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/openconfig-inet-types.yang
No license file was found, but licenses were detected in source scan.

module ietf-routing {


  prefix "rt";

  import ietf-yang-types {
    prefix "yang";
  }

  import ietf-interfaces {
    prefix "if";
  }

  organization
  "IETF NETMOD (NETCONF Data Modeling Language) Working Group";

  contact
  "WG Web:  <http://tools.ietf.org/wg/netmod/> 
  WG List:  <mailto:netmod@ietf.org>

  WG Chair: Thomas Nadeau
            <mailto:tnadeau@lucidvision.com>

  WG Chair: Juergen Schoenwaelder
            <mailto:j.schoenwaelder@jacobs-university.de>
description
"This YANG module defines essential components for the management of a routing subsystem.

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The key words 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in the module text are to be interpreted as described in RFC 2119 (http://tools.ietf.org/html/rfc2119).

This version of this YANG module is part of RFC XXXX (http://tools.ietf.org/html/rfcXXXX); see the RFC itself for full legal notices."

revision 2015-05-25 {
  description
    "Initial revision.";
  reference
    "RFC XXXX: A YANG Data Model for Routing Management";
}

/* Features */

feature multiple-ribs {
  description
    "This feature indicates that the server supports user-defined RIBs.

    Servers that do not advertise this feature SHOULD provide exactly one system-controlled RIB per routing-instance and supported address family and make them also the default RIBs. These RIBs then appear as entries of the list /routing-state/routing-instance/ribs/rib.";
}
feature router-id {
    description
    "This feature indicates that the server supports configuration of an explicit 32-bit router ID that is used by some routing protocols.

    Servers that do not advertise this feature set a router ID algorithmically, usually to one of configured IPv4 addresses. However, this algorithm is implementation-specific.";
}

/* Identities */

identity address-family {
    description
    "Base identity from which identities describing address families are derived."
}

identity ipv4 {
    base address-family;
    description
    "This identity represents IPv4 address family."
}

identity ipv6 {
    base address-family;
    description
    "This identity represents IPv6 address family."
}

identity routing-instance {
    description
    "Base identity from which identities describing routing instance types are derived."
}

identity default-routing-instance {
    base routing-instance;
    description
    "This identity represents either a default routing instance, or the only routing instance on systems that do not support multiple instances."
}

identity vrf-routing-instance {
    base routing-instance;
    description
This identity represents a VRF routing instance. The type is distinct from the default-routing-instance. There may be multiple vrf-routing-interfaces.

identity routing-protocol {
    description
    "Base identity from which routing protocol identities are derived.";
}

identity direct {
    base routing-protocol;
    description
    "Routing pseudo-protocol that provides routes to directly connected networks.";
}

identity static {
    base routing-protocol;
    description
    "Static routing pseudo-protocol.";
}

/* Type Definitions */

typedef routing-instance-ref {
    type leafref {
        path "/rt:routing/rt:routing-instance/rt:name";
    }
    description
    "This type is used for leafs that reference a routing instance configuration.";
}

typedef routing-instance-state-ref {
    type leafref {
        path "/rt:routing-state/rt:routing-instance/rt:name";
    }
    description
    "This type is used for leafs that reference state data of a routing instance.";
}

typedef route-preference {
    type uint32;
    description
    "This type is used for route preferences.";
/* Groupings */

grouping address-family {
    description
        "This grouping provides a leaf identifying an address family.";
    leaf address-family {
        type identityref {
            base address-family;
        }
        mandatory "true";
        description
            "Address family."
    }
}

grouping router-id {
    description
        "This grouping provides router ID.";
    leaf router-id {
        type yang:dotted-quad;
        description
            "A 32-bit number in the form of a dotted quad that is used by some routing protocols identifying a router.";
        reference
            "RFC 2328: OSPF Version 2."
    }
}

grouping special-next-hop {
    description
        "This grouping provides a leaf with an enumeration of special next-hops.";
    leaf special-next-hop {
        type enumeration {
            enum blackhole {
                description
                    "Silently discard the packet.";
            }
            enum unreachable {
                description
                    "Discard the packet and notify the sender with an error message indicating that the destination host is unreachable."
            }
            enum prohibit {

```
description
"Discard the packet and notify the sender with an error
message indicating that the communication is
administratively prohibited."
}
}
enum receive {
  description
  "The packet will be received by the local system."
}
}
description
"Special next-hop options."
}
}
grouping next-hop-content {
  description
  "Generic parameters of next-hops in static routes."
  choice next-hop-options {
    mandatory "true"
    description
    "Options for next-hops in static routes.
    It is expected that other cases will be added through
    augments from other modules, e.g., for Equal-Cost Multipath
    routing (ECMP)."
  case simple-next-hop {
    description
    "Simple next-hop is specified as an outgoing interface,
    next-hop address or both.
    Address-family-specific modules are expected to provide
    'next-hop-address' leaf via augmentation."
  leaf outgoing-interface {
    // type leafref {
    //   path "/rt:routing/rt:routing-instance/rt:interfaces/"
    //     + "rt:interface";
    // }
    type string;
    description
    "Name of the outgoing interface."
  }
  }
  case special-next-hop {
    uses special-next-hop;
  }
}
}
grouping next-hop-state-content {
  description
  "Generic parameters of next-hops in state data.";
  choice next-hop-options {
    mandatory "true";
    description
    "Options for next-hops in state data.
    It is expected that other cases will be added through
    augments from other modules, e.g., for ECMP or recursive
    next-hops.";
    case simple-next-hop {
      description
      "Simple next-hop is specified as an outgoing interface,
      next-hop address or both.
      Address-family-specific modules are expected to provide
      'next-hop-address' leaf via augmentation.";
      leaf outgoing-interface {
        // type leafref {
        //   path "/rt:routing-state/rt:routing-instance/"
        //     + "rt:interfaces/rt:interface";
        // }
        type string;
        description
        "Name of the outgoing interface.";
      }
      leaf next-hop-address {
        description
        "IP address.";
        type string;
      }
    }
    case special-next-hop {
      uses special-next-hop;
    }
  }
}

grouping route-metadata {
  description
  "Common route metadata.";
  leaf source-protocol {
    type identityref {
      base routing-protocol;
    }
  }
}
mandatory "true";
description
"Type of the routing protocol from which the route originated."
}
leaf active {
type empty;
description
"Presence of this leaf indicates that the route is preferred among all routes in the same RIB that have the same destination prefix."
}
leaf last-updated {
type yang:date-and-time;
description
"Time stamp of the last modification of the route. If the route was never modified, it is the time when the route was inserted into the RIB."
}

/* State data */

augment "/if:interfaces-state/if:interface" {
description
"This augment adds a wrapped leaf-list to interface state data."
leaf routing-instance {
// type routing-instance-state-ref;
type string;
must "./if:name=../rt:routing-state/"
+ "rt:routing-instance[rt:name=current()]/rt:interfaces/"
+ "rt:interface" {
error-message
"The interface is not assigned to the routing instance."

description
"The reference must mirror a corresponding assignment under routing-instance."
}
description
"The name of the routing instance to which the interface is assigned."
}
}

container routing-state {
config "false";
description
"State data of the routing subsystem."

list routing-instance {
  key "name";
  min-elements "1";
  description
  "Each list entry is a container for state data of a routing instance.

  An implementation MUST support routing instance(s) of the type 'rt:default-routing-instance', and MAY support other types. An implementation MAY restrict the number of routing instances of each supported type.

  An implementation SHOULD create at least one system-controlled instance, and MAY allow the clients to create user-controlled routing instances in configuration."

leaf name {
  type string;
  description
  "The name of the routing instance.

  For system-controlled instances the name is persistent, i.e., it SHOULD NOT change across reboots."
}

leaf type {
  type identityref {
    base routing-instance;
  }
  description
  "The routing instance type."
}

uses router-id {
  description
  "Global router ID.

  It may be either configured or assigned algorithmically by the implementation."
}

container interfaces {
  description
  "Network layer interfaces belonging to the routing instance."

leaf-list interface {
  type if:interface-state-ref;
  description
  "Each entry is a reference to the name of a configured network layer interface.";
container routing-protocols {
  description
    "Container for the list of routing protocol instances.";
  list routing-protocol {
    key "type name";
    description
      "State data of a routing protocol instance.

      An implementation MUST provide exactly one
      system-controlled instance of the type 'direct'. Other
      instances MAY be created by configuration.";
    leaf type {
      type identityref {
        base routing-protocol;
      }
      description
        "Type of the routing protocol.";
    }
    leaf name {
      type string;
      description
        "The name of the routing protocol instance.

        For system-controlled instances this name is
        persistent, i.e., it SHOULD NOT change across
        reboots.";
    }
  }
}

container ribs {
  description
    "Container for RIBs.";
  list rib {
    key "name";
    min-elements "1";
    description
      "Each entry represents a RIB identified by the 'name'
      key. All routes in a RIB MUST belong to the same address
      family.

      For each routing instance, an implementation SHOULD
      provide one system-controlled default RIB for each
      supported address family.";
    leaf name {
      type string;
      description

"The name of the RIB."

uses address-family;
leaf default-rib {
  if-feature multiple-ribs:
  type boolean;
  default "true";
  description
  "This flag has the value of 'true' if and only if the
  RIB is the default RIB for the given address family.

  A default RIB always receives direct routes. By
  default it also receives routes from all routing
  protocols.";
}
container routes {
  description
  "Current content of the RIB.";
  list route {
    key "destination-prefix";
    description
    "A RIB route entry. This data node MUST be augmented
    with information specific for routes of each address
    family.";
    leaf route-preference {
      type route-preference;
      description
      "This route attribute, also known as administrative
distance, allows for selecting the preferred route
among routes with the same destination prefix. A
smaller value means a more preferred route.";
    }
    leaf destination-prefix {
      description
      "Destination IP address with prefix";
      type string;
    }
    leaf metric {
      type uint32;
      description "Route metric.";
    }
    container next-hop {
      description
      "Route's next-hop attribute.";
      uses next-hop-state-content;
    }
    uses route-metadata;
  leaf update-source {

type string;
    description
    "Update source for the route.";
    }
}
}
}
}
}
}

/* Configuration Data */

container routing {
    description
    "Configuration parameters for the routing subsystem.";
    list routing-instance {
        key "name";
        description
        "Configuration of a routing instance.";
        leaf name {
            type string;
            description
            "The name of the routing instance.
For system-controlled entries, the value of this leaf must
be the same as the name of the corresponding entry in
state data.

For user-controlled entries, an arbitrary name can be
used.";
        }
        leaf type {
            type identityref {
                base routing-instance;
            }
            default "rt:default-routing-instance";
            description
            "The type of the routing instance.";
        }
        leaf enabled {
            type boolean;
            default "true";
            description
            "Enable/disable the routing instance.
If this parameter is false, the parent routing instance is
disabled and does not appear in state data, despite any
other configuration that might be present.

}
uses router-id {
    if-feature router-id;
    description
        "Configuration of the global router ID. Routing protocols
        that use router ID can use this parameter or override it
        with another value.";
}
leaf description {
    type string;
    description
        "Textual description of the routing instance.";
}
container interfaces {
    description
        "Assignment of the routing instance's interfaces.";
    leaf-list interface {
        type if:interface-ref;
        description
            "The name of a configured network layer interface to be
            assigned to the routing-instance.";
    }
}
container routing-protocols {
    description
        "Configuration of routing protocol instances.";
    list routing-protocol {
        key "type name";
        description
            "Each entry contains configuration of a routing protocol
            instance.";
        leaf type {
            type identityref {
                base routing-protocol;
            }
            description
                "Type of the routing protocol - an identity derived
                from the 'routing-protocol' base identity.";
        }
        leaf name {
            type string;
            description
                "An arbitrary name of the routing protocol instance.";
        }
        leaf description {
            type string;
            description
                "Textual description of

"Textual description of the routing protocol instance.");
}
container static-routes {
  when "/type='rt:static'" {
    description
    "This container is only valid for the 'static' routing protocol."
  }
}
description
"Configuration of the 'static' pseudo-protocol.

Address-family-specific modules augment this node with their lists of routes."
}
}
}
}
}
}
container ribs {
  description
  "Configuration of RIBs."
  list rib {
    key "name";
    description
    "Each entry contains configuration for a RIB identified by the 'name' key.

Entries having the same key as a system-controlled entry of the list /routing-state/routing-instance/ribs/rib are used for configuring parameters of that entry. Other entries define additional user-controlled RIBs.";
    leaf name {
      type string;
      description
      "The name of the RIB.

For system-controlled entries, the value of this leaf must be the same as the name of the corresponding entry in state data.

For user-controlled entries, an arbitrary name can be used."
    }
    uses address-family {
      description
      "Address family of the RIB.

It is mandatory for user-controlled RIBs. For system-controlled RIBs it can be omitted, otherwise it
must match the address family of the corresponding state entry.

refine "address-family" {
    mandatory "false";
}

leaf description {
    type string;
    description
    "Textual description of the RIB."
}

/* RPC operations */

rpc fib-route {
    description
    "Return the active FIB route that a routing-instance uses for sending packets to a destination address.";
    input {
        leaf routing-instance-name {
            // type routing-instance-state-ref;
            type string;
            mandatory "true";
            description
            "Name of the routing instance whose forwarding information base is being queried.

            If the routing instance with name equal to the value of this parameter doesn't exist, then this operation SHALL fail with error-tag 'data-missing' and error-app-tag 'routing-instance-not-found'.";
        }
        container destination-address {
            description
            "Network layer destination address.

            Address family specific modules MUST augment this container with a leaf named 'address'.";
            uses address-family;
        }
    }
    output {
        container route {
            description
"The active FIB route for the specified destination.

If the routing instance has no active FIB route for the destination address, no output is returned - the server SHALL send an <rpc-reply> containing a single element <ok>.

Address family specific modules MUST augment this list with appropriate route contents.

uses address-family;
container next-hop {
  description
    "Route's next-hop attribute.";
  uses next-hop-state-content;
}
uses route-metadata;
}
}
}

Found in path(s):
*/opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8.tar.gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-routing.yang

No license file was found, but licenses were detected in source scan.

module openconfig-yang-types {

  yang-version "1";
namespace "http://openconfig.net/yang/types/yang";
  prefix "oc-yang";

  import openconfig-extensions { prefix "oc-ext"; }

  organization
    "OpenConfig working group";

  contact
    "OpenConfig working group
    www.openconfig.net";

  description
    "This module contains a set of extension types to the
    YANG builtin types that are used across multiple
    OpenConfig models.

    Portions of this code were derived from IETF RFC 6021.
    Please reproduce this note if possible."
typedef dotted-quad {
  type string {
  }
  description
  "An unsigned 32-bit integer expressed as a dotted quad. The format is four octets written as decimal numbers separated with a period character.";
}
typedef hex-string {
    type string {
        pattern '^\{0-9a-fA-F\}*$';
    }
    description
    "A string consisting of a hexadecimal characters.";
}

typedef counter32 {
    type uint32;
    description
    "A 32-bit counter. A counter value is a monotonically increasing
    value which is used to express a count of a number of
    occurrences of a particular event or entity. When the counter
    reaches its maximum value, in this case 2^32-1, it wraps to 0.
    Discontinuities in the counter are generally triggered only when
    the counter is reset to zero.";
}

typedef counter64 {
    type uint64;
    description
    "A 64-bit counter. A counter value is a monotonically increasing
    value which is used to express a count of a number of
    occurrences of a particular event or entity. When a counter64
    reaches its maximum value, 2^64-1, it loops to zero.
    Discontinuities in a counter are generally triggered only when
    the counter is reset to zero, through operator or system
    intervention.";
}

typedef date-and-time {
    type string {
        pattern '^[0-9\d]{4}\-[0-9\d]{2}\-[0-9\d]{2}[0-9\d]{2}[0-9\d]{2}[0-9\d]{2}\:[0-9\d]{2}[0-9\d]{2}[0-9\d]{2}$';
    }
    description
    "A date and time, expressed in the format described in RFC3339.
    That is to say:
    YYYY-MM-DDTHH:MM:SSZ+-hh:mm";
where YYYY is the year, MM is the month expressed as a two-digit month (zero padding if required), DD is the day of the month, expressed as a two-digit value. T is the literal character 'T', HH is the hour of the day expressed as a two-digit number, using the 24-hour clock, MM is the minute of the hour expressed as a two-digit number. Z is the literal character 'Z', followed by a timezone offset expressed in hours (hh) and minutes (mm), both expressed as two-digit numbers. The time offset is specified as a positive or negative offset to UTC using the '+' or '-' character preceding the offset.

Optionally, fractional seconds can be expressed after the minute of the hour as a decimal number of unspecified precision reflecting fractions of a second.

reference
"RFC3339 - Date and Time on the Internet: Timestamps";
}

typedef date {
    type string {
        pattern '^[0-9]{4}\-[0-9]{2}\-[0-9]{2}$';
    }

description
"A full UTC date, expressed in the format described in RFC3339. That is to say:

YYYY-MM-DD

where YYYY is the year, MM is the month expressed as a two-digit month (zero padding if required), DD is the day of the month, expressed as a two-digit value."

reference
"RFC3339 - Date and Time on the Internet: full-date";
}

typedef gauge64 {
    type uint64;

description
"A gauge value may increase or decrease - and reflects a value at a particular point in time. If the value of the variable being modeled using the gauge exceeds its maximum - 2^64-1 in this case - the gauge is set to its maximum value."
}

typedef phys-address {
    type string {
        pattern '^([0-9a-fA-F]{2}(:[0-9a-fA-F]{2})*)$';
    }

description
"A physical address expressed in the format described in RFC3176. That is to say:

02:00:00:00:00:00

where the first two characters are the address family, and the subsequent four characters are the interface ID."

reference
"RFC3176 - Addressing and Routing Architecture for Link Aggregation in IPv4/IPv6";
}
typedef mac-address {
    type string {
        pattern "^[0-9a-fA-F]{2}(:[0-9a-fA-F]{2}){5}$";
    }
    description
        "An IEEE 802 MAC address";
}

module openconfig-alarms {

    yang-version "1";

    // namespace
    namespace "http://openconfig.net/yang/alarms";

    prefix "oc-alarms";

    // import some basic types
    import openconfig-alarm-types { prefix oc-alarm-types; }
    import openconfig-extensions { prefix oc-ext; }
    import openconfig-types { prefix oc-types; }
    import openconfig-platform { prefix oc-platform; }

    // meta
    organization "OpenConfig working group";

    contact
        "OpenConfig working group
        www.openconfig.net";

    description
        "This module defines operational state data related to alarms
that the device is reporting.

This model reuses some data items defined in the draft IETF
YANG Alarm Module:"
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to IETF Documents (http://trustee.ietf.org/license-info)."

oc-ext:openconfig-version "0.3.0";

revision "2018-01-16" {
  description
    "Moved alarm identities into separate types module";
  reference "0.3.0";
}

revision "2018-01-10" {
  description
    "Make alarms list read only";
  reference "0.2.0";
}

revision "2017-08-24" {
  description
    "Initial public release";
  reference "0.1.0";
}

// grouping statements

grouping alarm-state {
  description
    "Operational state data for device alarms";

  leaf id {
    type string;
    description
    "Unique ID for the alarm -- this will not be a
    configurable parameter on many implementations";
  }
}
leaf resource {
    type string;
    description
    "The item that is under alarm within the device. The
    resource may be a reference to an item which is
    defined elsewhere in the model. For example, it
    may be a platform/component, interfaces/interface,
    terminal-device/logical-channels/channel, etc. In this
    case the system should match the name of the referenced
    item exactly. The referenced item could alternatively be
    the path of the item within the model.";
    reference
    "IETF YANG Alarm Module: Draft - typedef resource
}

leaf text {
    type string;
    description
    "The string used to inform operators about the alarm. This
    MUST contain enough information for an operator to be able
    to understand the problem. If this string contains structure,
    this format should be clearly documented for programs to be
    able to parse that information";
    reference
    "IETF YANG Alarm Module: Draft - typedef alarm-text
}

leaf time-created {
    type oc-types:timeticks64;
    description
    "The time at which the alarm was raised by the system.
    This value is expressed as nanoseconds since the Unix Epoch";
}

leaf severity {
    type identityref {
        base oc-alarm-types:OPENCONFIG_ALARM_SEVERITY;
    }
    description
    "The severity level indicating the criticality and impact
    of the alarm";
    reference
    "IETF YANG Alarm Module: Draft - typedef severity
leaf type-id {
  type union {
    type string;
    type identityref {
      base oc-alarm-types:OPENCONFIG_ALARM_TYPE_ID;
    }
  }
}

description
"The abbreviated name of the alarm, for example LOS, EQPT, or OTS. Also referred to in different systems as condition type, alarm identifier, or alarm mnemonic. It is recommended to use the OPENCONFIG_ALARM_TYPE_ID identities where possible and only use the string type when the desired identityref is not yet defined";

reference
"IETF YANG Alarm Module: Draft - typedef alarm-type-id

}

grouping alarm-config {
  description
  "Configuration data for device alarms";
}

grouping alarms-top {
  description
  "Top-level grouping for device alarms";

container alarms {
  description
  "Top-level container for device alarms";

  config false;

  list alarm {
    key "id";
    description
    "List of alarms, keyed by a unique id";

    leaf id {
      type leafref {
        path "./state/id";
      }
    }

    description
  }
}
"References the unique alarm id";
}

container config {
    description
    "Configuration data for each alarm";

    uses alarm-config;
}

container state {
    config false;

    description
    "Operational state data for a device alarm";

    uses alarm-config;
    uses alarm-state;
}

// augments

augment "/oc-platform:components/oc-platform:component/oc-platform:state" {
    description
    "Adds specific alarms related to a component."

    leaf equipment-failure {
        type boolean;
        default "false";
        description
        "If true, the hardware indicates that the component's physical equipment
        has failed";
    }

    leaf equipment-mismatch {
        type boolean;
        default "false";
        description
        "If true, the hardware indicates that the component inserted into the
        affected component's physical location is of a different type than what
        is configured";
    }
}
module openconfig-system {

  yang-version "1";

  // namespace
  namespace "http://openconfig.net/yang/system";

  prefix "oc-sys";

  // import some basic types
  import openconfig-inet-types { prefix oc-inet; }
  import openconfig-yang-types { prefix oc-yang; }
  import openconfig-types { prefix oc-types; }
  import openconfig-extensions { prefix oc-ext; }
  import openconfig-aaa { prefix oc-aaa; }
  import openconfig-system-logging { prefix oc-log; }
  import openconfig-system-management { prefix oc-sys-mgmt; }
  import openconfig-system-terminal { prefix oc-sys-term; }
  import openconfig-procmom { prefix oc-proc; }
  import openconfig-alarms { prefix oc-alarms; }

  // meta
  organization "OpenConfig working group";

  contact
    "OpenConfig working group
    netopenconfig@googlegroups.com";

  description
    "Model for managing system-wide services and functions on
    network devices.

  Portions of this code were derived from IETF RFC 7317.
  Please reproduce this note if possible.

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oc-ext:openconfig-version "0.6.0";

revision "2018-07-17" {
    description
    "Add gRPC server data";
    reference "0.6.0";
}

revision "2018-01-21" {
    description
    "Add cpu utilization data";
    reference "0.5.0";
}

revision "2017-12-15" {
    description
    "Add alarms to the system model";
    reference "0.4.0";
}

revision "2017-09-18" {
    description
    "Updated to use OpenConfig types modules";
    reference "0.3.0";
}

revision "2017-07-06" {
    description
    "Move to oc-inet types, add IETF attribution, add RADIUS counters, changed password leaf names to indicate hashed";
    reference "0.2.0";
}

revision "2017-01-29" {
    description
    "Initial public release";
    reference "0.1.0";
}

// extension statements

// feature statements
// identity statements

identity NTP_AUTH_TYPE {
    description
        "Base identity for encryption schemes supported for NTP
        authentication keys";
}

identity NTP_AUTH_MD5 {
    base NTP_AUTH_TYPE;
    description
        "MD5 encryption method";
}

// typedef statements

typedef timezone-name-type {
    type string;
    description
        "A time zone name as used by the Time Zone Database,
        sometimes referred to as the 'Olson Database'.

        The exact set of valid values is an implementation-specific
        matter. Client discovery of the exact set of time zone names
        for a particular server is out of scope.";
    reference
        "BCP 175: Procedures for Maintaining the Time Zone Database";
}

// grouping statements

grouping system-clock-config {
    description
        "Configuration data for system-wide clock configuration";

    leaf timezone-name {
        type timezone-name-type;
        description
            "The TZ database name to use for the system, such
            as 'Europe/Stockholm'.";
        reference "IANA Time Zone Database
            http://www.iana.org/time-zones";
    }
}

grouping system-clock-state {
    description
        "Operational state data for system-wide clock configuration";
    }
grouping system-clock-top {
    description
    "Top-level grouping for system-wide clock configuration";

    container clock {
        description
        "Top-level container for clock configuration data";
    }

    container config {
        description
        "Configuration data for system clock";

        uses system-clock-config;
    }

    container state {
        config false;

        description
        "Operational state data for system clock";

        uses system-clock-config;
        uses system-clock-state;
    }
}

grouping system-global-config {
    description "system-wide configuration parameters";

    leaf hostname {
        type oc-inet:domain-name;
        description
        "The hostname of the device -- should be a single domain
         label, without the domain."
    }

    leaf domain-name {
        type oc-inet:domain-name;
        description
        "Specifies the domain name used to form fully qualified name
         for unqualified hostnames.";
    }

    leaf login-banner {

type string;
description
   "The console login message displayed before the login prompt, 
i.e., before a user logs into the system.";
}
leaf motd-banner {
   type string;
description
   "The console message displayed after a user logs into the 
system. They system may append additional standard 
information such as the current system date and time, uptime, 
last login timestamp, etc.";
}

grouping system-global-state {
   description 
   "Global operational state data for the system";
   leaf current-datetime {
      type oc-yang:date-and-time;
description
      "The current system date and time.";
   }
   leaf boot-time {
      type oc-types:timeticks64;
description
      "This timestamp indicates the time that the system was last 
restarted. The value is the timestamp in seconds relative 
to the Unix Epoch (Jan 1, 1970 00:00:00 UTC).";
   }
}

grouping system-dns-config {
   description "DNS / resolver related configuration data";
   leaf-list search {
      type oc-inet:domain-name;
ordered-by user;
description
   "An ordered list of domains to search when resolving 
a host name.";
   }
}
grouping system-dns-state {
    description
    "Operational state data for system DNS resolver";
}

grouping system-dns-servers-config {
    description
    "Configuration data for DNS resolvers";

    //RFC 7317 includes a single-value choice statement to for
    //TCP and UDP transport. This has been removed since it the
    //transport protocol is not generally available as an options
    //on target devices. It may be added back if and when needed.

    leaf address {
        type oc-inet:ip-address;
        description
        "The address of the DNS server, can be either IPv4
        or IPv6.";
    }

    leaf port {
        type oc-inet:port-number;
        default 53;
        description
        "The port number of the DNS server.";
    }

    //RFC 7317 includes resolver timeout and attempts options. These
    //have been omitted as they are not available on many targets. If
    //and when they are required, they may be added back in.
}

grouping system-dns-static-config {
    description
    "Configuration data for static host entries";

    leaf hostname {
        type string;
        description
        "Hostname for the static DNS entry";
    }

    leaf-list alias {
        type string;
        description
        "Additional aliases for the hostname";
    }
leaf-list ipv4-address {
    type oc-inet:ipv4-address;
    description
        "List of IPv4 addresses for the host entry";
}

leaf-list ipv6-address {
    type oc-inet:ipv6-address;
    description
        "List of IPv6 addresses for the host entry";
}

grouping system-dns-static-state {
    description
        "Operational state data for static host entries";
}

grouping system-dns-static-top {
    description
        "Top-level grouping for static DNS host entries";

    container host-entries {
        description
            "Enclosing container for list of static host entries";

        list host-entry {
            key "hostname";
            description
                "List of static host entries";

            leaf hostname {
                type leafref {
                    path ".../config/hostname";
                }
                description
                    "Reference to the hostname list key";
            }

            container config {
                description
                    "Configuration data for static host entries";

                uses system-dns-static-config;
            }
        }
    }
}
container state {
 config false;

description
  "Operational state data for static host entries";

uses system-dns-static-config;
uses system-dns-static-state;
}
}
}

container state {

description
  "Operational state data for static host entries";

uses system-dns-static-config;
uses system-dns-static-state;
}
}
}

container state {

description
  "Operational state data for static host entries";

uses system-dns-static-config;
uses system-dns-static-state;
}
}
}

container state {

description
  "Operational state data for static host entries";

uses system-dns-static-config;
uses system-dns-static-state;
}
}
}

grouping system-dns-servers-state {

description
  "Operational state data for DNS resolvers";
}


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}

}
type leafref {
  path "../config/address";
}
description
  "References the configured address of the DNS server";
}

container config {
  description
    "Configuration data for each DNS resolver";

  uses system-dns-servers-config;
}

container state {
  config false;

  description
    "Operational state data for each DNS resolver";

  uses system-dns-servers-config;
  uses system-dns-servers-state;
}
}

grouping system-dns-top {
  description
    "Top-level grouping for DNS / resolver config and operational state data";

  container dns {
    description
      "Enclosing container for DNS resolver data";

    container config {
      description
        "Configuration data for the DNS resolver";

      uses system-dns-config;
    }

    container state {

config false;

description
 "Operational state data for the DNS resolver";

uses system-dns-config;
uses system-dns-state;

}

uses system-dns-servers-top;
uses system-dns-static-top;
}
}

grouping system-ntp-server-config {

description
 "Configuration data for NTP servers";

leaf address {

type oc-inet:host;

description
 "The address or hostname of the NTP server.";
}

leaf port {

type oc-inet:port-number;

default 123;

description
 "The port number of the NTP server.";
}

leaf version {

type uint8 {

range 1..4;
}

default 4;

description
 "Version number to put in outgoing NTP packets";
}

leaf association-type {

type enumeration {

enum SERVER {

description
 "Use client association mode. This device will not provide synchronization to the configured NTP server.";
}
enum PEER {
    description
    "Use symmetric active association mode. This device may provide synchronization to the configured NTP server."
}

enum POOL {
    description
    "Use client association mode with one or more of the NTP servers found by DNS resolution of the domain name given by the 'address' leaf. This device will not provide synchronization to the servers."
}

default SERVER;

description
    "The desired association type for this NTP server."
}

leaf iburst {
    type boolean;
    default false;
    description
    "Indicates whether this server should enable burst synchronization or not."
}

leaf prefer {
    type boolean;
    default false;
    description
    "Indicates whether this server should be preferred or not."
}

}

grouping system-ntp-server-state {
    description
    "Operational state data for NTP servers"
}

leaf stratum {
    type uint8;
    description
    "Indicates the level of the server in the NTP hierarchy. As stratum number increases, the accuracy is degraded. Primary servers are stratum while a maximum value of 16 indicates unsynchronized. The values have the following specific semantics:

| 0 | unspecified or invalid |
| 1 | primary server (e.g., equipped with a GPS receiver) |
| 2-15 | secondary server (via NTP) |
| 16 | unsynchronized |
| 17-255 | reserved |

reference

leaf root-delay {
    type uint32;
    // TODO: reconsider units for these values -- the spec defines
    // rootdelay and rootdisperson as 2 16-bit integers for seconds
    // and fractional seconds, respectively. This gives a
    // precision of ~15 us (2^-16). Using milliseconds here based
    // on what implementations typically provide and likely lack
    // of utility for less than millisecond precision with NTP
    // time sync.
    units "milliseconds";
    description
    "The round-trip delay to the server, in milliseconds.";
    reference
}

leaf root-dispersion {
    type uint64;
    units "milliseconds";
    description
    "Dispersion (epsilon) represents the maximum error inherent
    in the measurement";
    reference
}

leaf offset {
    type uint64;
    units "milliseconds";
    description
    "Estimate of the current time offset from the peer. This is
    the time difference between the local and reference clock.";
}

leaf poll-interval {
type uint32;
units "seconds";
description
"Polling interval of the peer";
}
}

grouping system-ntp-server-top {
description
"Top-level grouping for the list of NTP servers";
}

container servers {
description
"Enclosing container for the list of NTP servers";
}

list server {
  key "address";
description
"List of NTP servers to use for system clock synchronization. If '/system/ntp-enabled' is 'true', then the system will attempt to contact and utilize the specified NTP servers.";
}

leaf address {
type leafref {
  path "../config/address";
}
description
"References the configured address or hostname of the NTP server.";
}

container config {
description
"Configuration data for an NTP server.";

uses system-ntp-server-config;
}

container state {
config false;

description
"Operational state data for an NTP server.";

uses system-ntp-server-config;
uses system-ntp-server-state;
grouping system-ntp-auth-keys-config {
    description
    "Configuration data ";

    leaf key-id {
        type uint16;
        description
        "Integer identifier used by the client and server to
designate a secret key. The client and server must use
the same key id."
    }

    leaf key-type {
        type identityref {
            base NTP_AUTH_TYPE;
        }
        description
        "Encryption type used for the NTP authentication key"
    }

    leaf key-value {
        type string;
        description
        "NTP authentication key value"
    }
}

grouping system-ntp-auth-keys-state {
    description
    "Operational state data for NTP auth key data"
}

grouping system-ntp-auth-keys-top {
    description
    "Top-level grouping for NTP auth key data"
}

container ntp-keys {
    description
    "Enclosing container for list of NTP authentication keys"

    list ntp-key {
        key "key-id"
    }
}
description
"List of NTP authentication keys";

leaf key-id {
  type leafref {
    path ".../config/key-id";
  }
  description
  "Reference to auth key-id list key";
}

container config {
  description
  "Configuration data for NTP auth keys";

  uses system-ntp-auth-keys-config;
}

container state {
  config false;

  description
  "Operational state data for NTP auth keys";

  uses system-ntp-auth-keys-config;
  uses system-ntp-auth-keys-state;
}

grouping system-ntp-config {
  description
  "Configuration data for system-wide NTP operation.";

  leaf enabled {
    type boolean;
    default false;
    description
    "Enables the NTP protocol and indicates that the system should attempt to synchronize the system clock with an NTP server from the servers defined in the 'ntp/server' list.";
  }

  leaf ntp-source-address {
    type oc-inet:ip-address;
    description
  }
}
"Source address to use on outgoing NTP packets";
}

leaf enable-ntp-auth {
  type boolean;
  default false;
  description
  "Enable or disable NTP authentication -- when enabled, the
  system will only use packets containing a trusted
  authentication key to synchronize the time."
};
}

grouping system-ntp-state {
  description
  "Operational state data for system-wide NTP operation."
;
  leaf auth-mismatch {
    type oc-yang:counter64;
    description
    "Count of the number of NTP packets received that were not
    processed due to authentication mismatch."
    };
};
}

grouping system-ntp-top {
  description
  "Top-level grouping for configuration and state data for NTP"
;
  container ntp {
    description
    "Top-level container for NTP configuration and state"
;
    container config {
      description
      "Configuration data for NTP client."
;
      uses system-ntp-config;
    }
    }
    container state {
      config false;
      description
      "Operational state data for NTP services."
;
      uses system-ntp-config;
      uses system-ntp-state;
    }
uses system-ntp-auth-keys-top;
uses system-ntp-server-top;
} 
} 

grouping system-memory-config {
  description
  "Configuration data for system memory";
} 

grouping system-memory-state {
  description
  "Operational state data for system memory";

  leaf physical {
    type uint64;
    units bytes;
    // TODO: consider making units in megabytes
    description
      "Reports the total physical memory available on the system.";
  }

  leaf reserved {
    type uint64;
    units bytes;
    description
      "Memory reserved for system use";
  }
} 

grouping system-memory-top {
  description
    "Top-level grouping for system memory data definitions";

  container memory {
    description
      "Top-level container for system memory data";

    container config {
      description
        "Configuration data for system memory";

      uses system-memory-config;
    }

    container state {
      config false;
    }
}
description
"Operational state data for system memory";

uses system-memory-config;
uses system-memory-state;
}
}
}

grouping system-cpu-state {
    description
    "Operational state data for the system CPU(s)";

    leaf index {
        type union {
            type enumeration {
                enum ALL {
                    description
                    "Index value indicating all CPUs in the system";
                }
            }
            type uint32;
        }
        description
        "The CPU index for each processor core on the system. On a
        single-core system, the index should be zero. The ALL
        index signifies an aggregation of the CPU utilization
        statistics over all cores in the system.";
    }

    container total {
        description
        "Total CPU utilization.";

        uses oc-types:avg-min-max-instant-stats-pct;
    }

    container user {
        description
        "Percentage of CPU time spent running in user space.";

        uses oc-types:avg-min-max-instant-stats-pct;
    }

    container kernel {
        description
        "Percentage of CPU time spent running in kernel space.";
    }
}
uses oc-types:avg-min-max-instant-stats-pct;
}

container nice {
  description
  "Percentage of CPU time spent running low-priority (niced) user processes."
  uses oc-types:avg-min-max-instant-stats-pct;
}

container idle {
  description
  "Percentage of CPU time spent idle."
  uses oc-types:avg-min-max-instant-stats-pct;
}

container wait {
  description
  "Percentage of CPU time spent waiting for I/O."
  uses oc-types:avg-min-max-instant-stats-pct;
}

container hardware-interrupt {
  description
  "Percentage of CPU time spent servicing hardware interrupts."
  uses oc-types:avg-min-max-instant-stats-pct;
}

container software-interrupt {
  description
  "Percentage of CPU time spent servicing software interrupts"
  uses oc-types:avg-min-max-instant-stats-pct;
}

}

grouping system-cpu-top {
  description
  "Top-level grouping for system CPU data"
  container cpus {
    config false;
    description
    "Enclosing container for the list of CPU cores on the
system;

list cpu {
  key "index";
  description
    "List of CPU cores on the system (including logical CPUs
    on hyperthreaded systems), keyed by either a numerical
    index, or the ALL value for an entry representing the
    aggregation across all CPUs."

  leaf index {
    type leafref {
      path "../state/index";
    }
    description
      "Reference to list key"
  }
}

container state {

  description
    "Operational state data for the system CPU(s)"

  uses system-cpu-state;
}
}
}

grouping system-top {
  description
    "Top level system data containers"

container system {
  description
    "Enclosing container for system-related configuration and
    operational state data"

  container config {
    description "Global configuration data for the system"

    uses system-global-config;
  }
  }
  }
}

container state {
  config false;
  description "Global operational state data for the system";
uses system-global-config;
uses system-global-state;
}

uses system-clock-top;
uses system-dns-top;
uses system-ntp-top;
uses oc-sys-mgmt:system-grpc-server-top;
uses oc-sys-term:system-ssh-server-top;
uses oc-sys-term:system-telnet-server-top;
uses oc-log:logging-top;
uses oc-aaa:aaa-top;
uses system-memory-top;
uses system-cpu-top;
uses oc-proc:procmon-processes-top;
uses oc-alarms:alarms-top;
}
}

// data definition statements

uses system-top;

}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-
  0.1.8/ydk/models/openconfig/_yang/openconfig-system.yang
No license file was found, but licenses were detected in source scan.

module openconfig-system-logging {

  yang-version "1";

  // namespace
  namespace "http://openconfig.net/yang/system/logging":

  prefix "oc-log":

  // import some basic types
  import openconfig-extensions { prefix oc-ext; }
  import openconfig-inet-types { prefix oc-inet; }

  // meta
  organization "OpenConfig working group";
contact
"OpenConfig working group
www.openconfig.net";

description
"This module defines configuration and operational state data
for common logging facilities on network systems."

oc-ext:openconfig-version "0.3.0";

revision "2017-09-18" {
  description
  "Updated to use OpenConfig types modules";
  reference "0.3.0";
}

revision "2017-07-06" {
  description
  "Move to oc-inet types, add IETF attribution, add RADIUS
counters, changed password leaf names to indicate hashed";
  reference "0.2.0";
}

revision "2017-01-29" {
  description
  "Initial public release";
  reference "0.1.0";
}

// extension statements

// feature statements

// identity statements

identity SYSLOG_FACILITY {
  description
  "Base identity for Syslog message facilities.";
  reference
  "IETF RFC 5424 - The Syslog Protocol";
}

identity ALL {
  base SYSLOG_FACILITY;
  description
  "All supported facilities";
}
identity AUTHPRIV {
    base SYSLOG_FACILITY;
    description
    "The facility for privileged security/authorization messages."
    reference
    "IETF RFC 5424 - The Syslog Protocol"
}

identity NTP {
    base SYSLOG_FACILITY;
    description
    "The facility for the NTP subsystem."
    reference
    "IETF RFC 5424 - The Syslog Protocol"
}

identity AUDIT {
    base SYSLOG_FACILITY;
    description
    "The facility for log audit messages."
    reference
    "IETF RFC 5424 - The Syslog Protocol"
}

identity CONSOLE {
    base SYSLOG_FACILITY;
    description
    "The facility for log alert messages."
    reference
    "IETF RFC 5424 - The Syslog Protocol"
}

identity LOCAL0 {
    base SYSLOG_FACILITY;
    description
    "The facility for local use 0 messages."
    reference
    "IETF RFC 5424 - The Syslog Protocol"
}

identity LOCAL1 {
    base SYSLOG_FACILITY;
    description
    "The facility for local use 1 messages."
    reference
    "IETF RFC 5424 - The Syslog Protocol"
identity LOCAL2 {
    base SYSLOG_FACILITY;
    description
        "The facility for local use 2 messages.";
    reference
        "IETF RFC 5424 - The Syslog Protocol";
}

identity LOCAL3 {
    base SYSLOG_FACILITY;
    description
        "The facility for local use 3 messages.";
    reference
        "IETF RFC 5424 - The Syslog Protocol";
}

identity LOCAL4 {
    base SYSLOG_FACILITY;
    description
        "The facility for local use 4 messages.";
    reference
        "IETF RFC 5424 - The Syslog Protocol";
}

identity LOCAL5 {
    base SYSLOG_FACILITY;
    description
        "The facility for local use 5 messages.";
    reference
        "IETF RFC 5424 - The Syslog Protocol";
}

identity LOCAL6 {
    base SYSLOG_FACILITY;
    description
        "The facility for local use 6 messages.";
    reference
        "IETF RFC 5424 - The Syslog Protocol";
}

identity LOCAL7 {
    base SYSLOG_FACILITY;
    description
        "The facility for local use 7 messages.";
    reference
        "IETF RFC 5424 - The Syslog Protocol";
identity LOG_DESTINATION_TYPE {
    description
    "Base identity for destination for logging messages";
}

identity DEST_CONSOLE {
    base LOG_DESTINATION_TYPE;
    description
    "Directs log messages to the console";
}

identity DEST_BUFFER {
    base LOG_DESTINATION_TYPE;
    description
    "Directs log messages to and in-memory circular buffer";
}

identity DEST_FILE {
    base LOG_DESTINATION_TYPE;
    description
    "Directs log messages to a local file";
}

identity DEST_REMOTE {
    base LOG_DESTINATION_TYPE;
    description
    "Directs log messages to a remote syslog server";
}

// typedef statements

typedef syslog-severity {
    type enumeration {
        enum EMERGENCY {
            description
            "Emergency: system is unusable (0)";
        }
        enum ALERT {
            description
            "Alert: action must be taken immediately (1)";
        }
        enum CRITICAL {
            description
            "Critical: critical conditions (2)";
        }
        enum ERROR {

enum WARNING {
    description "Warning: warning conditions (4)"
}
enum NOTICE {
    description "Notice: normal but significant condition(5)"
}
enum INFORMATIONAL {
    description "Informational: informational messages (6)"
}
enum DEBUG {
    description "Debug: debug-level messages (7)"
}

description "Syslog message severities"
reference "IETF RFC 5424 - The Syslog Protocol"

// grouping statements

grouping logging-selectors-config {
    description "Configuration data for logging selectors"

    leaf facility {
        type identityref {
            base SYSLOG_FACILITY;
        }
        description "Specifies the facility, or class of messages to log"
    }

    leaf severity {
        type syslog-severity;
        description "Specifies that only messages of the given severity (or greater severity) for the corresponding facility are logged"
    }
}
grouping logging-selectors-state {
    description
    "Operational state data for logging selectors";
}

grouping logging-selectors-top {
    description
    "Top-level grouping for the logging selector list";

ccontainer selectors {
    description
    "Enclosing container ";

list selector {
    key "facility severity";
    description
    "List of selectors for log messages";

leaf facility {
    type leafref {
        path ".../config/facility";
    }
    description
    "Reference to facility list key";
}

leaf severity {
    type leafref {
        path "./config/severity";
    }
    description
    "Reference to severity list key";
}

ccontainer config {
    description
    "Configuration data ";

uses logging-selectors-config;
}

ccontainer state {

cconfig false;

description
    "Operational state data ";
uses logging-selectors-config;
uses logging-selectors-state;
}
}
}

grouping logging-console-config {
  description
   "Configuration data for console logging";
}

grouping logging-console-state {
  description
   "Operational state data for console logging";
}

grouping logging-console-top {
  description
   "Top-level grouping for console logging data";

  container console {
    description
      "Top-level container for data related to console-based logging";

    container config {
      description
        "Configuration data for console logging";

      uses logging-console-config;
    }

    container state {
      config false;

      description
        "Operational state data for console logging";

      uses logging-console-config;
      uses logging-console-state;
    }

    uses logging-selectors-top;
  }
}
grouping logging-remote-config {
  description
  "Configuration data for remote log servers";

  leaf host {
    type oc-inet:host;
    description
    "IP address or hostname of the remote log server";
  }

  leaf source-address {
    type oc-inet:ip-address;
    description
    "Source IP address for packets to the log server";
  }

  leaf remote-port {
    type oc-inet:port-number;
    default 514;
    description
    "Sets the destination port number for syslog UDP messages to
    the server. The default for syslog is 514.";
  }
}

grouping logging-remote-state {
  description
  "Operational state data for remote log servers";
}

grouping logging-remote-top {
  description
  "Top-level grouping for remote log servers";

  container remote-servers {
    description
    "Enclosing container for the list of remote log servers";

    list remote-server {
      key "host";
      description
      "List of remote log servers";

      leaf host {
        type leafref {
          path "./config/host";
        }
        description
      }
    }
  }
}
"Reference to the host list key";
}

container config {
  description
  "Configuration data for remote log servers";

  uses logging-remote-config;
}

container state {

  config false;

  description
  "Operational state data for remote log servers";

  uses logging-remote-config:
    uses logging-remote-state;
  }
  uses logging-selectors-top;
}
}

grouping logging-top {
  description
  "Top-level grouping for logging data";

  container logging {
    description
    "Top-level container for data related to logging / syslog";

    uses logging-console-top:
      uses logging-remote-top;
  }
}

// data definition statements

// augment statements

}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/openconfig-system-logging.yang
No license file was found, but licenses were detected in source scan.

submodule openconfig-aaa-tacacs {

  yang-version "1";

  belongs-to "openconfig-aaa" {
    prefix "oc-aaa";
  }

  // import some basic types
  import openconfig-inet-types { prefix oc-inet; }
  import openconfig-extensions { prefix oc-ext; }
  import openconfig-aaa-types { prefix oc-aaa-types; }
  import openconfig-types { prefix oc-types; }

  // meta
  organization "OpenConfig working group";

  contact
    "OpenConfig working group
    www.openconfig.net";

  description
    "This module defines configuration and operational state data
    related to the TACACS+ protocol for authentication,
    authorization, and accounting."

  oc-ext:openconfig-version "0.3.0";

  revision "2017-09-18" {
    description
      "Updated to use OpenConfig types modules";
    reference "0.3.0";
  }

  revision "2017-07-06" {
    description
      "Move to oc-inet types, add IETF attribution, add RADIUS
      counters, changed password leaf names to indicate hashed";
    reference "0.2.0";
  }

  revision "2017-01-29" {
    description
      "Initial public release";
    reference "0.1.0";
grouping aaa-tacacs-server-state {
    description
    "Operational state data for a TACACS+ server";
}

grouping aaa-tacacs-server-top {
    description
    "Top-level grouping for TACACS+ sever data";

carrier tacacs {
    description
    "Top-level container for TACACS+ server data";

carrier config {
    description
    "Configuration data for TACACS+ server";

    uses aaa-tacacs-server-config;
}

carrier state {

    config false;

    description
    "Operational state data for TACACS+ server";

    uses aaa-tacacs-server-config;
    uses aaa-tacacs-server-state;
}
}

// data definition statements

// augment statements

// rpc statements

// notification statements

}
module ietf-netconf-acm {

namespace "urn:ietf:params:xml:ns:yang:ietf-netconf-acm";

prefix "nacm";

import ietf-yang-types {
    prefix yang;
}

organization
    "IETF NETCONF (Network Configuration) Working Group";

contact
    "WG Web:  <http://tools.ietf.org/wg/netconf/>";
    WG List: <mailto:netconf@ietf.org>

    WG Chair: Mehmet Ersue
            <mailto:mehmet.ersue@nsn.com>

    WG Chair: Bert Wijnen
            <mailto:bertietf@bwijnen.net>

    Editor:  Andy Bierman
            <mailto:andy@yumaworks.com>

    Editor:  Martin Bjorklund
            <mailto:mbj@tail-f.com>";

description
    "NETCONF Access Control Model.

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    authors of the code.  All rights reserved.

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    without modification, is permitted pursuant to, and subject
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    Legal Provisions Relating to IETF Documents
    (http://trustee.ietf.org/license-info).

    This version of this YANG module is part of RFC 6536; see
    the RFC itself for full legal notices.";

revision "2012-02-22" {
    description
        "Initial version";
extension default-deny-write {
    description
        "Used to indicate that the data model node
        represents a sensitive security system parameter.

        If present, and the NACM module is enabled (i.e.,
        /nacm/enable-nacm object equals 'true'), the NETCONF server
        will only allow the designated 'recovery session' to have
        write access to the node. An explicit access control rule is
        required for all other users.

        The 'default-deny-write' extension MAY appear within a data
        definition statement. It is ignored otherwise.";
}

extension default-deny-all {
    description
        "Used to indicate that the data model node
        controls a very sensitive security system parameter.

        If present, and the NACM module is enabled (i.e.,
        /nacm/enable-nacm object equals 'true'), the NETCONF server
        will only allow the designated 'recovery session' to have
        read, write, or execute access to the node. An explicit
        access control rule is required for all other users.

        The 'default-deny-all' extension MAY appear within a data
        definition statement, 'rpc' statement, or 'notification'
        statement. It is ignored otherwise.";
}

/*
* Derived types
*/
typedef user-name-type {
    type string {
        length "1..max";
    }
}
typedef matchall-string-type {
    type string {
        pattern '\*';
    }
    description
    "The string containing a single asterisk '*' is used to conceptually represent all possible values for the particular leaf using this data type.";
}

typedef access-operations-type {
    type bits {
        bit create {
            description
            "Any protocol operation that creates a new data node."
        }
        bit read {
            description
            "Any protocol operation or notification that returns the value of a data node."
        }
        bit update {
            description
            "Any protocol operation that alters an existing data node."
        }
        bit delete {
            description
            "Any protocol operation that removes a data node."
        }
        bit exec {
            description
            "Execution access to the specified protocol operation."
        }
    }
    description
    "NETCONF Access Operation."
}

typedef group-name-type {
    type string {
        length "1..max";
        pattern '\[\^[^\*].*';
    }
}
typedef action-type {
  type enumeration {
    enum permit {
      description
      "Requested action is permitted.";
    }
    enum deny {
      description
      "Requested action is denied.";
    }
  }
  description
  "Action taken by the server when a particular rule matches.";
}

typedef node-instance-identifier {
  type yang:xpath1.0;
  description
  "Path expression used to represent a special data node instance identifier string.

  A node-instance-identifier value is an unrestricted YANG instance-identifier expression. All the same rules as an instance-identifier apply except predicates for keys are optional. If a key predicate is missing, then the node-instance-identifier represents all possible server instances for that key.

  This XPath expression is evaluated in the following context:

  o The set of namespace declarations are those in scope on the leaf element where this type is used.

  o The set of variable bindings contains one variable, ‘USER’, which contains the name of the user of the current session.

  o The function library is the core function library, but note that due to the syntax restrictions of an instance-identifier, no functions are allowed.";
}
The context node is the root node in the data tree.

/*
 * Data definition statements
 */

container nacm {
  nacm:default-deny-all;

  description
  "Parameters for NETCONF Access Control Model."
;

  leaf enable-nacm {
    type boolean;
    default true;
    description
    "Enables or disables all NETCONF access control enforcement. If 'true', then enforcement is enabled. If 'false', then enforcement is disabled."
;
  }

  leaf read-default {
    type action-type;
    default "permit";
    description
    "Controls whether read access is granted if no appropriate rule is found for a particular read request."
;
  }

  leaf write-default {
    type action-type;
    default "deny";
    description
    "Controls whether create, update, or delete access is granted if no appropriate rule is found for a particular write request."
;
  }

  leaf exec-default {
    type action-type;
    default "permit";
    description
    "Controls whether exec access is granted if no appropriate rule is found for a particular protocol operation request."
;
  }
}
leaf enable-external-groups {
  type boolean;
  default true;
  description
    "Controls whether the server uses the groups reported by the
    NETCONF transport layer when it assigns the user to a set of
    NACM groups. If this leaf has the value 'false', any group
    names reported by the transport layer are ignored by the
    server."
}

leaf denied-operations {
  type yang:zero-based-counter32;
  config false;
  mandatory true;
  description
    "Number of times since the server last restarted that a
    protocol operation request was denied.";
}

leaf denied-data-writes {
  type yang:zero-based-counter32;
  config false;
  mandatory true;
  description
    "Number of times since the server last restarted that a
    protocol operation request to alter
    a configuration datastore was denied.";
}

leaf denied-notifications {
  type yang:zero-based-counter32;
  config false;
  mandatory true;
  description
    "Number of times since the server last restarted that
    a notification was dropped for a subscription because
    access to the event type was denied.";
}

container groups {
  description
    "NETCONF Access Control Groups.";

  list group {
    key name;
  }
}
description
"One NACM Group Entry. This list will only contain
configured entries, not any entries learned from
any transport protocols.";

leaf name {
    type group-name-type;
    description
        "Group name associated with this entry.";
} leaf-list user-name {
    type user-name-type;
    description
        "Each entry identifies the username of
        a member of the group associated with
        this entry.";
} list rule-list {
    key "name";
    ordered-by user;
    description
        "An ordered collection of access control rules.";
    leaf name {
        type string {
            length "1..max";
        }
        description
            "Arbitrary name assigned to the rule-list.";
    } leaf-list group {
        type union {
            type matchall-string-type;
            type group-name-type;
        }
        description
            "List of administrative groups that will be
            assigned the associated access rights
            defined by the 'rule' list.

            The string '*' indicates that all groups apply to the
            entry.";
    }
list rule {
    key "name";
    ordered-by user;
    description "One access control rule.

    Rules are processed in user-defined order until a match is found. A rule matches if 'module-name', 'rule-type', and 'access-operations' match the request. If a rule matches, the 'action' leaf determines if access is granted or not."

    leaf name {
        type string {
            length "1..max";
        }
        description "Arbitrary name assigned to the rule."
    }

    leaf module-name {
        type union {
            type matchall-string-type;
            type string;
        }
        default "*";
        description "Name of the module associated with this rule. This leaf matches if it has the value '*' or if the object being accessed is defined in the module with the specified module name."
    }

    choice rule-type {
        description "This choice matches if all leafs present in the rule match the request. If no leafs are present, the choice matches all requests."
        case protocol-operation {
            leaf rpc-name {
                type union {
                    type matchall-string-type;
                    type string;
                }
                description "This leaf matches if it has the value '*' or if its value equals the requested protocol operation name.";
            }
        }
    }
}
case notification {
    leaf notification-name {
        type union {
            type matchall-string-type;
            type string;
        }
        description
        "This leaf matches if it has the value '*' or if its value equals the requested notification name.";
    }
}

case data-node {
    leaf path {
        type node-instance-identifier;
        mandatory true;
        description
        "Data Node Instance Identifier associated with the data node controlled by this rule.

        Configuration data or state data instance identifiers start with a top-level data node. A complete instance identifier is required for this type of path value.

        The special value '/' refers to all possible datastore contents.";
    }
}

leaf access-operations {
    type union {
        type matchall-string-type;
        type access-operations-type;
    }
    default "*";
    description
    "Access operations associated with this rule.

    This leaf matches if it has the value '*' or if the bit corresponding to the requested operation is set.";
}

leaf action {
    type action-type;
    mandatory true;
description
"The access control action associated with the
rule. If a rule is determined to match a
particular request, then this object is used
to determine whether to permit or deny the
request.";
}

leaf comment {
  type string;
  description
    "A textual description of the access rule.";
}

module ietf-netconf-with-defaults {


  prefix ncwd;

  import ietf-netconf { prefix nc; }

  organization
    "IETF NETCONF (Network Configuration Protocol) Working Group";

  contact
    "WG Web: <http://tools.ietf.org/wg/netconf/>
    WG List: <netconf@ietf.org>
    WG Chair: Bert Wijnen
      <bertietf@bwijnen.net>
    WG Chair: Mehmet Ersue
      <mehmet.ersue@nsn.com>
    Editor: Andy Bierman
      <andy.bierman@brocade.com>
description
"This module defines an extension to the NETCONF protocol
that allows the NETCONF client to control how default
values are handled by the server in particular NETCONF
operations.

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This version of this YANG module is part of RFC 6243; see
the RFC itself for full legal notices.

revision 2011-06-01 {
  description
    "Initial version.";
  reference
    "RFC 6243: With-defaults Capability for NETCONF";
}

typedef with-defaults-mode {
  description
    "Possible modes to report default data.";
  reference
    "RFC 6243; Section 3.";
  type enumeration {
    enum report-all {
      description
        "All default data is reported.";
      reference
        "RFC 6243; Section 3.1";
    }
    enum report-all-tagged {
      description
        "All default data is reported. Any nodes considered to be default data
will contain a 'default' XML attribute, set to 'true' or '1'.";
      reference
    }
  }
}
enum trim {
    description
    "Values are not reported if they contain the default.";
    reference
    "RFC 6243; Section 3.2";
}
enum explicit {
    description
    "Report values that contain the definition of
    explicitly set data.";
    reference
    "RFC 6243; Section 3.3";
}
}

// extending the get-config operation
augment /nc:get-config/nc:input {
    description
    "Adds the <with-defaults> parameter to the
    input of the NETCONF <get-config> operation.";
    reference
    "RFC 6243; Section 4.5.1";

    uses with-defaults-parameters;
}

// extending the get operation
augment /nc:get/nc:input {
    description
    "Adds the <with-defaults> parameter to
the input of the NETCONF <get> operation.”;
reference
"RFC 6243; Section 4.5.1”;
uses with-defaults-parameters;
}

// extending the copy-config operation
augment /nc:copy-config/nc:input {
   description
   "Adds the <with-defaults> parameter to
   the input of the NETCONF <copy-config> operation.”;
   reference
   "RFC 6243; Section 4.5.1”;

   uses with-defaults-parameters;
}

}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-
  0.1.8/ydk/models/openconfig/_yang/ietf-netconf-with-defaults.yang
No license file was found, but licenses were detected in source scan.

module openconfig-alarm-types {

   yang-version "1";

   // namespace
   namespace "http://openconfig.net/yang/alarms/types";

   prefix "oc-alarm-types";

   // import some basic types
   import openconfig-extensions { prefix oc-ext; }

   // meta
   organization "OpenConfig working group";

   contact
   "OpenConfig working group
   www.openconfig.net";

   description
   "This module defines operational state data related to alarms
that the device is reporting."
This model reuses some data items defined in the draft IETF
YANG Alarm Module:

Portions of this code were derived from the draft IETF YANG Alarm
Module. Please reproduce this note if possible.

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to IETF Documents (http://trustee.ietf.org/license-info)."

oc-ext:openconfig-version "0.2.0";
revision "2018-01-16" {
    description
    "Moved alarm identities into separate types module";
    reference "0.2.0";
}

// identity statements
identity OPENCONFIG_ALARM_TYPE_ID {
    description
    "Base identity for alarm type ID profiles";
}

identity AIS {
    base OPENCONFIG_ALARM_TYPE_ID;
    description
    "Defines an alarm indication signal type of alarm";
}

identity EQPT {
    base OPENCONFIG_ALARM_TYPE_ID;
    description
    "Defines an equipment related type of alarm that is specific
to the physical hardware";
}

identity LOS {
    base OPENCONFIG_ALARM_TYPE_ID;
    description
"Defines a loss of signal type of alarm";
}

identity OTS {
  base OPENCONFIG_ALARM_TYPE_ID;
  description
  "Defines an optical transport signal type of alarm";
}

identity OPENCONFIG_ALARM_SEVERITY {
  description
  "Base identity for alarm severity profiles. Derived identities are based on contents of the draft IETF YANG Alarm Module";
  reference
  "IETF YANG Alarm Module: Draft - typedef severity
}

identity UNKNOWN {
  base OPENCONFIG_ALARM_SEVERITY;
  description
  "Indicates that the severity level could not be determined. This level SHOULD be avoided.";
}

identity MINOR {
  base OPENCONFIG_ALARM_SEVERITY;
  description
  "Indicates the existence of a non-service affecting fault condition and that corrective action should be taken in order to prevent a more serious (for example, service affecting) fault. Such a severity can be reported, for example, when the detected alarm condition is not currently degrading the capacity of the resource";
}

identity WARNING {
  base OPENCONFIG_ALARM_SEVERITY;
  description
  "Indicates the detection of a potential or impending service affecting fault, before any significant effects have been felt. Action should be taken to further diagnose (if necessary) and correct the problem in order to prevent it from becoming a more serious service affecting fault.";
}
identity MAJOR {
base OPENCONFIG_ALARM_SEVERITY;
description
"Indicates that a service affecting condition has developed
and an urgent corrective action is required. Such a severity
can be reported, for example, when there is a severe
degradation in the capability of the resource and its full
capability must be restored.";
}

identity CRITICAL {
base OPENCONFIG_ALARM_SEVERITY;
description
"Indicates that a service affecting condition has occurred
and an immediate corrective action is required. Such a
severity can be reported, for example, when a resource becomes
totally out of service and its capability must be restored.";
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8-tar-gz/ydk-models-openconfig-
  0.1.8/ydk/models/openconfig/_yang/openconfig-alarm-types.yang
No license file was found, but licenses were detected in source scan.

module ietf-netconf {
namespace "urn:ietf:params:xml:ns:netconf:base:1.0";
prefix nc;

import ietf-inet-types {
  prefix inet;
}

organization
"IETF NETCONF (Network Configuration) Working Group";
contact
"WG Web: <http://tools.ietf.org/wg/netconf/>
WG List: <netconf@ietf.org>

WG Chair: Bert Wijnen
  <bertietf@bwijnen.net>

WG Chair: Mehmet Ersue
  <mehmet.ersue@nsn.com>

Editor: Martin Bjorklund
  <mbj@tail-f.com>
extension get-filter-element-attributes {
  description
  "If this extension is present within an 'anyxml' statement named 'filter', which must be conceptually defined within the RPC input section for the <get> and <get-config> protocol operations, then the following unqualified XML attribute is supported within the <filter> element, within a <get> or <get-config> protocol operation:

  type : optional attribute with allowed value strings 'subtree' and 'xpath'. If missing, the default value is 'subtree'.

  If the 'xpath' feature is supported, then the following unqualified XML attribute is also supported:

  select: optional attribute containing a string representing an XPath expression.";
The 'type' attribute must be equal to 'xpath' if this attribute is present.

feature writable-running {

description
"NETCONF :writable-running capability;
If the server advertises the :writable-running capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled."
reference "RFC 6241, Section 8.2";
}

feature candidate {

description
"NETCONF :candidate capability;
If the server advertises the :candidate capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled."
reference "RFC 6241, Section 8.3";
}

feature confirmed-commit {

if-feature "candidate";

description
"NETCONF :confirmed-commit:1.1 capability;
If the server advertises the :confirmed-commit:1.1 capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled."
reference "RFC 6241, Section 8.4";
}

feature rollback-on-error {

description
"NETCONF :rollback-on-error capability;
If the server advertises the :rollback-on-error capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled."
reference "RFC 6241, Section 8.5";
}

feature validate {

description
"NETCONF :validate:1.1 capability;
If the server advertises the :validate:1.1 capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled.

reference "RFC 6241, Section 8.6"

}

feature startup {

description

"NETCONF :startup capability; If the server advertises the :startup capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled.";

reference "RFC 6241, Section 8.7"

}

feature url {

description

"NETCONF :url capability; If the server advertises the :url capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled.";

reference "RFC 6241, Section 8.8"

}

feature xpath {

description

"NETCONF :xpath capability; If the server advertises the :xpath capability for a session, then this feature must also be enabled for that session. Otherwise, this feature must not be enabled.";

reference "RFC 6241, Section 8.9"

}

typedef session-id-type {

type uint32 {

range "1..max";

}

description

"NETCONF Session Id";

}

typedef session-id-or-zero-type {

type uint32;

description
typedef error-tag-type {
  type enumeration {
    enum "in-use" {
      description "The request requires a resource that
                   already is in use.";
    }
    enum "invalid-value" {
      description "The request specifies an unacceptable value for one
                   or more parameters.";
    }
    enum "too-big" {
      description "The request or response (that would be generated) is
                   too large for the implementation to handle.";
    }
    enum "missing-attribute" {
      description "An expected attribute is missing.";
    }
    enum "bad-attribute" {
      description "An attribute value is not correct; e.g., wrong type,
                   out of range, pattern mismatch.";
    }
    enum "unknown-attribute" {
      description "An unexpected attribute is present.";
    }
    enum "missing-element" {
      description "An expected element is missing.";
    }
    enum "bad-element" {
      description "An element value is not correct; e.g., wrong type,
                   out of range, pattern mismatch.";
    }
    enum "unknown-element" {
      description "An unexpected element is present.";
    }
    enum "unknown-namespace" {
      description "NETCONF Session Id or Zero to indicate none";
    }
  }
}
"An unexpected namespace is present."
}
enum "access-denied" {
    description
    "Access to the requested protocol operation or
data model is denied because authorization failed."
}
enum "lock-denied" {
    description
    "Access to the requested lock is denied because the
lock is currently held by another entity."
}
enum "resource-denied" {
    description
    "Request could not be completed because of
insufficient resources."
}
enum "rollback-failed" {
    description
    "Request to roll back some configuration change (via
rollback-on-error or <discard-changes> operations)
was not completed for some reason."
}
enum "data-exists" {
    description
    "Request could not be completed because the relevant
data model content already exists. For example,
a 'create' operation was attempted on data that
already exists."
}
enum "data-missing" {
    description
    "Request could not be completed because the relevant
data model content does not exist. For example,
a 'delete' operation was attempted on
data that does not exist."
}
enum "operation-not-supported" {
    description
    "Request could not be completed because the requested
operation is not supported by this implementation."
}
enum "operation-failed" {
    description
    "Request could not be completed because the requested
operation failed for some reason not covered by
any other error condition."
}
enum "partial-operation" {
    description
    "This error-tag is obsolete, and SHOULD NOT be sent
    by servers conforming to this document.";
}

enum "malformed-message" {
    description
    "A message could not be handled because it failed to
    be parsed correctly. For example, the message is not
    well-formed XML or it uses an invalid character set.";
}

description
"NETCONF Error Tag";
reference "RFC 6241, Appendix A";
}

typedef error-severity-type {
    type enumeration {
        enum "error" {
            description
            "Error severity";
        }
        enum "warning" {
            description
            "Warning severity";
        }
    }
    description
    "NETCONF Error Severity";
    reference "RFC 6241, Section 4.3";
}

typedef edit-operation-type {
    type enumeration {
        enum "merge" {
            description
            "The configuration data identified by the
            element containing this attribute is merged
            with the configuration at the corresponding
            level in the configuration datastore identified
            by the target parameter.";
        }
        enum "replace" {
            description
            "The configuration data identified by the element
            containing this attribute replaces any related
            configuration in the configuration datastore
identified by the target parameter. If no such
configuration data exists in the configuration
datastore, it is created. Unlike a
<copy-config> operation, which replaces the
entire target configuration, only the configuration
actually present in the config parameter is affected.

} enum "create" {
  description
  "The configuration data identified by the element
  containing this attribute is added to the
  configuration if and only if the configuration
data does not already exist in the configuration
datastore. If the configuration data exists, an
<rpc-error> element is returned with an
<error-tag> value of 'data-exists'.";
}

enum "delete" {
  description
  "The configuration data identified by the element
  containing this attribute is deleted from the
  configuration if and only if the configuration
data currently exists in the configuration
datastore. If the configuration data does not
exist, an <rpc-error> element is returned with
an <error-tag> value of 'data-missing'.";
}

enum "remove" {
  description
  "The configuration data identified by the element
  containing this attribute is deleted from the
  configuration if the configuration
data currently exists in the configuration
datastore. If the configuration data does not
exist, the 'remove' operation is silently ignored
by the server.";
}
}
}
default "merge";

description
"NETCONF 'operation' attribute values";
reference "RFC 6241, Section 7.2";
}
}

rpc get-config {
  description
  "Retrieve all or part of a specified configuration.";
  reference "RFC 6241, Section 7.1";
input {
  container source {
    description "Particular configuration to retrieve.";
    choice config-source {
      mandatory true;
      description "The configuration to retrieve.";
      leaf candidate {
        if-feature "candidate";
        type empty;
        description "The candidate configuration is the config source.";
      }
      leaf running {
        type empty;
        description "The running configuration is the config source.";
      }
      leaf startup {
        if-feature "startup";
        type empty;
        description "The startup configuration is the config source.
          This is optional-to-implement on the server because
          not all servers will support filtering for this
datastore.";
      }
    }
  }
  anyxml filter {
    description "Subtree or XPath filter to use.";
    nc:get-filter-element-attributes;
  }
}
output {
  anyxml data {
    description "Copy of the source datastore subset that matched
      the filter criteria (if any).  An empty data container
      indicates that the request did not produce any results.";
  }
}
rpc edit-config {
  description "The <edit-config> operation loads all or part of a specified
configuration to the specified target configuration.";
reference "RFC 6241, Section 7.2";
input {
  container target {
    description "Particular configuration to edit.";
    choice config-target {
      mandatory true;
      description "The configuration target.";
      leaf candidate {
        if-feature "candidate";
        type empty;
        description "The candidate configuration is the config target.";
      }
      leaf running {
        if-feature "writable-running";
        type empty;
        description "The running configuration is the config source.";
      }
    }
    leaf default-operation {
      type enumeration {
        enum "merge" {
          description "The default operation is merge.";
        }
        enum "replace" {
          description "The default operation is replace.";
        }
        enum "none" {
          description "There is no default operation.";
        }
      }
      default "merge";
      description "The default operation to use.";
    }
    leaf test-option {
      if-feature "validate";
      type enumeration {
        enum "test-then-set" {
          description "";
        }
        enum "test-then-apply" {
          description "";
        }
      }
      default "test-then-set";
      description "";
    }
  }
}
"The server will test and then set if no errors."

enum "set" {
  description
  "The server will set without a test first."
}

enum "test-only" {
  description
  "The server will only test and not set, even
  if there are no errors."
}

default "test-then-set";
description
  "The test option to use."

leaf error-option {
  type enumeration {
    enum "stop-on-error" {
      description
      "The server will stop on errors."
    }
    enum "continue-on-error" {
      description
      "The server may continue on errors."
    }
    enum "rollback-on-error" {
      description
      "The server will roll back on errors.
      This value can only be used if the ‘rollback-on-error’
      feature is supported."
    }
  }
  default "stop-on-error";
description
  "The error option to use."

choice edit-content {
  mandatory true;
description
  "The content for the edit operation."
  anyxml config {
    description
    "Inline Config content."
  }
  leaf url {
    if-feature "url";
type inet:uri;
rpc copy-config {
  description "Create or replace an entire configuration datastore with the contents of another complete configuration datastore.";
  reference "RFC 6241, Section 7.3";
  input {
    container target {
      description "Particular configuration to copy to.";
      choice config-target {
        mandatory true;
        description "The configuration target of the copy operation.";
        leaf candidate {
          if-feature "candidate";
          type empty;
          description "The candidate configuration is the config target.";
        }
        leaf running {
          if-feature "writable-running";
          type empty;
          description "The running configuration is the config target. This is optional-to-implement on the server.";
        }
        leaf startup {
          if-feature "startup";
          type empty;
          description "The startup configuration is the config target.";
        }
        leaf url {
          if-feature "url";
          type inet:uri;
          description "The URL-based configuration is the config target.";
        }
      }
    }
  }
}
"Particular configuration to copy from."
choice config-source {
  mandatory true;
  description
    "The configuration source for the copy operation."
  leaf candidate {
    if-feature "candidate";
    type empty;
    description
      "The candidate configuration is the config source."
  }
  leaf running {
    type empty;
    description
      "The running configuration is the config source."
  }
  leaf startup {
    if-feature "startup";
    type empty;
    description
      "The startup configuration is the config source."
  }
  leaf url {
    if-feature "url";
    type inet:uri;
    description
      "The URL-based configuration is the config source."
  }
}​
anyxml config {
  description
    "Inline Config content: <config> element. Represents
    an entire configuration datastore, not
    a subset of the running datastore."
}
}
}
}
}

rpc delete-config {
  description
    "Delete a configuration datastore."
  reference "RFC 6241, Section 7.4";
  input {
    container target {
      description
        "Particular configuration to delete."
      choice config-target {
        mandatory true;
description
  "The configuration target to delete."
leaf startup {
  if-feature "startup"
  type empty
  description
    "The startup configuration is the config target."
}
leaf url {
  if-feature "url"
  type inet:uri
  description
    "The URL-based configuration is the config target."
}
}
}
}
}
}
rpc lock {
  description
    "The lock operation allows the client to lock the configuration
     system of a device."
  reference "RFC 6241, Section 7.5"
  input {
    container target {
      description
        "Particular configuration to lock."
      choice config-target {
        mandatory true
        description
          "The configuration target to lock."
        leaf candidate {
          if-feature "candidate"
          type empty
          description
            "The candidate configuration is the config target."
        }
        leaf running {
          type empty
          description
            "The running configuration is the config target."
        }
        leaf startup {
          if-feature "startup"
          type empty
          description
            "The startup configuration is the config target."
        }
    }
  }
}
rpc unlock {
    description
    "The unlock operation is used to release a configuration lock,
    previously obtained with the 'lock' operation.";
    reference "RFC 6241, Section 7.6";
    input {
        container target {
            description
            "Particular configuration to unlock.";
            choice config-target {
                mandatory true;
                description
                "The configuration target to unlock.";
                leaf candidate {
                    if-feature "candidate";
                    type empty;
                    description
                    "The candidate configuration is the config target.";
                }
                leaf running {
                    type empty;
                    description
                    "The running configuration is the config target.";
                }
                leaf startup {
                    if-feature "startup";
                    type empty;
                    description
                    "The startup configuration is the config target.";
                }
            }
        }
    }
}

rpc get {
    description
    "Retrieve running configuration and device state information.";
    reference "RFC 6241, Section 7.7";
    input {
        anyxml filter {
            description
            "This parameter specifies the portion of the system
            configuration and state data to retrieve.";
            nc:get-filter-element-attributes;
        }
    }
}
output {
  anyxml data {
    description
    "Copy of the running datastore subset and/or state
data that matched the filter criteria (if any).
An empty data container indicates that the request did not
produce any results.";
  }
}

call rpc close-session {
  description
  "Request graceful termination of a NETCONF session.";
  reference "RFC 6241, Section 7.8";
}

call rpc kill-session {
  description
  "Force the termination of a NETCONF session.";
  reference "RFC 6241, Section 7.9";
  input {
    leaf session-id {
      type session-id-type;
      mandatory true;
      description
      "Particular session to kill.";
    }
  }
}

call rpc commit {
  if-feature "candidate";
  description
  "Commit the candidate configuration as the device's new
current configuration.";
  reference "RFC 6241, Section 8.3.4.1";
  input {
    leaf confirmed {
      if-feature "confirmed-commit";
      type empty;
      description
      "Requests a confirmed commit.";
      reference "RFC 6241, Section 8.3.4.1";
    }
    leaf confirm-timeout {
      if-feature "confirmed-commit";
      type uint32 {
        range "1..max";
      }
    }
  }
}
units "seconds";
default "600";
description
  "The timeout interval for a confirmed commit.";
reference "RFC 6241, Section 8.3.4.1";
}
leaf persist {
  if-feature "confirmed-commit";
  type string;
  description
  "This parameter is used to make a confirmed commit
  persistent. A persistent confirmed commit is not aborted
  if the NETCONF session terminates. The only way to abort
  a persistent confirmed commit is to let the timer expire,
  or to use the <cancel-commit> operation.

  The value of this parameter is a token that must be given
  in the 'persist-id' parameter of <commit> or
  <cancel-commit> operations in order to confirm or cancel
  the persistent confirmed commit.

  The token should be a random string.";
reference "RFC 6241, Section 8.3.4.1";
}
leaf persist-id {
  if-feature "confirmed-commit";
  type string;
  description
  "This parameter is given in order to commit a persistent
  confirmed commit. The value must be equal to the value
  given in the 'persist' parameter to the <commit> operation.
  If it does not match, the operation fails with an
  'invalid-value' error.";
reference "RFC 6241, Section 8.3.4.1";
}
}
rpc discard-changes {
  if-feature "candidate";
  description
  "Revert the candidate configuration to the current
  running configuration.";
reference "RFC 6241, Section 8.3.4.2";
}
rpc cancel-commit {
  if-feature "confirmed-commit";
  description
"This operation is used to cancel an ongoing confirmed commit. If the confirmed commit is persistent, the parameter 'persist-id' must be given, and it must match the value of the 'persist' parameter."
reference "RFC 6241, Section 8.4.4.1"

input {
  leaf persist-id {
    type string;
    description
    "This parameter is given in order to cancel a persistent confirmed commit. The value must be equal to the value given in the 'persist' parameter to the <commit> operation. If it does not match, the operation fails with an 'invalid-value' error.";
  }
}

rpc validate {
  if-feature "validate";
  description
  "Validates the contents of the specified configuration.";
  reference "RFC 6241, Section 8.6.4.1"
  input {
    container source {
      description
      "Particular configuration to validate.";
      choice config-source {
        mandatory true;
        description
        "The configuration source to validate.";
        leaf candidate {
          if-feature "candidate";
          type empty;
          description
          "The candidate configuration is the config source.";
        }
        leaf running {
          type empty;
          description
          "The running configuration is the config source.";
        }
        leaf startup {
          if-feature "startup";
          type empty;
          description
          "The startup configuration is the config source.";
        }
      }
      leaf url {
if-feature "url";
type inet:uri;
description
"The URL-based configuration is the config source."
}
anyxml config {
description
"Inline Config content: <config> element. Represents
an entire configuration datastore, not
a subset of the running datastore."
}
}
}

Found in path(s):
* /opt/cola/permits/1302206195_1649327870.44/0/ydk-models-openconfig-0-1-8.tar.gz/ydk-models-openconfig-0.1.8/ydk/models/openconfig/_yang/ietf-netconf.yang

1.273 gcab 1.1 1.el8
1.273.1 Available under license:

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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1.274 cyphar-filepath-securejoin 0.2.2

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1.276 marshmallow 3.14.1

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1.277 libcap 2.26-5.el8

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# Contributions to the urllib3 project

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## Contributors

In chronological order:

* victor.vde [http://code.google.com/u/victor.vde/]
  * HTTPS patch (which inspired HTTPSConnectionPool)

* erikcederstrand [http://code.google.com/u/erikcederstrand/]
  * NTLM-authenticated HTTPSConnectionPool
  * Basic-authenticated HTTPSConnectionPool (merged into make_headers)

* niphlod <niphlod@gmail.com>
  * Client-verified SSL certificates for HTTPSConnectionPool
  * Response gzip and deflate encoding support
  * Better unicode support for filepost using StringIO buffers

* btoconnor <brian@btoconnor.net>
  * Non-multipart encoding for POST requests

* p.dobrogost [http://code.google.com/u/@WBRSRIBZDhBFXQB6/]
  * Code review, PEP8 compliance, benchmark fix

* kennethreitz <me@kennethreitz.com>
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* georgemarshall [https://github.com/georgemarshall]
  * Bugfixes, Improvements and Test coverage

* Thomas Kluyver <thomas@kluyver.me.uk>
  * Python 3 support

* brandon-rhodes [http://rhodesmill.org/brandon]
  * Design review, bugfixes, test coverage.

* studer <theo.studer@gmail.com>
  * IPv6 url support and test coverage
* Shivaram Lingamneni <slingamn@cs.stanford.edu>
  * Support for explicitly closing pooled connections

* hartator <hartator@gmail.com>
  * Corrected multipart behavior for params

* Thomas Weischuh <thomas@t-8ch.de>
  * Support for TLS SNI
  * API unification of ssl_version/cert_reqs
  * SSL fingerprint and alternative hostname verification
  * Bugfixes in testsuite

* Sune Kirkeby <mig@ibofobi.dk>
  * Optional SNI-support for Python 2 via PyOpenSSL.

* Marc Schlaich <marc.schlaich@gmail.com>
  * Various bugfixes and test improvements.

* Bryce Boe <bbzbryce@gmail.com>
  * Correct six.moves conflict
  * Fixed pickle support of some exceptions

* Boris Figovsky <boris.figovsky@ravellosystems.com>
  * Allowed to skip SSL hostname verification

* Cory Benfield <https://lukasa.co.uk/about/>
  * Stream method for Response objects.
  * Return native strings in header values.
  * Generate 'Host' header when using proxies.

* Jason Robinson <jaywink@basshero.org>
  * Add missing WrappedSocket.fileno method in PyOpenSSL

* Audrius Butkevicius <audrius.butkevicius@elastichosts.com>
  * Fixed a race condition

* Stanislav Vitkovskiy <stas.vitkovsky@gmail.com>
  * Added HTTPS (CONNECT) proxy support

* Stephen Holsapple <sholsapp@gmail.com>
  * Added abstraction for granular control of request fields

* Martin von Gagern <Martin.vGagern@gmx.net>
  * Support for non-ASCII header parameters

* Kevin Burke <kev@inburke.com> and Pavel Kirichenko <juanych@yandex-team.ru>
  * Support for separate connect and request timeouts
* Peter Waller <p@pwaller.net>
  * HTTPResponse.tell() for determining amount received over the wire

* Nipunn Koorapati <nipunn1313@gmail.com>
  * Ignore default ports when comparing hosts for equality

* Danilo @dbrgn <https://dbrgn.ch/>
  * Disabled TLS compression by default on Python 3.2+
  * Disabled TLS compression in pyopenssl contrib module
  * Configurable cipher suites in pyopenssl contrib module

* Roman Bogorodskiy <roman.bogorodskiy@ericsson.com>
  * Account retries on proxy errors

* Nicolas Delaby <nicolas.delaby@ezeep.com>
  * Use the platform-specific CA certificate locations

* Josh Schneier <https://github.com/jschneier>
  * HTTPHeaderDict and associated tests and docs
  * Bugfixes, docs, test coverage

* Tahia Khan <http://tahia.tk/>
  * Added Timeout examples in docs

* Arthur Grunseid <https://grunseid.com>
  * source_address support and tests (with https://github.com/bui)

* Ian Cordasco <graffatcolmingov@gmail.com>
  * PEP8 Compliance and Linting
  * Add ability to pass socket options to an HTTP Connection

* Erik Tollerud <erik.tollerud@gmail.com>
  * Support for standard library io module.

* Krishna Prasad <kprasad.iitd@gmail.com>
  * Google App Engine documentation

* Aaron Meurer <asmeurer@gmail.com>
  * Added Url.url, which unparses a Url

* Evgeny Kapun <abacabadabacaba@gmail.com>
  * Bugfixes

* Benjamen Meyer <bm_witness@yahoo.com>
  * Security Warning Documentation update for proper capture

* Shivan Sornarajah <github@sornars.com>
  * Support for using ConnectionPool and PoolManager as context managers.
* Alex Gaynor <alex.gaynor@gmail.com>
  * Updates to the default SSL configuration

* Tomas Tomecek <ttomecek@redhat.com>
  * Implemented generator for getting chunks from chunked responses.

* tlynn <https://github.com/tlynn>
  * Respect the warning preferences at import.

* David D. Riddle <ddriddle@illinois.edu>
  * IPv6 bugfixes in testsuite

* Thea Flowers <magicalgirl@google.com>
  * App Engine environment tests.
  * Documentation re-write.

* John Krauss <https://github.com/talos>
  * Clues to debugging problems with `cryptography` dependency in docs

* Disassem <https://github.com/Disassem>
  * Fix pool-default headers not applying for url-encoded requests like GET.

* James Atherfold <jlatherfold@hotmail.com>
  * Bugfixes relating to cleanup of connections during errors.

* Christian Pedersen <https://github.com/chripede>
  * IPv6 HTTPS proxy bugfix

* Jordan Moldow <https://github.com/jmoldow>
  * Fix low-level exceptions leaking from `HTTPResponse.stream()`.
  * Bugfix for `ConnectionPool.urlopen(release_conn=False)`.
  * Creation of `HTTPConnectionPool.ResponseCls`.

* Predrag Gruevski <https://github.com/obi1kenobi>
  * Made cert digest comparison use a constant-time algorithm.

* Adam Talsma <https://github.com/a-tal>
  * Bugfix to ca_cert file paths.

* Evan Meagher <https://evanmeagher.net>
  * Bugfix related to `memoryview` usage in PyOpenSSL adapter

* John Vandenberg <jayvdb@gmail.com>
  * Python 2.6 fixes; pyflakes and pep8 compliance

* Andy Caldwell <andy.m.caldwell@googlemail.com>
  * Bugfix related to reusing connections in indeterminate states.
* Ville Skytt <ville.skytta@iki.fi>
  * Logging efficiency improvements, spelling fixes, Travis config.

* Shige Takeda <smtakeda@gmail.com>
  * Started Recipes documentation and added a recipe about handling concatenated gzip data in HTTP response

* Jess Shapiro <jesse@jesseshapiro.net>
  * Various character-encoding fixes/tweaks
  * Disabling IPv6 DNS when IPv6 connections not supported

* David Foster <http://dafoster.net/>
  * Ensure order of request and response headers are preserved.

* Jeremy Cline <jeremy@jcline.org>
  * Added connection pool keys by scheme

* Aviv Palivoda <palaviv@gmail.com>
  * History list to Retry object.
  * HTTPResponse contains the last Retry object.

* Nate Prewitt <nate.prewitt@gmail.com>
  * Ensure timeouts are not booleans and greater than zero.
  * Fixed infinite loop in ``stream`` when amt=None.
  * Added length_remaining to determine remaining data to be read.
  * Added enforce_content_length to raise exception when incorrect content-length received.

* Seth Michael Larson <sethmichaellarson@protonmail.com>
  * Created selectors backport that supports PEP 475.

* Alexandre Dias <alex.dias@smarkets.com>
  * Don't retry on timeout if method not in whitelist

* Moinuddin Quadri <moin18@gmail.com>
  * Lazily load idna package

* Tom White <s6yg1ez3@mail2tor.com>
  * Made SOCKS handler differentiate socks5h from socks5 and socks4a from socks4.

* Tim Burke <tim.burke@gmail.com>
  * Stop buffering entire deflate-encoded responses.

* Tuukka Mustonen <tuukka.mustonen@gmail.com>
  * Add counter for status_forcelist retries.

* Erik Rose <erik@mozilla.com>
  * Bugfix to pyopenssl vending
* Wolfgang Richter <wolfgang.richter@gmail.com>
  * Bugfix related to loading full certificate chains with PyOpenSSL backend.

* Mike Miller <github@mikeage.net>
  * Logging improvements to include the HTTP(S) port when opening a new connection

* Ioannis Tziakos <mail@itziakos.gr>
  * Fix ``util.selectors._fileobj_to_fd`` to accept ``long``.
  * Update appveyor tox setup to use the 64bit python.

* Akamai (through Jess Shapiro) <jshapiro@akamai.com>
  * Ongoing maintenance; 2017-2018

* Dominique Leuenberger <dimstar@opensuse.org>
  * Minor fixes in the test suite

* Will Bond <will@wbond.net>
  * Add Python 2.6 support to ``contrib.securetransport``

* Aleksei Alekseev <alekseev.yeskela@gmail.com>
  * using auth info for socks proxy

* Chris Wilcox <git@crwilcox.com>
  * Improve contribution guide
  * Add ``HTTPResponse.geturl`` method to provide ``urllib2.urlopen().geturl()`` behavior

* Bruce Merry <https://www.brucemerry.org.za>
  * Fix leaking exceptions when system calls are interrupted with zero timeout

* Hugo van Kemenade <https://github.com/hugovk>
  * Drop support for EOL Python 2.6

* Tim Bell <https://github.com/timb07>
  * Bugfix for responses with Content-Type: message/* logging warnings

* Justin Bramley <https://github.com/jbramleycl>
  * Add ability to handle multiple Content-Encodings

* Katsuhiko YOSHIDA <https://github.com/kyoshidajp>
  * Remove Authorization header regardless of case when redirecting to cross-site

* James Meickle <https://permadeath.com/>  
  * Improve handling of Retry-After header

* Chris Jerdonek <chris.jerdonek@gmail.com>
  * Remove a spurious TypeError from the exception chain inside HTTPConnectionPool._make_request(), also for BaseExceptions.
* Jorge Lopez Silva <https://github.com/jalopezsilva>
  * Added support for forwarding requests through HTTPS proxies.

* Benno Rice <benno@jeamland.net>
  * Allow cadata parameter to be passed to underlying `SSLContext.load_verify_locations()`.

* Keiichi Kobayashi <abok.1k@gmail.com>
  * Rename VerifiedHTTPSConnection to HTTPSConnection

* Himanshu Garg <garg_himanshu@outlook.com>
  * DOC & LICENSE Update

* Hod Bin Noon <bin.noon.hod@gmail.com>
  * Test improvements

* Chris Olufson <tycarac@gmail.com>
  * Fix for connection not being released on HTTP redirect and response not preloaded

* [Bastiaan Bakker] <https://github.com/bastiaanb>
  * Support for logging session keys via environment variable `SSLKEYLOGFILE` (Python 3.8+)

* [Ezzeri Esa] <https://github.com/savarin>
  * Ports and extends on types from typeshed

* [Your name or handle] <[email or website]>
  * [Brief summary of your changes]

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--------------------------------------------------
For lib/py.compat/win32/stdint.h

// ISO C9x compliant stdint.h for Microsoft Visual Studio
// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124

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++++++++++++++++

Dean Elsner wrote the original gas for vax. [more details?]

Jay Fenlason maintained gas for a while, adding support for gdb-specific debug information and the 68k series machines, most of the preprocessing pass, and extensive changes in messages.c, input-file.c, write.c.

K. Richard Pixley maintained gas for a while, adding various enhancements and many bug fixes, including merging support for several processors, breaking gas up to handle multiple object file format backends (including heavy rewrite, testing, an integration of the coff and b.out backends), adding configuration including heavy testing and verification of cross assemblers and file splits and renaming, converted gas to strictly ansi C including full prototypes, added support for m680[34]0 & cpu32, considerable work on i960 including a coff port (including considerable amounts of reverse engineering), a sparc opcode file rewrite, decstation, rs6000, and hp300hpux host ports, updated "know" assertions and made them work, much other reorganization, cleanup, and lint.

Ken Raeburn wrote the high-level BFD interface code to replace most of the code in format-specific I/O modules.

The original Vax-VMS support was contributed by David L. Kashtan. Eric Youngdale and Pat Rankin have done much work with it since.

The Intel 80386 machine description was written by Eliot Dresselhaus.

Minh Tran-Le at IntelliCorp contributed some AIX 386 support.

The Motorola 88k machine description was contributed by Devon Bowen of Buffalo University and Torbjorn Granlund of the Swedish Institute of Computer Science.

Keith Knowles at the Open Software Foundation wrote the original MIPS back end (tc-mips.c, tc-mips.h), and contributed Rose format support that hasn't been merged in yet. Ralph Campbell worked with the MIPS code to support a.out format.
Support for the Zilog Z8k and Hitachi H8/300, H8/500 and SH processors (tc-z8k, tc-h8300, tc-h8500, tc-sh), and IEEE 695 object file format (obj-ieee), was written by Steve Chamberlain of Cygnus Solutions. Steve also modified the COFF back end (obj-coffbfd) to use BFD for some low-level operations, for use with the Hitachi, 29k and Zilog targets.

John Gilmore built the AMD 29000 support, added .include support, and simplified the configuration of which versions accept which pseudo-ops. He updated the 68k machine description so that Motorola's opcodes always produced fixed-size instructions (e.g. jsr), while synthetic instructions remained shrinkable (jbsr). John fixed many bugs, including true tested cross-compilation support, and one bug in relaxation that took a week and required the proverbial one-bit fix.

Ian Lance Taylor of Cygnus Solutions merged the Motorola and MIT syntaxes for the 68k, completed support for some COFF targets (68k, i386 SVR3, and SCO Unix), wrote the ECOFF support based on Michael Meissner's mips-tfile program, wrote the PowerPC and RS/6000 support, and made a few other minor patches. He handled the binutils releases for versions 2.7 through 2.9.

David Edelsohn contributed fixes for the PowerPC and AIX support.

Steve Chamberlain made gas able to generate listings.

Support for the HP9000/300 was contributed by Glenn Engel of HP.

Support for ELF format files has been worked on by Mark Eichin of Cygnus Solutions (original, incomplete implementation), Pete Hoogenboom at the University of Utah (HPPA mainly), Michael Meissner of the Open Software Foundation (i386 mainly), and Ken Raeburn of Cygnus Solutions (sparc, initial 64-bit support).

Several engineers at Cygnus Solutions have also provided many small bug fixes and configuration enhancements.

The initial Alpha support was contributed by Carnegie-Mellon University. Additional work was done by Ken Raeburn of Cygnus Solutions. Richard Henderson then rewrote much of the Alpha support.

Ian Dall updated the support code for the National Semiconductor 32000 series, and added support for Mach 3 and NetBSD running on the PC532.

Klaus Kaempf ported the assembler and the binutils to openVMS/Alpha.

Steve Haworth contributed the support for the Texas Instruction c30 (tms320c30).
H.J. Lu has contributed many patches and much testing.

Alan Modra reworked much of the i386 backend, improving the error checking, updating the code, and improving the 16 bit support, using patches from the work of Martynas Kunigelis and H.J. Lu.

Many others have contributed large or small bugfixes and enhancements. If you've contributed significant work and are not mentioned on this list, and want to be, let us know. Some of the history has been lost; we aren't intentionally leaving anyone out.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:
a) Accompany the work with the complete corresponding
machine-readable source code for the Library including whatever
changes were used in the work (which must be distributed under
Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable "work that
uses the Library", as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified
executable containing the modified Library. (It is understood
that the user who changes the contents of definitions files in the
Library will not necessarily be able to recompile the application
to use the modified definitions.)

b) Accompany the work with a written offer, valid for at
least three years, to give the same user the materials
specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above
specified materials from the same place.

d) Verify that the user has already received a copy of these
materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the
Library" must include any data and utility programs needed for
reproducing the executable from it. However, as a special exception,
the source code distributed need not include anything that is normally
distributed (in either source or binary form) with the major
components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
the executable.

It may happen that this requirement contradicts the license
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accompany the operating system. Such a contradiction means you cannot
use both them and the Library together in an executable that you
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7. You may place library facilities that are a work based on the
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a) Accompany the combined library with a copy of the same work
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Ty Coon, President of Vice

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Public License permits more lax criteria for linking other code with the library.

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In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs
(which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

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d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all
subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

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For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

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   b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

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* Being respectful of differing viewpoints and experiences
* Gracefully accepting constructive criticism
* Focusing on what is best for the community
* Showing empathy towards other community members

Examples of unacceptable behavior by participants include:

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advances
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* Publishing others' private information, such as a physical or electronic address, without explicit permission
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As the userbase of Click grows, more and more major feature requests pop up in Click's bugtracker. As reasonable as it may be for those features to be bundled with Click instead of being a standalone project, many of those requested features are either highly experimental or have unproven practical use, while potentially being a burden to maintain.

This is why click-contrib exists. The GitHub organization is a collection of possibly experimental third-party packages whose featureset does not belong into Click, but also a playground for major features that may be added to Click in the future. It is also meant to coordinate and concentrate effort on writing third-party extensions for Click, and to ease the effort of searching for such extensions. In that sense it could be described as a low-maintenance alternative to extension repositories of other frameworks.

Please note that the quality and stability of those packages may be different than what you expect from Click itself. While published under a common organization, they are still projects separate from Click.

.. _click-contrib: https://github.com/click-contrib/

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* /opt/cola/permits/1166815366_1621502560.93/0/pallets-click-8-0-1-0-gbaea623-tar-gz/pallets-click-bbec11f/docs/contrib.rst
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. The file `src/libs/snprintf/snprintf.c', written by Mark Martinec <mark.martinec@ijs.si>.

Please look into snprintf.c for the copyright message.
The complete snprintf package together with documentation is available from

http://www.ijs.si/software/snprintf/.

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The original package can be found at

src/preproc/grn/gprint.h
src/preproc/grn/hdb.cpp
src/preproc/grn/hgraph.cpp
src/preproc/grn/hpoint.cpp
src/preproc/grn/main.cpp

The `gxditview' output device. It is based on X11's `xditview' program and thus has the X license.

src/devices/xditview/DESC.in
src/devices/xditview/Dvi.c
src/devices/xditview/Dvi.h
src/devices/xditview/DviP.h
src/devices/xditview/FontMap
src/devices/xditview/GXditview.ad
src/devices/xditview/Menu.h
src/devices/xditview/ad2c
src/devices/xditview/device.c
src/devices/xditview/device.h
src/devices/xditview/draw.c
src/devices/xditview/font.c
src/devices/xditview/gray1.bm
src/devices/xditview/gray2.bm
src/devices/xditview/gray3.bm
src/devices/xditview/gray4.bm
src/devices/xditview/gray5.bm
src/devices/xditview/gray6.bm
src/devices/xditview/gray7.bm
src/devices/xditview/gray8.bm
src/devices/xditview/gxditview.man
src/devices/xditview/lex.c
src/devices/xditview/page.c
src/devices/xditview/parse.c
src/devices/xditview/xdit.bm
src/devices/xditview/xdit_mask.bm
src/devices/xditview/xditview.c

src/include/DviChar.h
src/include/XFontName.h

src/libs/libxutil/DviChar.c
src/libs/libxutil/XFontName.c

Macro Packages
---------------

. The -mdoc macro set, using the BSD license.

  tmac/doc.tmac
  tmac/doc-old.tmac
  tmac/doc-common
  tmac/doc-ditroff
  tmac/doc-nroff
  tmac/doc-syms
  tmac/groff_mdoc.man

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  tmac/e.tmac
  tmac/groff_me.man
  doc/meintro.me
  doc/meintro_fr.me
  doc/meref.me

Hyphenation Patterns
---------------------

. The file `tmac/hyphen.us' is identical to the file `hyphen.tex', part of
  the TeX system written by Donald E. Knuth; the master file can be found
  at

    ftp://labrea.stanford.edu/pub/tex/dist/lib/hyphen.tex

  It has been renamed for consistency, i.e., to make patterns available
  under the filenames `hyphen.<language>', e.g. `hyphen.de' or
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. The file `tmac/hyphen.fr' contains the same patterns as the file
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1.315 python-dateutil 2.7.5

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```
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## jQuery v3.5.1

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...  

## DOM Level 3 Core Specification v1.0

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Mesa 3-D graphics library
Version: 7.0

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* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/socket/oio/OioSocketChannelConfig.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/DefaultMessageSizeEstimator.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/DefaultChannelProgressivePromise.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/DefaultChannelProgressiveFuture.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/socket/oio/DefaultOioServerSocketChannelConfig.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/socket/oio/DefaultOioSocketChannelConfig.java
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* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/DefaultChannelId.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/group/ChannelGroup.java
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* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/AddressedEnvelope.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1.jar/io/netty/channel/socket/oio/DefaultOioSocketChannelConfig.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-
jar/io/netty/channel/AbstractEventLoopGroup.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-
jar/io/netty/channel/ChannelHandlerAdapter.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-
jar/io/netty/channel/ChannelProgressivePromise.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-
jar/io/netty/channel/ChannelOutboundBuffer.java
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/**
 * Handles an I/O event or intercepts an I/O operation, and forwards it to its next handler in
 * its [ @link ChannelPipeline ].
 *
 * [ @link ChannelHandler ] itself does not provide many methods, but you usually have to implement one of its
 * subtypes:
 * <ul>
 * <li> [ @link ChannelInboundHandler ] to handle inbound I/O events, and</li>
 * <li> [ @link ChannelOutboundHandler ] to handle outbound I/O operations.</li>
 * </ul>
 * </p>
 * <p>
 * Alternatively, the following adapter classes are provided for your convenience:
 * <ul>
 * <li> [ @link ChannelInboundHandlerAdapter ] to handle inbound I/O events.</li>
 * <li> [ @link ChannelOutboundHandlerAdapter ] to handle outbound I/O operations, and</li>
 * <li> [ @link ChannelDuplexHandler ] to handle both inbound and outbound events</li>
 * </ul>
 * */
* For more information, please refer to the documentation of each subtype.
* </p>
* 
* <h3>The context object</h3>
* 
* A [@link ChannelHandler] is provided with a [@link ChannelHandlerContext] object. A [@link ChannelHandler] is supposed to interact with the [@link ChannelPipeline] it belongs to via a context object. Using the context object, the [@link ChannelHandler] can pass events upstream or downstream, modify the pipeline dynamically, or store the information (using [@link AttributeKey]s) which is specific to the handler.
* 
* <h3>State management</h3>
* 
* A [@link ChannelHandler] often needs to store some stateful information. The simplest and recommended approach is to use member variables:
* 
* <pre>
* public interface Message {
*     // your methods here
* }
* 
* public class DataServerHandler extends @link SimpleChannelInboundHandler<Message> {
* 
*     private boolean loggedIn;
*
*     @Override
*     public void channelRead0(@link ChannelHandlerContext ctx, Message message) {
*         if (message instanceof LoginMessage) {
*             authenticate((LoginMessage) message);
*             loggedIn = true;
*         } else if (message instanceof GetDataMessage) {
*             if (loggedIn) {
*                 ctx.writeAndFlush(fetchSecret((GetDataMessage) message));
*             } else {
*                 fail();
*             }
*         }
*     }
*     ...
* }
* </pre>
* 
* Because the handler instance has a state variable which is dedicated to one connection, you have to create a new handler instance for each new channel to avoid a race condition where a unauthenticated client can get the confidential information:
* 
* // Create a new handler instance per channel.
* // See [@link ChannelInitializer#initChannel(Channel)].
* public class DataServerInitializer extends {@link ChannelInitializer}&lt;{@link Channel}&gt; {  
  {@code @Override}
*   public void initChannel({@link Channel} channel) {  
      channel.pipeline().addLast("handler", <b>new DataServerHandler()</b>);
*   }
* }
* }
* }
* }
* </pre>
* *
* &lt;h4&gt;Using {@link AttributeKey}s&lt;/h4&gt;
* *
* Although it's recommended to use member variables to store the state of a
* handler, for some reason you might not want to create many handler instances.
* In such a case, you can use {@link AttributeKey}s which is provided by
* {@link ChannelHandlerContext}:
* &lt;pre&gt;
* public interface Message {
*   // your methods here
* }
* *
* {@code @Sharable}
* public class DataServerHandler extends {@link SimpleChannelInboundHandler}&lt;Message&gt; {  
*   private final {@link AttributeKey}&lt;{@link Boolean}&gt; auth =
*     {@link AttributeKey#valueOf(String) AttributeKey.valueOf("auth")};
* }
* *@code @Override}
* public void channelRead({@link ChannelHandlerContext} ctx, Message message) {  
*   {@link Attribute}&lt;{@link Boolean}&gt; attr = ctx.attr(auth);
*   if (message instanceof LoginMessage) {
*     authenticate((LoginMessage) o);
*     <b>attr.set(true)</b>;
*   } else (message instanceof GetDataMessage) {
*     if (<b>Boolean.TRUE.equals(attr.get())</b>) {
*       ctx.writeAndFlush(fetchSecret((GetDataMessage) o));
*     } else {
*       fail();
*     }
*   }
* }
* ...
* }
* }&lt;/pre&gt;
* Now that the state of the handler is attached to the {@link ChannelHandlerContext}, you can add the
* same handler instance to different pipelines:
* &lt;pre&gt;
* public class DataServerInitializer extends {@link ChannelInitializer}&lt;{@link Channel}&gt; {  
*   private static final DataServerHandler &lt;b&gt;SHARED&lt;/b&gt; = new DataServerHandler();
*   public void initChannel({@link Channel} channel) {
*     channel.pipeline().addLast("handler", <b>new DataServerHandler()</b>);
*   }
* }
* }
* }
* \{ @code @Override \}
* public void initChannel(\{ @link Channel \} channel) {
*     channel.pipeline().addLast("handler", <b>SHARED</b>);
* } 
* } 
* </pre>

* <h4>The \{ @code @Sharable \} annotation</h4>
* <p>
* In the example above which used an \{ @link AttributeKey \},
* you might have noticed the \{ @code @Sharable \} annotation.
* 
* If a \{ @link ChannelHandler \} is annotated with the \{ @code @Sharable \}
* annotation, it means you can create an instance of the handler just once and
* add it to one or more \{ @link ChannelPipeline \}s multiple times without
* a race condition.
* 
* If this annotation is not specified, you have to create a new handler
* instance every time you add it to a pipeline because it has unshared state
* such as member variables.
* 
* This annotation is provided for documentation purpose, just like
* \<a href="http://www.javaconcurrencyinpractice.com/annotations/doc/">the JCIP annotations</a>.
* 
* <h3>Additional resources worth reading</h3>
* 
* Please refer to the \{ @link ChannelHandler \}, and
* \{ @link ChannelPipeline \} to find out more about inbound and outbound operations,
* what fundamental differences they have, how they flow in a pipeline, and how to handle
* the operation in your application.
* */

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* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-jar/io/netty/channel/ChannelException.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-jar/io/netty/channel/embedded/EmbeddedSocketAddress.java
* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-jar/io/netty/channel/socket/oio/OioSocketChannel.java

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* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-jar/io/netty/channel/socket/oio/OioSocketChannel.java
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* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-jar/io/netty/channel/internal/ChannelUtils.java
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* /opt/ws_local/PERMITS_SQL/1068232313_1594323914.29/0/netty-transport-4-1-49-final-sources-1-jar/io/netty/channel/nio/SelectedSelectionKeySetSelector.java
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1.339 bouncycastle-fips 1.0.2

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1.340 go.mongodb.org-mongo-driver 1.7.3

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BSON library for Go

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1.343 moby-spdystream 0.2.0

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* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/proc/JWTClaimsSetTransformer.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/factories/package-info.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/RSADecrypter.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/X25519Encrypter.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/proc/JOSEException.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/Header.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/RSAEncrypter.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/jwk/JWK.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/util/DeflateUtils.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/MACVerifier.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/proc/SimpleSecurityContext.java
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* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSA_1_5.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/AESGCMKW.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/AESGCM.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSASSA.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/AESGCM.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSASSA.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSACryptoProvider.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSACryptoProvider.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/PBKDF2.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/PBKDF2.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/proc/JWTCrimeClaimsSetAwareJWSKeySelector.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/proc/JWTCrimeClaimsSetAwareJWSKeySelector.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/PRFParams.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/PRFParams.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/ECDH.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/ECDH.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSA-OAEP_256.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSA-OAEP_256.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/PBKDF2.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSACryptoProvider.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSACryptoProvider.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/PBKDF2.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/PBKDF2.java
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* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/ECDH.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSA-OAEP_256.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/RSA-OAEP_256.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/proc/JWEEncryptionKeySelector.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/jwk/JWKMatcher.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/proc/JWSAlgorithmFamilyJWSEntriyKeySelector.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/jwk/JWSSecContextJWKSet.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/proc/JOSEObjectTypeVerifier.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/ECDHCryptoProvider.java

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* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/proc/OSEObjectTypeVerifier.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/impl/ECDHCryptoProvider.java

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* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/Ed25519Verifier.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/Ed25519Signer.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/crypto/Base64Codec.java
* /opt/ws_local/PERMITS_SQL/1022406693_1591855896.29/0/nimbus-jose-jwt-8-6-sources-jar/com/nimbusds/jose/jwk/JWKSet.java

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## Setting the License

Choose one of the following methods (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

```
shell-session
export CONSUL_LICENSE=<LICENSE_VALUE>
```
1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

```
```shell-session
   export CONSUL_LICENSE_PATH=<PATH>/TO/<FILE>
```
```

1. Configure the `[license_path]` option in the configuration file to point to the file containing the license.

```
```hcl
   license_path = "<PATH>/TO/<FILE>"
```
```

-> **Note**: the [options to set the license and the order of precedence](/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.

Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise) for detailed steps on how to install the license key.

### Updating the License

The previous section describes options for [setting the license](#setting-the-license) needed to start running Consul-Terraform-Sync Enterprise. Use the following procedure to update the license when it expires or is near the expiration date:

1. Update the license environment variable or configuration with the new license value or path to the new license file
1. Stop and restart Consul-Terraform-Sync Enterprise

Once Consul-Terraform-Sync Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

## Notification and Termination Behavior

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires. Consul-Terraform-Sync Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement for complete terms of your grace period.

When approaching expiration and termination, Consul-Terraform-Sync Enterprise will provide notifications in the system logs:

<table>
<thead>
<tr>
<th>Time period</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 days before expiration</td>
<td>Warning-level log every 24-hours</td>
</tr>
<tr>
<td>7 days before expiration</td>
<td>Warning-level log every 1 hour</td>
</tr>
<tr>
<td>1 hour before expiration</td>
<td>Warning-level log every 1 minute</td>
</tr>
<tr>
<td>1 day before expiration</td>
<td>Warning-level log every 5 minutes</td>
</tr>
<tr>
<td>At or after expiration (before termination)</td>
<td>Error-level log every 1 minute</td>
</tr>
<tr>
<td>At or after termination</td>
<td>Error-level log and exit</td>
</tr>
</tbody>
</table>

-> **Note**: Notification frequency and [grace period](/docs/enterprise/license/faq#is-there-a-grace-period-when-licenses-expire) behavior is the same as Consul Enterprise.

```html
<FormGroup @name={{name}} as |group|>

{{yield (hash submit=(action 'submit' changeset) reset=(action 'reset' changeset)
  isDirty=(and changeset.isValid changeset.isDirty)
  changeset=changeset )}}

</fieldset>
</form>
```

```
<group.Element @name=""HeaderType"
  @type="select" as |el|>
  <el.Label>Header type</el.Label>
  <PowerSelect @options={{headerTypes}}
    @selected={{headerType}}
    @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
    {{get headerLabels Type}}
  </PowerSelect>
</group.Element>
```

```
<group.Element @name=""Name"
  @error=| (changeset-get changeset 'error.Name')
  as |el|>
  <el.Label>Header name</el.Label>
  <el.Text @value=| (changeset-get changeset 'Name')
    oninput=| (action 'change' 'Name' changeset)}
```
The /operator/license endpoint allows for retrieving the Consul Enterprise License.

---

# License - Operator HTTP API

The licensing functionality described here is available only in [Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.

## Getting the Consul License

This endpoint gets information about the current license.
<table>
<thead>
<tr>
<th>Method</th>
<th>Path</th>
<th>Produces</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>GET</code></td>
<td><code>/operator/license</code></td>
<td><code>application/json</code></td>
</tr>
</tbody>
</table>

The table below shows this endpoint's support for [blocking queries](/api/features/blocking), [consistency modes](/api/features/consistency), [agent caching](/api/features/caching), and [required ACLs](/api#authentication).

<table>
<thead>
<tr>
<th>Blocking Queries</th>
<th>Consistency Modes</th>
<th>Agent Caching</th>
<th>ACL Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>NO</code></td>
<td><code>all</code></td>
<td><code>none</code></td>
<td><code>none</code></td>
</tr>
</tbody>
</table>

### Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved. This will default to the datacenter of the agent serving the HTTP request. This is specified as a URL query parameter.

### Sample Request

```
$ curl \
  http://127.0.0.1:8500/v1/operator/license
```

### Sample Response

```
{
  "Valid": true,
  "License": {
    "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
    "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
    "installation_id": "*",
    "issue_time": "2018-05-21T20:03:35.911567355Z",
    "start_time": "2018-05-21T04:00:00Z",
    "expiration_time": "2019-05-22T03:59:59.999Z",
    "product": "consul",
    "flags": {
      "package": "premium"
    },
    "features": [
      "Automated Backups",
      "Automated Upgrades",
      "Enhanced Read Scalability"
    ]
  }
}```
## Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the license contents as well as any warning messages regarding its validity.

<table>
<thead>
<tr>
<th>Method</th>
<th>Path</th>
<th>Produces</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>PUT</code></td>
<td><code>/operator/license</code></td>
<td><code>application/json</code></td>
</tr>
</tbody>
</table>

The table below shows this endpoint's support for [blocking queries](/api/features/blocking), [consistency modes](/api/features/consistency), [agent caching](/api/features/caching), and [required ACLs](/api#authentication).

<table>
<thead>
<tr>
<th>Blocking Queries</th>
<th>Consistency Modes</th>
<th>Agent Caching</th>
<th>ACL Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>NO</code></td>
<td><code>none</code></td>
<td><code>none</code></td>
<td><code>operator:write</code></td>
</tr>
</tbody>
</table>

### Parameters

- `dc` (string: `""`) - Specifies the datacenter whose license should be updated. This will default to the datacenter of the agent serving the HTTP request. This is specified as a URL query parameter.

### Sample Payload

The payload is the raw license blob.

### Sample Request

```shell-session
$ curl \
   --request PUT \
   --data @consul.license
```
http://127.0.0.1:8500/v1/operator/license

```json
{
  "Valid": true,
  "License": {
    "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
    "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
    "installation_id": "*",
    "issue_time": "2018-05-21T20:03:35.911567355Z",
    "start_time": "2018-05-21T04:00:00Z",
    "expiration_time": "2019-05-22T03:59:59.999Z",
    "product": "consul",
    "flags": {
      "package": "premium"
    },
    "features": [
      "Automated Backups",
      "Automated Upgrades",
      "Enhanced Read Scalability",
      "Network Segments",
      "Redundancy Zone",
      "Advanced Network Federation"
    ],
    "temporary": false
  },
  "Warnings": []
}
```

## Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

<table>
<thead>
<tr>
<th>Method</th>
<th>Path</th>
<th>Produces</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>DELETE</code></td>
<td><code>/operator/license</code></td>
<td><code>application/json</code></td>
</tr>
</tbody>
</table>

The table below shows this endpoint's support for

[blocking queries]([/api/features/blocking]),

[consistency modes]([/api/features/consistency],)
[agent caching]/api/features/caching), and
[required ACLs]/api#authentication).

<table>
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<td><code>none</code></td>
<td><code>operator:write</code></td>
</tr>
</tbody>
</table>

### Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated. This will default to the datacenter of the agent serving the HTTP request. This is specified as a URL query parameter.

### Sample Request

```
```

```shell-session
$ curl
   --request DELETE \
   http://127.0.0.1:8500/v1/operator/license
```

### Sample Response

```
```

```json
```

```json
```
# Consul Enterprise License

## Licensing

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend on which binary is in use, whether the agent is a server, client or snapshot agent and whether ACLs have been enabled for the cluster.

-> **Consul Enterprise 1.10.0 removed temporary licensing.** In previous versions Consul Enterprise agents could start without a license and then have a license applied to them later on via the CLI or API. That functionality has been removed and replaced with the ability to load licenses from the agent's configuration or environment. Also prior to 1.10.0 server agents would automatically propagate the license between themselves. This no longer occurs and the license must be present on each server when they are started.

-> Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise) for detailed steps on how to install the license key.

### Binaries with Built In Licenses

If you are downloading Consul from Amazon S3, then the license is included in the binary and you do not need to take further action. This is the most common use case.

In the S3 bucket you will find three Enterprise zip packages. The packages with `+pro` and `+prem` in the name, are the binaries that include the license. The package with `+ent` in the name does not include the license.

When using these binaries no further action is necessary to configure the license.

### Binaries Without Built In Licenses

For Consul Enterprise 1.10.0 or greater, binaries that do not include built in licenses a license must be available at
the time the agent starts.
For server agents this means that they must either have the `license_path` configuration set or have a license configured in the servers environment with the `CONSUL_LICENSE` or `CONSUL_LICENSE_PATH` environment variables. Both the configuration item and the `CONSUL_LICENSE_PATH` environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple of these are set the order of precedence is:

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Both client agents and the snapshot agent may also be licensed in the very same manner. However to prevent the need to configure the license on many client agents and snapshot agents those agents have the capability to retrieve the license automatically under specific circumstances.

#### Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize the request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the `start_join` or `retry_join` configurations. If those are both unset or no `agent` token is set then the client agent will immediately shut itself down.

If all preliminary checks pass the client agent will attempt to reach out to any server on its RPC port to request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below. Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

#### Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also like client agents, the snapshot agent will shut itself down after being unable to retrieve the license for 5 minutes.
<FormGroup
    @name={{name}}
    as [group]>

  {{yield (hash
    submit=(action 'submit' changeset)
    reset=(action 'reset' changeset)
    isDirty=(and changeset.isValid)
    changeset=changeset
  )}}</FormGroup>

<form>
  <fieldset>
    <div data-property="action">
      <span class="label">
        Should this permission allow the source connect to the destination?
      </span>
      <div role="radiogroup" class={{if changeset.error.Action 'has-error'}}>
        {{#each intents as |intent|}}
          <label>
            <span>{{capitalize intent}}</span>
            <input
              type="radio"
              name="Action"
              value={{intent}}
              checked={{if (eq changeset.Action intent) 'checked'}}
              onchange={{action (changeset-set changeset 'Action') value="target.value"}}/>
          </label>
        {{/each}}
      </div>
    </div>
  </fieldset>

  <fieldset>
    <header>
      <h2>Path</h2>
    </header>
    <div>
      <group.Element
        @name="PathType"
        @type="select"
        as [el]>
        <el.Label>Path type</el.Label>
        <el.Label>Path type</el.Label>
        <PowerSelect
          type="radio"
          name="Action"
          value={{intent}}
          checked={{if (eq changeset.Action intent) 'checked'}}
          onchange={{action (changeset-set changeset 'Action') value="target.value"}}/>
      </group.Element>
    </div>
  </fieldset>
</form>
Open Source Used In BGP TE Controller Version 4.3.0 4921

```html
@options={ [pathTypes] }
@selected={ [pathType] }
@onChange={ { action 'change' 'HTTP.PathType' changeset } } as [Type]>

{{get pathLabels Type}}
</PowerSelect>
</group.Element>

{{#if shouldShowPathField}}
<group.Element
    @name="Path"
    @error={ {changeset-get changeset 'error.HTTP.Path'} }
as [el]>
    <el.Label>
        {{get pathLabels pathType}}
    </el.Label>
    <el.Text
        @value={ {changeset-get changeset 'HTTP.Path'} }
        oninput={ {action 'change' 'HTTP.Path' changeset} }
    />
    <State @state={{el.state}} @matches="error">  
        <el.Error>
            {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}
                Path Regex should not be blank
            {{else}}
                Path should begin with a '/'
            {{/if}}
        </el.Error>
    </State>
</group.Element>
{{/if}}
</div>
</fieldset>

<fieldset>
<h2>Methods</h2>
<div class="type-toggle">
    <span>All methods are applied by default unless specified</span>
</div>
</fieldset>
```
<fieldset><h2>Headers</h2></fieldset>

<Consul::Intention::Permission::Header::List
  @items={{changeset-get changeset 'HTTP.Header'}}
  @ondelete={{action 'delete' 'HTTP.Header' changeset}}
  as |headerList|>
  </Consul::Intention::Permission::Header::List>

<Consul::Intention::Permission::Header::Form
  @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
  <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
</Consul::Intention::Permission::Header::Form>

<button
  data-test-add-header
  type="button"
  class="type-submit"
  disabled={{if (not this.headerForm.isDirty) 'disabled'}}
  onclick={{action this.headerForm.submit}}>
  Add{{#if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0)}} another{{/if}} header
</button>
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The 'license' command provides a datacenter-level view of the Consul Enterprise license. This was added in Consul 1.1.0 but Consul 1.10.0 removed the ability to set and reset the license using the CLI. See the [licensing documentation](/docs/enterprise/license/overview) for more information about Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in order to use this command. Requests are forwarded internally to the leader if required, so this can be run from any Consul node in a cluster. See the [ACL Guide](https://learn.hashicorp.com/consul/security-networking/production-acls) for more information.

```
Usage: consul license <subcommand> [options] [args]
```

This command has subcommands for managing the Consul Enterprise license. Here are some simple examples, and more detailed examples are available in the subcommands or the documentation.
Install a new license from a file:

$ consul license put @consul.license

Install a new license from stdin:

$ consul license put -

Install a new license from a string:

$ consul license put "<license blob>"

Retrieve the current license:

$ consul license get

Inspect a license:

$ consul license inspect "<path to license file>"

Reset the current license:

$ consul license reset

For more examples, ask for subcommand help or view the documentation.

Subcommands:

get     Get the active license
inspect Inspect a signed license
put     Puts a new license in the datacenter
reset   Resets the license in the datacenter

## inspect

This command inspects and validates a license. Just like a Consul agent it can load the license from a file on disk or from the `CONSUL_LICENSE` and `CONSUL_LICENSE_PATH` environment variables.

Usage: `consul license inspect [options] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```
Inspect a license loaded from the environment:

````
$ consul license inspect
```n
This will look at the CONSUL_LICENSE environment variable first and if not present then we will look for the file specified by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:

````
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7cc8-c210-20d899e5f3b4
Installation ID: *
Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
  Global Visibility, Routing and Scale
  Governance and Policy
Features:
  Automated Backups
  Automated Upgrades
  Enhanced Read Scalability
  Network Segments
  Redundancy Zone
  Advanced Network Federation
  Namespaces
  SSO
  Audit Logging
  Admin Partitions

License is valid
```n

## put

-> **Deprecated** The ability to manage the cluster's license via the CLI was removed in Consul 1.10. While the CLI command still exists it will always return an error. This command will be fully removed in a future release.

This command sets the Consul Enterprise license.
Usage: `consul license put [options] LICENSE`

#### API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffe-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
  Automated Backups
  Automated Upgrades
  Enhanced Read Scalability
  Network Segments
  Redundancy Zone
  Advanced Network Federation
```

## get

This command gets the Consul Enterprise license.

Usage: `consul license get [options]`

#### API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffe-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
```
Licensed Features:
   Automated Backups
   Automated Upgrades
   Enhanced Read Scalability
   Network Segments
   Redundancy Zone
   Advanced Network Federation

```
## reset
-> **Deprecated** The ability to manage the cluster's license via the CLI was removed in Consul 1.10. While the CLI command still exists it will always return an error. This command will be fully removed in a future release.

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid. If the builtin license is invalid, the current one stays active.

Usage: `consul license reset [options]`

#### API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

The output looks like this:

```
text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
   Automated Backups
   Automated Upgrades
   Enhanced Read Scalability
   Network Segments
   Redundancy Zone
   Advanced Network Federation
```

@import './skin';
@import './layout';
.conserv-intention-permission-list > ul > li {
   @extend %list-row-200;
}
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{{#if (gt items.length 0)}}
<ListCollection
    class="consul-intention-permission-header-list"
    @items={{items}}
    @scroll="native"
    @cellHeight={{42}}
    as |item|>
    <BlockSlot @name="details">
        <dl>
            <dt>
                <Tooltip>
                    Header
                </Tooltip>
            </dt>
            <dd>
                {{item.Name}} {{route-match item}}
            </dd>
        </dl>
    </BlockSlot>
    <BlockSlot @name="actions" as |Actions|>
        <Actions as |Action|>
            <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
                <BlockSlot @name="label">
                    Delete
                </BlockSlot>
                <BlockSlot @name="confirmation" as |Confirmation|>
                    <Confirmation class="warning">
                        <BlockSlot @name="header">
                            Confirm delete
                        </BlockSlot>
                        <BlockSlot @name="body">
                            <p>
                                Are you sure you want to delete this header?
                            </p>
                        </BlockSlot>
                        <BlockSlot @name="confirm" as |Confirm|>
                            <Confirm>Delete</Confirm>
                        </BlockSlot>
                    </Confirmation>
                </BlockSlot>
            </Action>
        </Actions>
    </BlockSlot>
</ListCollection>
{{/if}}
.consul-intention-permission-list {
    dt::before {
        @extend %with-glyph-icon;
    }
}
package api

import (
    "io/ioutil"
    "strings"
    "time"
)

type License struct {
    // The unique identifier of the license
    LicenseID string `json:"license_id"

    // The customer ID associated with the license
    CustomerID string `json:"customer_id"

    // If set, an identifier that should be used to lock the license to a
    // particular site, cluster, etc.
    InstallationID string `json:"installation_id"

    // The time at which the license was issued
    IssueTime time.Time `json:"issue_time"

    // The time at which the license starts being valid
    StartTime time.Time `json:"start_time"

    // The time after which the license expires
    ExpirationTime time.Time `json:"expiration_time"

    // The time at which the license ceases to function and can
    // no longer be used in any capacity
    TerminationTime time.Time `json:"termination_time"

    // The product the license is valid for
    Product string `json:"product"

    // License Specific Flags
    Flags map[string]interface{} `json:"flags""
// Modules is a list of the licensed enterprise modules
Modules []string `json:"modules"

// List of features enabled by the license
Features []string `json:"features"

}

type LicenseReply struct {
    Valid    bool
    License  *License
    Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
    var reply LicenseReply
    if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
        return nil, err
    } else {
        return &reply, nil
    }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
    r := op.c.newRequest("GET", "/v1/operator/license")
    r.params.Set("signed", "1")
    r.setQueryOptions(q)
    _, resp, err := op.c.doRequest(r)
    if err != nil {
        return "", err
    }
    defer closeResponseBody(resp)
    if err := requireOK(resp); err != nil {
        return "", err
    }
    data, err := ioutil.ReadAll(resp.Body)
    if err != nil {
        return "", err
    }
    return string(data), nil
}

// LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
    var reply LicenseReply
    r := op.c.newRequest("DELETE", "/v1/operator/license")
    r.setWriteOptions(opts)
    _, resp, err := op.c.doRequest(r)
    if err != nil {
        return nil, err
    }
    defer closeResponseBody(resp)
    if err := requireOK(resp); err != nil {
        return nil, err
    }
    if err := decodeBody(resp, &reply); err != nil {
        return nil, err
    }
    return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
    var reply LicenseReply
    r := op.c.newRequest("PUT", "/v1/operator/license")
    r.setWriteOptions(opts)
    r.body = strings.NewReader(license)
    _, resp, err := op.c.doRequest(r)
    if err != nil {
        return nil, err
    }
    defer closeResponseBody(resp)
    if err := requireOK(resp); err != nil {
        return nil, err
    }
    if err := decodeBody(resp, &reply); err != nil {
        return nil, err
    }
    return &reply, nil
}
Presentational component for informational/warning/error banners/notice.

```
hbs preview-template
<Notice
  @type={{this.type}}
  as |notice|
  <notice.Header>
    <h3>Header</h3>
  </notice.Header>
  <notice.Body>
    <p>
      Body
    </p>
  </notice.Body>
  <notice.Footer>
```

---
## Arguments

<table>
<thead>
<tr>
<th>Argument/Attribute</th>
<th>Type</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>type</code></td>
<td><code>String</code></td>
<td><code>info</code></td>
<td>Type of notice [info</td>
</tr>
</tbody>
</table>

## See

- [Template Source Code](./index.hbs)

```
/* this is probably skin */
%notice {
  position: relative;
  padding: 0.8rem;
}
%notice header {
  margin-bottom: 0.1rem;
}
%notice header > * {
  margin-bottom: 0;
}
%notice p {
  margin-bottom: 0.3rem;
  line-height: 1.4;
}
```
Some of your intentions are being managed through an Intention Custom Resource in your Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will work but will not be synced to the Custom Resource Definition (CRD) datastore.

Learn more about CRDs.

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```css
%notice-info::before {
@extend %with-info-circle-fill-mask;
color: rgb(var(--tone-blue-500));
}

%notice-highlight::before {
@extend %with-star-fill-mask;
color: rgb(var(--tone-yellow-500));
}

%notice-warning::before {
@extend %with-alert-triangle-mask;
color: rgb(var(--tone-orange-500));
}

%notice-error::before {
@extend %with-cancel-square-fill-mask;
color: rgb(var(--tone-red-500));
}

@import './skin';
@import './layout';

%notice {
margin: 1em 0;
}

/******************
.notice.success {
@extend %notice-success;
}

.notice.warning {
@extend %notice-warning;
}

.notice.error {
@extend %notice-error;
}

.notice.info {
@extend %notice-info;
}

.notice.highlight {
@extend %notice-highlight;
}

.notice.policy-management {
@extend %notice-highlight;
}

.notice.crd::before {
-webkit-mask-image: none;
mask-image: none;
background-color: transparent;
@extend %with-logo-kubernetes-color-icon;
}
```
# Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0. Consul Enterprise automatically loads Consul licenses when the server agent starts.

## Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different. HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file. If the license is missing, invalid, or expired, the server will immediately exit. This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol. This will no longer work since each server must be able to find a valid license during the startup process.

## Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release. During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token. The upgrade process varies if ACLs are enabled or disabled in the cluster. Refer to the instructions on [upgrading to 1.10.x](https://www.consul.io/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

## Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise).

## Q: What resources are available?

The list below is a great starting point for learning more about the license changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](https://www.consul.io/docs/enterprise/upgrades)
- [Consul License Documentation](https://www.consul.io/docs/enterprise/license)
- [License configuration values documentation](https://www.consul.io/docs/enterprise/license/overview#binaries-without-built-in-
## Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (evaluation or non-evaluation licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

## Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0, a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

## Q: What is the impact on evaluation licenses due to this change?

The 6-hour trial period for evaluation licenses will be deprecated as of Consul Enterprise 1.10.0.
This means that any clusters deployed with Consul 1.10.0+ent binaries will need to have a valid license on the disk (auto-loaded) or as an environment variable.
Failure to provide a valid license key will result in the Consul server agent not starting.

## Q: Is there a grace period when licenses expire?

A license includes an `expiration_date` and a `termination_date`. An enterprise binary will cease to function once the `termination_date` has passed.
Licenses will now have a 24 hrs grace period. The grace period is the time between license expiry until the time it terminates.
As Consul Enterprise approaches the expiration date, warnings will be issued in the system logs.

## Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.
Please review the [upgrade requirements](faq#q-what-are-the-upgrade-requirements) documentation.

## Q: Does this affect snapshot agents?

Same behavior as Consul clients. See answer for [Does this affect client agents?](faq#q-does-this-affect-client-agents)

## Q: What is the behavior if the license is missing?
Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `start_join/retry_join` addresses.
- The start/retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `start_join/retry_join` addresses, the start/retry join addresses are addresses of the Consul servers.

### Q: Where can users get a trial license for Consul Enterprise?

Visit [https://www.consul.io/trial](https://www.consul.io/trial) for a free 30-day trial license.

### Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

### Q: Will this impact HCP Consul?

This will not impact HCP Consul.

### Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for evaluation licenses (non-evaluation licenses already go through EULA check during contractual agreement).

The agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

### Q: What are the scenarios that a customer must plan for because of these changes?

New Consul cluster deployments using 1.10.0+ent will need to have a valid license on servers to successfully deploy.

This valid license must be on-disk (auto-loaded) or as an environment variable.

Please see the [upgrade requirements](faq#q-what-are-the-upgrade-requirements).
## Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

### VM

1. Run `[`consul license get -signed`]/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
2. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.
3. Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise) for detailed steps on how to install the license key.
4. Follow the Consul upgrade [documentation](/docs/upgrading).

### Kubernetes

**NOTE:** If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
2. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, then if you are an existing HashiCorp enterprise customer you may contact your organization's customer success manager (CSM) or email support-softwaredelivery@hashicorp.com for information on how to get your organization's enterprise license. Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/docs/k8s/installation/deployment-configurations/consul-enterprise).
3. Follow the [Kubernetes Upgrade Docs](/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

~~> **WARNING:** If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/docs/k8s/installation/deployment-configurations/consul-enterprise) for more details.

## Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed binaries to the license on disk flow?

### VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's customer success manager (CSM) or email support-softwaredelivery@hashicorp.com for information on how to get your organization's enterprise license.
2. Store the license in a secure location on disk.
3. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
4. Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise) for detailed steps on how to install the license key.
5. Follow the Consul upgrade [documentation](/docs/upgrading).

### Kubernetes
1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's customer success manager (CSM) or email support-softwaredelivery@hashicorp.com for information on how to get your organization's enterprise license.

1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.

Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise) for detailed steps on how to install the license key.

1. Proceed with the `helm` [upgrade instructions](/docs/k8s/upgrade)

### Q: Will Consul downgrades/rollbacks work?

When downgrading to a version of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

### Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

-> Verify that you meet the [upgrade requirements](faq#q-what-are-the-upgrade-requirements).

Assume a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.

Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).

The `consul license put` operation will fail due to being removed from 1.10.0.

This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not transferred back over to a node not running 1.10.0+.

This also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

### Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer, but not the Consul version.

You will need to add the following configuration.

```yaml
---
server:
  enterpriseLicense:
    enableLicenseAutoload: false
---
```
1.358 oslo-config 8.7.1
1.358.1 Available under license:

Apache License
Version 2.0, January 2004
http://www.apache.org/licenses/

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1.363 e2fsprogs 1.46.2-r0

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This is the Debian GNU/Linux prepackaged version of the static EXT2 file system consistency checker (e2fsck.static). The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

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#
# This is a Makefile stub which handles the creation of BSD shared libraries.
#
# In order to use this stub, the following makefile variables must be defined.
all:: image

real-subdirs:: Makefile
@echo "MKDIR pic"
@mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:$(BSD_LIB)

$(BSD_LIB): $(OBJS)
(cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
$(MV) pic/$(BSD_LIB) .
$(RM) -f ../$(BSD_LIB)
(cd ..; $(LN) $(LINK_BUILD_FLAGS) $(my_dir) | sed -e 's;lib/;;' $(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
@echo "INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
@$(INSTALL_PROGRAM) $(BSD_LIB) $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
@$-(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
$(RM) -f $(DESTDIR)/$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
$(RM) -rf pic
$(RM) -f $(BSD_LIB)
$(RM) -f ../$(BSD_LIB)

This package was added to the e2fsprogs debian source package by
Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

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--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
 Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
 */
 /*
 - Unix SMB/CIFS implementation.
 + trivial database library - standalone version

 - trivial database library - private includes
 -
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Theodore Ts'o
23-June-2007

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That's all there is to it!
This package was added to the e2fsprogs debian source package by Theodore T's'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

http://sourceforge.net/projects/e2fsprogs

Upstream Author: Theodore T's'o <tytso@mit.edu>

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This is the Debian GNU/Linux prepackaged version of the ss command-line interface parsing library. It is currently distributed together with the EXT2 file system utilities, which are otherwise packaged as "e2fsprogs".

This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
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Gadi Oxman, August 1995

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Otherwise, if the work is a derivative of the Library, you may
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b) Give prominent notice with the combined library of the fact
that part of it is a work based on the Library, and explaining
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Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if
necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the
library `Frob' (a library for tweaking knobs) written by James
Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!
This package was debianized by Jean Pierre LeJacq
<jplejacq@quoininc.com> on Wed, 25 Feb 1998. Martin Pitt
<martin@piware.de> was the package's maintainer up to version
2.7.19-1. The current maintainer is Jan Dittberner
<jandd@debian.org>.

It was downloaded from http://sourceforge.net/projects/cracklib

Copyright (c) 1993 Alec Muffett <alecm@crypto.dircon.co.uk>,
Copyright (c) 2005-2009 Nathan Neulinger <nneul@umr.edu>,
Copyright (c) 2008-2009 Jan Dittberner <jan@dittberner.info>

Modifications: Added cronjob, configuration file, and man pages.

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http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html. You can also
obtain it by writing to the Free Software Foundation, Inc., 51
Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

Copyright information:

CrackLib was originally licensed with a variant of the Artistic
license. In the interests of wider acceptance and more modern
licensing, it was switched with the original author's blessing to GPL
v2.
This approval was carried out in email discussions in 2005, and has been reconfirmed as of 2007-10-01 with the following email from Alec Muffett. Cracklib's license was changed from the GPL to the LGPL after consensus of all previous developers in October 2008, effective with release 2.8.15 released on 2009-11-19. See the email discussion below for both license changes.

-------------------------------------
-----------
EFFECTIVE OCT 2008, LICENSE IS BEING CHANGED TO LGPL-2.1 (though not reflected in released code until Nov 2009 - slow release cycle...)
-----------

Discussion thread from mailing list archive, with approval from everyone actively involved or holding original licensing rights included.

[Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:16
Attachments: Message as HTML
looks like 2.8.11 is out and marked as "GPL-2" ... releasing libraries unde=r=20
GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
=2Dmike

Re: [Cracklib-devel] cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:18
I understand that, and you're welcome to bring it up with Alec directly and see if he wants to relicense his code as LGPL... but at this point, it was enough to just get it consistent and documented as to what it was released under. This wasn't actually a license change, just a clarification of the licensing that was already in place.=20

-- Nathan
=20
******************************************************************************
Nathan Neulinger EMail: nneul@um...
University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216

> -----Original Message-----
> From: cracklib-devel-bounces@li...
looks like 2.8.11 is out and marked as "GPL-2" ... releasing libraries under GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists

the original license (before moving to sourceforge -- aka, 2.7) was not GPL-2 ... it was a modified artistic license ... i didnt notice the license change until it was mentioned in the latest notes.

unlike the old license, GPL-2 prevents people from using cracklib unless their applications are also GPL-2 which imo is just wrong. it isn't the place of library to dictate to application writes what license they should be using.

thus LGPL-2.1 enters to fill this void.

--mike
Nathan Neulinger EMail: nneul@um...
University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216

-----Original Message-----
From: cracklib-devel-bounces@li...
[mailto:cracklib-devel-bounces@li...] On Behalf Of
Mike Frysinger
Sent: Monday, October 01, 2007 8:33 PM
To: Neulinger, Nathan
Cc: cracklib-devel@li...; Alec Muffett
Subject: Re: [Cracklib-devel] cracklib license

On Monday 01 October 2007, Neulinger, Nathan wrote:
> I understand that, and you're welcome to bring it up with Alec
directly
> and see if he wants to relicense his code as LGPL... but at this
point,
> it was enough to just get it consistent and documented as to what
it was
> released under. This wasn't actually a license change, just a
clarification of the licensing that was already in place.

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not
GPL-2 ... it was a modified artistic license ... i didnt notice the
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applications are also GPL-2 which imo is just wrong. it isn't the
place of a
library to dictact to application writes what license they should
be using.
thus LGPL-2.1 enters to fill this void.
-mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2007-10-02 08:57
> Seems like the ideal thing here would be for you and the other distro
maintainers to get together with Alec in a conversation and come to a
decision as to what licensing scheme y'all want. I haven't really done
much other than cleaning up the packaging and patches and a small
bit of
additional code, so whatever licensing y'all come up with is fine
> by me.

I am sympathetic. Guys, what do you reckon?

What I am hearing so far is that LGPL makes sense, since it can be
linked with any code, not just GPL...

-a

Re: [Cracklib-devel] cracklib license
From: Devin Reade <gdr@gn...> - 2007-10-02 15:04
I would like to see it under LGPL as well. I think it is in everyone's
best interests to have as secure systems as possible, and I think tainting
it via GPL will just make it less likely that the library gets used, and
will not usually cause companies/developers to GPL the dependent code
(where it is not already GPL).

I like GPL, I use it when I can, but I don't think that it's the correct
license in this situation.

Devin
--
If it's sinful, it's more fun.

Re: [Cracklib-devel] cracklib license
From: Nalin Dahyabhai <nalin@re...> - 2008-01-28 16:32
On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
> > Seems like the ideal thing here would be for you and the other distro
> > maintainers to get together with Alec in a conversation and come to a
> > decision as to what licensing scheme y'all want. I haven't really done
> > much other than cleaning up the packaging and patches and a small
> > bit of
> > additional code, so whatever licensing y'all come up with is fine
> > by me.
> >
> I am sympathetic. Guys, what do you reckon?
> >
> What I am hearing so far is that LGPL makes sense, since it can be
> linked with any code, not just GPL...

My apologies for not chiming in in anything resembling a reasonable
timeframe.

I'd also suggest the LGPL, for the reason you noted above. Alternately,
GPLv2 with the option of using the library under a later version of the
GPL would permit applications which were released under version 3 of the
GPL to use the library, too, which would be sufficient for the packages which are included in Fedora. FWIW, I'd personally lean toward LGPL.

In any case, I thank you both for working on sorting this out.

Cheers,

Nalin

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-05 21:27

Attachments: Message as HTML
On Monday 28 January 2008, Nalin Dahyabhai wrote:
> On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
> > >> Seems like the ideal thing here would be for you and the other distro
> > >> maintainers to get together with Alec in a conversation and come to a
> > >> decision as to what licensing scheme y'all want. I haven't really done
> > >> much other than cleaning up the packaging and patches and a small
> > >> bit of
> > >> additional code, so whatever licensing y'all come up with is fine
> > >> by me.
> > >> I am sympathetic. Guys, what do you reckon?
> > >>
> > >> What I am hearing so far is that LGPL makes sense, since it can be
> > >> linked with any code, not just GPL....
> >
> > My apologies for not chiming in in anything resembling a reasonable
> > timeframe.
> >
> > I'd also suggest the LGPL, for the reason you noted above. Alternately,
> > GPLv2 with the option of using the library under a later version of the
> > GPL would permit applications which were released under version 3 of the
> > GPL to use the library, too, which would be sufficient for the packages
> > which are included in Fedora. FWTW, I'd personally lean toward LGPL.
> >
> > In any case, I thank you both for working on sorting this out.

looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make the change now?

-mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2008-10-05 23:18
>> In any case, I thank you both for working on sorting this out.
> looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
> the change now?

yes. go for it. thanks++

-a

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-25 22:34

Attachments: Message as HTML
On Sunday 05 October 2008, Alec Muffett wrote:
> >> In any case, I thank you both for working on sorting this out.
> >>
> > looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we
> > make the change now?
> >
> > yes. go for it. thanks++

Nathan Neulinger is the only one who can actually make said change ...
-mike

-----------
BELOW IS ORIGINAL LICENSING DISCUSSION RE CHANGING TO GPL from Artistic.
-----------

CrackLib was originally licensed with a variant of the Artistic license. In the
interests of wider acceptance and more modern licensing, it was switched with
the original author's blessing to GPL v2.

This approval was carried out in email discussions in 2005, and has been reconfirmed
as of 2007-10-01 with the following email from Alec Muffett.

The below email references nneul@umr.edu address, as that is the address
that was used at the time. For any future emails regarding this, please
use nneul@neulinger.org.

-------------------------------------
From alecm@crypticide.com Mon Oct  1 12:26:03 2007
Received: from umr-exproto2.cc.umr.edu ([131.151.0.192]) by UMR-CMAIL1.umr.edu with Microsoft
SMTPSvc(6.0.3790.3959);
Mon, 1 Oct 2007 12:26:03 -0500
Received: from scansrv2.srv.mst.edu ([131.151.1.114]) by umr-exproto2.cc.umr.edu with Microsoft SMTPSVC(6.0.3790.3959);
       Mon, 1 Oct 2007 12:26:02 -0500
Received: (qmail 8022 invoked from network); 1 Oct 2007 16:59:55 -0000
Received: from smtp1.srv.mst.edu (131.151.1.43)
       by scanin-ipvs.cc.umr.edu with SMTP; 1 Oct 2007 16:59:55 -0000
Received: from spunkymail-mx8.g.dreamhost.com (mx1.spunky.mail.dreamhost.com [208.97.132.47])
       by smtp1.srv.mst.edu (8.13.1/8.13.1) with ESMTP id l91Gxtpr020623
for <nneul@umr.edu>; Mon, 1 Oct 2007 11:59:55 -0500
Received: from rutherford.zen.co.uk (rutherford.zen.co.uk [212.23.3.142])
       by spunkymail-mx8.g.dreamhost.com (Postfix) with ESMTP id 2C7734D311
for <nneul@neulinger.org>; Mon, 1 Oct 2007 09:59:50 -0700 (PDT)
Received: from [82.68.43.14] (helo=[192.168.1.3])
       by rutherford.zen.co.uk with esmtp (Exim 4.50)
       id 11cOcX-0004Qt-6L
for nneul@neulinger.org; Mon, 01 Oct 2007 16:59:49 +0000
Mime-Version: 1.0 (Apple Message framework v752.2)
In-Reply-To: <1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>
References: <1190922867.3457.147.camel@localhost.localdomain>
       <EC90713277D2BE41B7110CCCD74E235CEF44F38@UMR-CMAIL1.umr.edu>
       <1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>
Content-Type: text/plain; charset=US-ASCII; delsp=yes; format=flowed
Message-Id: <117A1264-F6DC-4E25-B0DD-56FBFEBE6E9F@crypticide.com>
Content-Transfer-Encoding: 7bit
From: Alec Muffett <alecm@crypticide.com>
Subject: Re: cracklib license
Date: Mon, 1 Oct 2007 17:59:46 +0100
To: Nathan Neulinger <nneul@neulinger.org>
X-Mailer: Apple Mail (2.752.2)
X-Originating-Rutherford-IP: [82.68.43.14]
Return-Path: alecm@crypticide.com
X-OriginalArrivalTime: 01 Oct 2007 17:26:03.0008 (UTC) FILETIME=[2420C000:01C80450]
Status: RO
Content-Length: 585
Lines: 21

> 
> > Forwarded message --------
> > From: Neulinger, Nathan <nneul@umr.edu>
> > Date: Sep 27, 2007 2:58 PM
> > Subject: RE: cracklib license
> > To: alecm@crypto.dircon.co.uk
> > 
> > Any chance you could write me a self-contained email stating clearly
> > that the license is being changed to GPL, so I could include that
> > email
> > in the repository and clean up the repository/tarballs? I have all the
original discussion, but something succinct and self contained
would be ideal.

The license for my code in the Cracklib distribution is henceforth GPL.

Happy now? :-)

-a

-----------
EFFECTIVE OCT 2008, LICENSE IS BEING CHANGED TO LGPL-2.1 (though not reflected in released code until Nov 2009 - slow release cycle...)
-----------

Discussion thread from mailing list archive, with approval from everyone actively involved or holding original licensing rights included.

[Cracklib-devel] cracklib license
From: Mike Fryssinger <vapier@ge...> - 2007-10-02 01:16

Attachments: Message as HTML
looks like 2.8.11 is out and marked as "GPL-2" ... releasing libraries unde=r
GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
=20
mike

Re: [Cracklib-devel] cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:18
I understand that, and you're welcome to bring it up with Alec directly and see if he wants to relicense his code as LGPL... but at this point, it was enough to just get it consistent and documented as to what it was released under. This wasn't actually a license change, just a clarification of the licensing that was already in place.=20

-- Nathan

time

Nathan Neulinger EMail: nneul@um... University of Missouri - Rolla Phone: (573) 341-6679 UMR Information Technology Fax: (573) 341-4216

-----Original Message-----
From: cracklib-devel-bounces@li...
[mailto:cracklib-devel-bounces@li...] On Behalf Of
Mike Fryssinger
> Sent: Monday, October 01, 2007 8:15 PM  
> To: cracklib-devel@li...  
> Subject: [Cracklib-devel] cracklib license
>
> looks like 2.8.11 is out and marked as "GPL-2" ... releasing
> libraries under
> GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
> -mike

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:33

Attachments: Message as HTML
On Monday 01 October 2007, Neulinger, Nathan wrote:
> I understand that, and you're welcome to bring it up with Alec directly
> and see if he wants to relicense his code as LGPL... but at this point,
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GPL-2 ... it was a modified artistic license ... i didnt notice the license=
change until it was mentioned in the latest notes.

unlike the old license, GPL-2 prevents people from using cracklib unless th=
eir=20
applications are also GPL-2 which imo is just wrong. it isnt the place of =
a=20
library to dictact to application writes what license they should be using.=
=20
thus LGPL-2.1 enters to fill this void.
=2Dmike

Re: [Cracklib-devel] cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:46

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maintainers to get together with Alec in a conversation and come to a
decision as to what licensing scheme y'all want. I haven't really done
much other than cleaning up the packaging and patches and a small bit of
additional code, so whatever licensing y'all come up with is fine by me.

-- Nathan
=20

============================================================================
Nathan Neulinger EMail: nneul@um...
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> From: cracklib-devel-bounces@li...
> [mailto:cracklib-devel-bounces@li...] On Behalf Of
> Mike Frysinger
> Sent: Monday, October 01, 2007 8:33 PM
> To: Neulinger, Nathan
> Cc: cracklib-devel@li...; Alec Muffett
> Subject: Re: [Cracklib-devel] cracklib license
> >=20
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> > place of a
> > library to dictact to application writes what license they should
> > be using.
> > thus LGPL-2.1 enters to fill this void.
> > -mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2007-10-02 08:57
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I am sympathetic. Guys, what do you reckon?

What I am hearing so far is that LGPL makes sense, since it can be linked with any code, not just GPL...

-a

Re: [Cracklib-devel] cracklib license
From: Devin Reade <gdr@gn...> - 2007-10-02 15:04
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My apologies for not chiming in in anything resembling a reasonable timeframe.

I'd also suggest the LGPL, for the reason you noted above. Alternately, GPLv2 with the option of using the library under a later version of the GPL would permit applications which were released under version 3 of the GPL to use the library, too, which would be sufficient for the packages which are included in Fedora. FWIW, I'd personally lean toward LGPL.
In any case, I thank you both for working on sorting this out.

Cheers,

Nalin

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-05 21:27

Attachments: Message as HTML
On Monday 28 January 2008, Nalin Dahyabhai wrote:
> On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
> >> Seems like the ideal thing here would be for you and the other distro
> >> maintainers to get together with Alec in a conversation and come to a
> >> decision as to what licensing scheme y'all want. I haven't really done
> >> much other than cleaning up the packaging and patches and a small
> >> bit of
> >> additional code, so whatever licensing y'all come up with is fine
> >> by me.
> >
> > I am sympathetic. Guys, what do you reckon?
> >
> > What I am hearing so far is that LGPL makes sense, since it can be
> > linked with any code, not just GPL....
> >
> > My apologies for not chiming in in anything resembling a reasonable
> > timeframe.
> >
> > I'd also suggest the LGPL, for the reason you noted above. Alternately,
> > GPLv2 with the option of using the library under a later version of the
> > GPL would permit applications which were released under version 3 of the
> > GPL to use the library, too, which would be sufficient for the packages
> > which are included in Fedora. FWIW, I'd personally lean toward LGPL.
> >
> > In any case, I thank you both for working on sorting this out.

looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
the change now ?
-mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2008-10-05 23:18
>> In any case, I thank you both for working on sorting this out.
>
> looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
> the change now?

yes, go for it. thanks++

-a

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-25 22:34

On Sunday 05 October 2008, Alec Muffett wrote:
> >> In any case, I thank you both for working on sorting this out.
> >
> > looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we
> > make the change now?
> >
> > yes. go for it. thanks++

Nathan Neulinger is the only one who can actually make said change ...
-mike

-------------
BELOW IS ORIGINAL LICENSING DISCUSSION RE CHANGING TO GPL from Artistic.
-------------

CrackLib was originally licensed with a variant of the Artistic license. In the interests of wider acceptance and more modern licensing, it was switched with the original author's blessing to GPL v2.

This approval was carried out in email discussions in 2005, and has been reconfirmed as of 2007-10-01 with the following email from Alec Muffett.

The below email references nneul@umr.edu address, as that is the address that was used at the time. For any future emails regarding this, please use nneul@neulinger.org.

-------------------------------
From alecm@crypticide.com Mon Oct 1 12:26:03 2007
Received: from umr-exproto2.cc.umr.edu ([131.151.0.192]) by UMR-CMAIL1.umr.edu with Microsoft SMTPSVC(6.0.3790.3959);
 Mon, 1 Oct 2007 12:26:03 -0500
Received: from scansrv2.srv.mst.edu ([131.151.1.114]) by umr-exproto2.cc.umr.edu with Microsoft
Any chance you could write me a self-contained email stating clearly
that the license is being changed to GPL, so I could include that
email
in the repository and clean up the repository/tarballs? I have all the
original discussion, but something succinct and self contained
would be
> ideal.

The license for my code in the Cracklib distribution is henceforth GPL.

Happy now? :-)

-a

1.383 jackc-pgservicefile 0.0.0-20200307190119-3430c5407db8
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# Contributions to the urllib3 project

## Creator & Maintainer

* Andrey Petrov <andrey.petrov@shazow.net>

## Contributors

In chronological order:

* victor.vde <http://code.google.com/u/victor.vde/>
  * HTTPS patch (which inspired HTTPSConnectionPool)

* erikcederstrand <http://code.google.com/u/erikcederstrand/>
  * NTLM-authenticated HTTPSConnectionPool
  * Basic-authenticated HTTPSConnectionPool (merged into make_headers)

* niphlod <niphlod@gmail.com>
  * Client-verified SSL certificates for HTTPSConnectionPool
  * Response gzip and deflate encoding support
  * Better unicode support for filepost using StringIO buffers

* btoconnor <brian@btoconnor.net>
  * Non-multipart encoding for POST requests

* p.dobrogost <http://code.google.com/u/@WBRSRIBZDhBFXB6/>
  * Code review, PEP8 compliance, benchmark fix

* kennethreitz <me@kennethreitz.com>
  * Bugfixes, suggestions, Requests integration
* georgemarshall <https://github.com/georgemarshall>
  * Bugfixes, Improvements and Test coverage

* Thomas Kluyver <thomas@kluyver.me.uk>
  * Python 3 support

* brandon-rhodes <http://rhodesmill.org/brandon>
  * Design review, bugfixes, test coverage.

* studer <theo.studer@gmail.com>
  * IPv6 url support and test coverage

* Shivaram Lingamneni <slingamn@cs.stanford.edu>
  * Support for explicitly closing pooled connections

* hartator <hartator@gmail.com>
  * Corrected multipart behavior for params

* Thomas Weischuh <thomas@t-8ch.de>
  * Support for TLS SNI
  * API unification of ssl_version/cert_reqs
  * SSL fingerprint and alternative hostname verification
  * Bugfixes in testsuite

* Sune Kirkeby <mig@ibofobi.dk>
  * Optional SNI-support for Python 2 via PyOpenSSL.

* Marc Schlaich <marc.schlaich@gmail.com>
  * Various bugfixes and test improvements.

* Bryce Boe <bbzbryce@gmail.com>
  * Correct six.moves conflict
  * Fixed pickle support of some exceptions

* Boris Figovsky <boris.figovsky@ravellosystems.com>
  * Allowed to skip SSL hostname verification

* Cory Benfield <https://lukasa.co.uk/about/>
  * Stream method for Response objects.
  * Return native strings in header values.
  * Generate 'Host' header when using proxies.

* Jason Robinson <jaywink@basshero.org>
  * Add missing WrappedSocket.fileno method in PyOpenSSL

* Audrius Butkevicius <audrius.butkevicius@elastichosts.com>
  * Fixed a race condition
* Stanislav Vitkovskiy <stas.vitkovsky@gmail.com>
  * Added HTTPS (CONNECT) proxy support

* Stephen Holsapple <sholsapp@gmail.com>
  * Added abstraction for granular control of request fields

* Martin von Gagern <Martin.vGagern@gmx.net>
  * Support for non-ASCII header parameters

* Kevin Burke <kev@inburke.com> and Pavel Kirichenko <juanych@yandex-team.ru>
  * Support for separate connect and request timeouts

* Peter Waller <p@pwaller.net>
  * HTTPResponse.tell() for determining amount received over the wire

* Nipunn Koorapati <nipunn1313@gmail.com>
  * Ignore default ports when comparing hosts for equality

* Danilo @dbrgn <https://dbrgn.ch/>
  * Disabled TLS compression by default on Python 3.2+
  * Disabled TLS compression in pyopenssl contrib module
  * Configurable cipher suites in pyopenssl contrib module

* Roman Bogorodskiy <roman.bogorodskiy@ericsson.com>
  * Account retries on proxy errors

* Nicolas Delaby <nicolas.delaby@ezeep.com>
  * Use the platform-specific CA certificate locations

* Josh Schneier <https://github.com/jschneier>
  * HTTPHeaderDict and associated tests and docs
  * Bugfixes, docs, test coverage

* Tahia Khan <http://tahia.tk/>
  * Added Timeout examples in docs

* Arthur Grunseid <https://grunseid.com>
  * source_address support and tests (with https://github.com/bui)

* Ian Cordasco <graffatcolmimgov@gmail.com>
  * PEP8 Compliance and Linting
  * Add ability to pass socket options to an HTTP Connection

* Erik Tollerud <erik.tollerud@gmail.com>
  * Support for standard library io module.

* Krishna Prasad <kprasad.iitd@gmail.com>
  * Google App Engine documentation
* Aaron Meurer <asmeurer@gmail.com>
  * Added Url.url, which unparses a Url

* Evgeny Kapun <abacabadabacaba@gmail.com>
  * Bugfixes

* Benjamen Meyer <bm_witness@yahoo.com>
  * Security Warning Documentation update for proper capture

* Shivan Sornarajah <github@sornars.com>
  * Support for using ConnectionPool and PoolManager as context managers.

* Alex Gaynor <alex.gaynor@gmail.com>
  * Updates to the default SSL configuration

* Tomas Tomecek <ttomecek@redhat.com>
  * Implemented generator for getting chunks from chunked responses.

* tlynn <https://github.com/tlynn>
  * Respect the warning preferences at import.

* David D. Riddle <ddriddle@illinois.edu>
  * IPv6 bugfixes in testsuite

* Thea Flowers <magicalgirl@google.com>
  * App Engine environment tests.
  * Documentation re-write.

* John Krauss <https://github.com/talos>
  * Clues to debugging problems with `cryptography` dependency in docs

* Disassem <https://github.com/Disassem>
  * Fix pool-default headers not applying for url-encoded requests like GET.

* James Atherfold <jlatherfold@hotmail.com>
  * Bugfixes relating to cleanup of connections during errors.

* Christian Pedersen <https://github.com/chripede>
  * IPv6 HTTPS proxy bugfix

* Jordan Moldow <https://github.com/jmoldow>
  * Fix low-level exceptions leaking from `HTTPResponse.stream()`.
  * Bugfix for `ConnectionPool.urlopen(release_conn=False)`.
  * Creation of `HTTPConnectionPool.ResponseCls`.

* Predrag Gruevski <https://github.com/obi1kenobi>
  * Made cert digest comparison use a constant-time algorithm.
* Adam Talsma <https://github.com/a-tal>
  * Bugfix to ca_cert file paths.

* Evan Meagher <https://evanmeagher.net>
  * Bugfix related to `memoryview` usage in PyOpenSSL adapter

* John Vandenberg <jayvdb@gmail.com>
  * Python 2.6 fixes; pyflakes and pep8 compliance

* Andy Caldwell <andy.m.caldwell@googlemail.com>
  * Bugfix related to reusing connections in indeterminate states.

* Ville Skytt <ville.skytta@iki.fi>
  * Logging efficiency improvements, spelling fixes, Travis config.

* Shige Takeda <smtakeda@gmail.com>
  * Started Recipes documentation and added a recipe about handling concatenated gzip data in HTTP response

* Jesse Shapiro <jesse@jesseshapiro.net>
  * Various character-encoding fixes/tweaks
  * Disabling IPv6 DNS when IPv6 connections not supported

* David Foster <http://dafoster.net/>
  * Ensure order of request and response headers are preserved.

* Jeremy Cline <jeremy@jcline.org>
  * Added connection pool keys by scheme

* Aviv Palivoda <palaviv@gmail.com>
  * History list to Retry object.
  * HTTPResponse contains the last Retry object.

* Nate Prewitt <nate.prewitt@gmail.com>
  * Ensure timeouts are not booleans and greater than zero.
  * Fixed infinite loop in `stream` when amt=None.
  * Added `length_remaining` to determine remaining data to be read.
  * Added `enforce_content_length` to raise exception when incorrect content-length received.

* Seth Michael Larson <sethmichaellarson@protonmail.com>
  * Created selectors backport that supports PEP 475.

* Alexandre Dias <alex.dias@smarkets.com>
  * Don't retry on timeout if method not in whitelist

* Moinuddin Quadri <moin18@gmail.com>
  * Lazily load idna package
* Tom White <s6yg1ez3@mail2tor.com>
  * Made SOCKS handler differentiate socks5h from socks5 and socks4a from socks4.

* Tim Burke <tim.burke@gmail.com>
  * Stop buffering entire deflate-encoded responses.

* Tuukka Mustonen <tuukka.mustonen@gmail.com>
  * Add counter for status_forcelist retries.

* Erik Rose <erik@mozilla.com>
  * Bugfix to pyopenssl vending

* Wolfgang Richter <wolfgang.richter@gmail.com>
  * Bugfix related to loading full certificate chains with PyOpenSSL backend.

* Mike Miller <github@mikeage.net>
  * Logging improvements to include the HTTP(S) port when opening a new connection

* Ioannis Tziakos <mail@itziakos.gr>
  * Fix `util.selectors._fileobj_to_fd` to accept `’long’`.
  * Update appveyor tox setup to use the 64bit python.

* Akamai (through Jesse Shapiro) <jshapiro@akamai.com>
  * Ongoing maintenance

* Dominique Leuenberger <dimstar@opensuse.org>
  * Minor fixes in the test suite

* Will Bond <will@wbond.net>
  * Add Python 2.6 support to `’contrib.securetransport’`

* Aleksei Alekseev <alekseev.yeskela@gmail.com>
  * using auth info for socks proxy

* Chris Wilcox <git@crwilcox.com>
  * Improve contribution guide
  * Add `’HTTPResponse.geturl’` method to provide `’urllib2.urlopen().geturl()’` behavior

* Bruce Merry <https://www.brucemerry.org.za>
  * Fix leaking exceptions when system calls are interrupted with zero timeout

* Hugo van Kemenade <https://github.com/hugovk>
  * Drop support for EOL Python 2.6

* Tim Bell <https://github.com/timb07>
  * Bugfix for responses with Content-Type: message/* logging warnings

* Justin Bramley <https://github.com/jbramleycl>
* Add ability to handle multiple Content-Encodings

* Katsuhiko YOSHIDA <https://github.com/kyoshidajp>
* Remove Authorization header regardless of case when redirecting to cross-site

* [Your name or handle] <[email or website]>
* [Brief summary of your changes]

### 1.385 oslo-config 2.1.0

1.385.1 Available under license:

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== Contributors ==
* Tatu Saloranta
* Providing benchmark suite
* Alec Wysoker
* Performance and memory usage improvement

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1.390 cryptography 36.0.2

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1.392 perl-mime-base64 3.15 396.el8

1.392.1 Available under license:

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This package contains a base64 encoder/decoder and a quoted-printable encoder/decoder. These encoding methods are specified in RFC 2045 - MIME (Multipurpose Internet Mail Extensions).

The base64 encoding is designed to represent arbitrary sequences of octets in a form that need not be humanly readable. A 65-character subset ([A-Za-z0-9+/=]) of US-ASCII is used, enabling 6 bits to be represented per printable character.

The quoted-printable encoding is intended to represent data that largely consists of bytes that correspond to printable characters in the ASCII character set. Each non-printable character is represented by a triplet consisting of the character "=" followed by two hexadecimal digits.

In order to install and use this package you will need Perl version 5.6 or better. Installation as usual:

```perl
perl Makefile.PL
make
make test
make install
```

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---
abstract: 'The RFC 2045 encodings; base64 and quoted-printable'
author:
  - 'Gisle Aas <gisle@activestate.com>'
buildRequires:
  ExtUtils::MakeMaker: 0
configureRequires:
  ExtUtils::MakeMaker: 0
=head1 NAME

MIME::Base64 - Encoding and decoding of base64 strings

=head1 SYNOPSIS

use MIME::Base64;

$encoded = encode_base64('Aladdin:open sesame');
$decoded = decode_base64($encoded);

=head1 DESCRIPTION

This module provides functions to encode and decode strings into and from the base64 encoding specified in RFC 2045 - I<MIME (Multipurpose Internet Mail Extensions)>. The base64 encoding is designed to represent arbitrary sequences of octets in a form that need not be humanly readable. A 65-character subset ([A-Za-z0-9+/=]) of US-ASCII is used, enabling 6 bits to be represented per printable character.

The following primary functions are provided:

=over 4
Encode data by calling the `encode_base64()` function. The first argument is the byte string to encode. The second argument is the line-ending sequence to use. It is optional and defaults to "\n". The returned encoded string is broken into lines of no more than 76 characters each and it will end with $eol unless it is empty. Pass an empty string as second argument if you do not want the encoded string to be broken into lines.

The function will croak with "Wide character in subroutine entry" if $bytes contains characters with code above 255. The base64 encoding is only defined for single-byte characters. Use the Encode module to select the byte encoding you want.

Decode a base64 string by calling the `decode_base64()` function. This function takes a single argument which is the string to decode and returns the decoded data.

Any character not part of the 65-character base64 subset is silently ignored. Characters occurring after a '=' padding character are never decoded.

If you prefer not to import these routines into your namespace, you can call them as:

```perl
use MIME::Base64 ();
$encoded = MIME::Base64::encode($decoded);
$decoded = MIME::Base64::decode($encoded);
```

Additional functions not exported by default:

```perl
=over 4

=item encode_base64url( $bytes )
=item decode_base64url( $str )
```

Encode and decode according to the base64 scheme for "URL applications" [1]. This is a variant of the base64 encoding which does not use padding, does not break the string into multiple lines and use the characters "." and "," instead of "+" and "/" to avoid using reserved URL characters.
=item encoded_base64_length( $bytes )

=item encoded_base64_length( $bytes, $eol )

Returns the length that the encoded string would have without actually encoding it. This will return the same value as \<< length(encode_base64($bytes)) >>, but should be more efficient.

=item decoded_base64_length( $str )

Returns the length that the decoded string would have without actually decoding it. This will return the same value as \<< length(decode_base64($str)) >>, but should be more efficient.

=back

=head1 EXAMPLES

If you want to encode a large file, you should encode it in chunks that are a multiple of 57 bytes. This ensures that the base64 lines line up and that you do not end up with padding in the middle. 57 bytes of data fills one complete base64 line (76 == 57*4/3):

use MIME::Base64 qw(encode_base64);

open(FILE, "/var/log/wtmp") or die "$!";
while (read(FILE, $buf, 60*57)) {
  print encode_base64($buf);
}

or if you know you have enough memory

use MIME::Base64 qw(encode_base64);
local($/) = undef; # slurp
print encode_base64(<STDIN>);

The same approach as a command line:

perl -MMIME::Base64 -0777 -ne 'print encode_base64($_)' <file

Decoding does not need slurp mode if every line contains a multiple of four base64 chars:

perl -MMIME::Base64 -ne 'print decode_base64($_)' <file

Perl v5.8 and better allow extended Unicode characters in strings. Such strings cannot be encoded directly, as the base64
encoding is only defined for single-byte characters. The solution is to use the Encode module to select the byte encoding you want. For example:

```
use MIME::Base64 qw(encode_base64);
use Encode qw(encode);

$encoded = encode_base64(encode("UTF-8", "\x{FFFF}\n"));
print $encoded;
```

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Distantly based on LWP::Base64 written by Martijn Koster <m.koster@nexor.co.uk> and Joerg Reichelt <j.reichelt@nexor.co.uk> and code posted to comp.lang.perl <3pd2lp$6gf@wsinti07.win.tue.nl> by Hans Mulder <shansm@wsinti07.win.tue.nl>

The XS implementation uses code from metamail. Copyright 1991 Bell Communications Research, Inc. (Bellcore)

=head1 SEE ALSO

L<MIME::QuotedPrint>


=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1018810387_1591379702.59/0/perl-MIME-Base64-3.15-396.el8.src.rpm-cosi-expand-archive-0eqZ8FH8/MIME-Base64-3.15.tar.gz-cosi-expand-archive-Y9WxESAM/MIME-Base64-3.15/Base64.pm

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Found in path(s):
* /opt/ws_local/PERMITS_SQL/1018810387_1591379702.59/0/perl-MIME-Base64-3.15-396.el8.src.rpm-cosi-expand-archive-0eqZ8FH8/perl-MIME-Base64.spec

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=head1 NAME
MIME::QuotedPrint - Encoding and decoding of quoted-printable strings

=head1 SYNOPSIS

use MIME::QuotedPrint;

$encoded = encode_qp($decoded);
$decoded = decode_qp($encoded);

=head1 DESCRIPTION

This module provides functions to encode and decode strings into and from the quoted-printable encoding specified in RFC 2045 - I<MIME (Multipurpose Internet Mail Extensions)>. The quoted-printable encoding is intended to represent data that largely consists of bytes that correspond to printable characters in the ASCII character set. Each non-printable character (as defined by English Americans) is represented by a triplet consisting of the character "=" followed by two hexadecimal digits.

The following functions are provided:

=over 4
=item encode_qp( $str)
=item encode_qp( $str, $eol)
=item encode_qp( $str, $eol, $binmode )
=over

This function returns an encoded version of the string ($str) given as argument.

The second argument ($eol) is the line-ending sequence to use. It is optional and defaults to "$\n". Every occurrence of "$\n" is replaced with this string, and it is also used for additional "soft line breaks" to ensure that no line end up longer than 76 characters. Pass it as "\015\012" to produce data suitable for external consumption. The string "$\r\n" produces the same result on many platforms, but not all.

The third argument ($binmode) will select binary mode if passed as a TRUE value. In binary mode "$\n" will be encoded in the same way as any other non-printable character. This ensures that a decoder will end up with exactly the same string whatever line ending sequence it uses. In general it is preferable to use the base64 encoding for binary data; see L<MIME::Base64>. 
An $eol of "" (the empty string) is special. In this case, no "soft line breaks" are introduced and binary mode is effectively enabled so that any "\n" in the original data is encoded as well.

=item decode_qp( $str )

This function returns the plain text version of the string given as argument. The lines of the result are "\n" terminated, even if the $str argument contains "\r\n" terminated lines.

=back

If you prefer not to import these routines into your namespace, you can call them as:

use MIME::QuotedPrint ();
$encoded = MIME::QuotedPrint::encode($decoded);
$decoded = MIME::QuotedPrint::decode($encoded);

Perl v5.8 and better allow extended Unicode characters in strings. Such strings cannot be encoded directly, as the quoted-printable encoding is only defined for single-byte characters. The solution is to use the Encode module to select the byte encoding you want. For example:

use MIME::QuotedPrint qw(encode_qp);
use Encode qw(encode);

$encoded = encode_qp(encode("UTF-8", "\x{FFFF}\n"));
print $encoded;

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=head1 SEE ALSO

L<MIME::Base64>

=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1018810387_1591379702.59/0/perl-MIME-Base64-3.15-396.el8.src.rpm-cosi-expand-archive-0eqZ8FH8/MIME-Base64-3.15.tar.gz-cosi-expand-archive-Y9WxESAM/MIME-Base64-
3.15/QuotedPrint.pm
No license file was found, but licenses were detected in source scan.

/*

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Found in path(s):
* /opt/ws_local/PERMITS_SQL/1018810387_1591379702.59/0/perl-MIME-Base64-3.15-396.el8.src.rpm-cosi-expand-archive-0eqZ8FH8/MIME-Base64-3.15.tar.gz-cosi-expand-archive-Y9WxESAM/MIME-Base64-3.15/Base64.xs

1.393 u-root 7.0.0+incompatible

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1.394 agentx-levenshtein 1.2.3

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1.395 typing-extensions 4.1.1

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A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a
non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

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[metadata]
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version = attr: click.__version__
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project_urls =
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  Documentation = https://click.palletsprojects.com/
  Changes = https://click.palletsprojects.com/changes/
  Source Code = https://github.com/pallets/click/
  Issue Tracker = https://github.com/pallets/click/issues/
  Twitter = https://twitter.com/PalletsTeam
  Chat = https://discord.gg/pallets
license = BSD-3-Clause
license_files = LICENSE.rst
author = Armin Ronacher
author_email = armin.ronacher@active-4.com
maintainer = Pallets
maintainer_email = contact@palletsprojects.com
description = Composable command line interface toolkit
long_description = file: README.rst
long_description_content_type = text/x-rst
classifiers =
  Development Status :: 5 - Production/ Stable
  Intended Audience :: Developers
  License :: OSI Approved :: BSD License
  Operating System :: OS Independent
  Programming Language :: Python

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  include_package_data = true
  python_requires = >= 3.6

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  where = src

[tool:pytest]
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filterwarnings = error
[coverage:run]
branch = true
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tests

[coverage:paths]
source =
click
*/site-packages

[flake8]
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E501
E722
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src/click/__init__.py: F401

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no_implicit_reexport = True
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[mypy-importlib_metadata.*]
ignore_missing_imports = True

[egg_info]
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tag_date = 0

Found in path(s):
* /opt/cola/permits/1212549943_1634637984.77/0/click-8-0-3-tar-gz/click-8.0.3/setup.cfg
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Metadata-Version: 2.1
Name: click
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It aims to make the process of writing command line tools quick and fun while also preventing any frustration caused by the inability to implement an intended CLI API.

Click in three points:

- Arbitrary nesting of commands
- Automatic help page generation
- Supports lazy loading of subcommands at runtime

Installing
----------

Install and update using `pip`:
.. code-block:: text
$ pip install -U click

A Simple Example
---------------.. code-block:: python
import click
@click.command()
@click.option("--count", default=1, help="Number of greetings.")
@click.option("--name", prompt="Your name", help="The person to greet.")
def hello(count, name):
"""Simple program that greets NAME for a total of COUNT times."""
for _ in range(count):
click.echo(f"Hello, {name}!")
if __name__ == '__main__':
hello()
.. code-block:: text
$ python hello.py --count=3
Your name: Click
Hello, Click!
Hello, Click!
Hello, Click!

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Open Source Used In BGP TE Controller Version 4.3.0 5227


As the userbase of Click grows, more and more major feature requests pop up in Click's bugtracker. As reasonable as it may be for those features to be bundled with Click instead of being a standalone project, many of those requested features are either highly experimental or have unproven practical use, while potentially being a burden to maintain.

This is why click-contrib exists. The GitHub organization is a collection of possibly experimental third-party packages whose featureset does not belong into Click, but also a playground for major features that may be added to Click in the future. It is also meant to coordinate and concentrate effort on writing third-party extensions for Click, and to ease the effort of searching for such extensions. In that sense it could be described as a low-maintenance alternative to extension repositories of other frameworks.

Please note that the quality and stability of those packages may be different than what you expect from Click itself. While published under a common organization, they are still projects separate from Click.

---

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* /opt/cola/permits/1212549943_1634637984.77/0/click-8-0-3-tar-gz/click-8.0.3/docs/contrib.rst

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1.397 openssl 1.1.1h
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The End

1.398 netty-transport 4.1.62.Final

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Manifest-Version: 1.0
Implementation-Title: Netty/Transport
Bundle-Description: Netty is an asynchronous event-driven network application framework for rapid development of maintainable high performance protocol servers and clients.
Automatic-Module-Name: io.netty.transport
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0
Bundle-SymbolicName: io.netty.transport
Implementation-Version: 4.1.62.Final
Built-By: norman
Bnd-LastModified: 1617128242504
Bundle-ManifestVersion: 2
Implementation-Vendor-Id: io.netty
Bundle-DocURL: https://netty.io/
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1.399 metrics 2.2.0

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1.400 keyutils 1.5.10-9.el8

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Name: cx-common
Version: 0.0.1
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Classifier: Programming Language :: Python :: 3.6
Classifier: Programming Language :: Python :: Implementation :: CPython
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# Introduction

This is a common dependency which provide some basic module.

## Features

1. database operation
2. log encapsulation
3. http request processor base class and response class definition

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If you think you belong on this list, please let me know! --Benjamin

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not-a-legal-formal-parameter-tuple.scala:2: error: not a legal formal parameter.
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  Either create a single parameter accepting the Tuple2,
  or consider a pattern matching anonymous function: `{ case (a, b) => ... }`
val x: ((Int, Int) => Int) = (((a, b)) => a)

^ not-a-legal-formal-parameter-tuple.scala:3: error: not a legal formal parameter.
Note: Tuples cannot be directly destructured in method or function parameters.
  Either create a single parameter accepting the Tuple2,
  or consider a pattern matching anonymous function: `{ case (param1, param2) => ... }`
val y: ((Int, Int, Int) => Int) = (((a, !!)) => a)

^ not-a-legal-formal-parameter-tuple.scala:4: error: not a legal formal parameter.
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  Either create a single parameter accepting the Tuple3,
  or consider a pattern matching anonymous function: `{ case (param1, ..., param3) => ... }`
val z: ((Int, Int, Int) => Int) = (((a, NotAPatternVariableName, c)) => a)

^ 3 errors
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1.411 typing-extensions 3.10.0.0

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.
All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

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1.412 python-setuptools 54.1.1

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The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javasecurity.mail.glassfish
Oracle

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* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

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* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions. http://openjdk.java.net/legal/gplv2+ce.html

OW2

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org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

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org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay
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org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

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Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

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Assorted

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1.418 benbjohnson-clock 1.1.0

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1.419 containerd-go-cni 1.0.2

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1.420 flask 1.0.2

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1.421 jre 1.3.132u0

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1.422 python3-asn1crypto 0.24.0

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1.424 influxdb 0.2.8

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1.425 libxi 1.7.10-1.el8

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1.426 pixman 0.38.4 1.el8

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1.430 argparse 1.4.0

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A. HISTORY OF THE SOFTWARE
==============================

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same
In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

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1.433 go-toml 1.9.4

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localtime.go, localtime_test.go:

Originals:
https://raw.githubusercontent.com/googleapis/google-cloud-go/ed46f5086358513cf8c25f8e3f022cb838a49d66/civil/civil.go
https://raw.githubusercontent.com/googleapis/google-cloud-go/ed46f5086358513cf8c25f8e3f022cb838a49d66/civil/civil_test.go

Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.

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1.434 grub2 2.02-106.el8.alma

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tomb - support for clean goroutine termination in Go.

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Wavefront by VMware SDK for Go 0.9.9 GA

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1.451 pygobject 3.28.3 2.el8

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1.452 ruamel.yaml 0.16.13

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1.453 hppc 0.8.1

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1.454 tzlocal 4.1

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1.455 netty-handler 4.1.49.Final

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* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/0/netty-handler-4-1-49-final-sources-1-
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* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/0/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/PemX509Certificate.java
* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/0/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/PemEncoded.java
* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/0/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/PemPrivateKey.java
* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/0/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/PemValue.java
* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/0/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/flush/FlushConsolidationHandler.java
* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/0/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/OpenSslKeyMaterialManager.java
* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/0/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/util/X509TrustManagerWrapper.java

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* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/0/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/SslHandshakeTimeoutException.java

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/*
jar/io/netty/handler/ssl/JdkApplicationProtocolNegotiator.java
* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/PemReader.java
* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/util/BouncyCastleSelfSignedCertGenerator.java
* /opt/ws_local/PERMITS_SQL/1068232349_1594320675.63/netty-handler-4-1-49-final-sources-1-jar/io/netty/handler/ssl/SslProvider.java

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Bnd-LastModified: 1617125771772
Bundle-ManifestVersion: 2
Implementation-Vendor-Id: io.netty
Bundle-DocURL: https://netty.io/
Bundle-Vendor: The Netty Project
Implementation-Vendor: The Netty Project
Bundle-Name: Netty/Transport/Native/Epoll
Bundle-Version: 4.1.62.Final
Created-By: Apache Maven Bundle Plugin
Build-Jdk: 1.8.0_272
Implementation-URL: https://netty.io/netty-transport-native-epoll/

Found in path(s):
* /opt/cola/permits/1171712299_1623127843.95/0/netty-transport-native-epoll-4-1-62-final-jar/META-INF/MANIFEST.MF

1.462 match 1.1.1
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1.467 billiard 3.5.0.5

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1.468 binutils 2.30-108.el8_5.1

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++++++++++++++++

Dean Elsner wrote the original gas for vax. [more details?]

Jay Fenlason maintained gas for a while, adding support for gdb-specific debug information and the 68k series machines, most of the preprocessing pass, and extensive changes in messages.c, input-file.c, write.c.

K. Richard Pixley maintained gas for a while, adding various enhancements and many bug fixes, including merging support for several processors, breaking gas up to handle multiple object file format backends (including heavy rewrite, testing, an integration of the coff and b.out backends), adding configuration including heavy testing and verification of cross assemblers and file splits and renaming, converted gas to strictly ansi C including full prototypes, added support for m680[34]0 & cpu32, considerable work on i960 including a coff port (including considerable amounts of reverse engineering), a sparc opcode file rewrite, decstation, rs6000, and hp300hpux host ports, updated "know" assertions and made them work, much other reorganization, cleanup, and lint.

Ken Raeburn wrote the high-level BFD interface code to replace most of the code in format-specific I/O modules.

The original Vax-VMS support was contributed by David L. Kashtan. Eric Youngdale and Pat Rankin have done much work with it since.
The Intel 80386 machine description was written by Eliot Dresselhaus.

Minh Tran-Le at IntelliCorp contributed some AIX 386 support.

The Motorola 88k machine description was contributed by Devon Bowen of Buffalo University and Torbjorn Granlund of the Swedish Institute of Computer Science.

Keith Knowles at the Open Software Foundation wrote the original MIPS back end (tc-mips.c, tc-mips.h), and contributed Rose format support that hasn't been merged in yet. Ralph Campbell worked with the MIPS code to support a.out format.

Support for the Zilog Z8k and Hitachi H8/300, H8/500 and SH processors (tc-z8k, tc-h8300, tc-h8500, tc-sh), and IEEE 695 object file format (obj-ieee), was written by Steve Chamberlain of Cygnus Solutions. Steve also modified the COFF back end (obj-coffbfd) to use BFD for some low-level operations, for use with the Hitachi, 29k and Zilog targets.

John Gilmore built the AMD 29000 support, added .include support, and simplified the configuration of which versions accept which pseudo-ops. He updated the 68k machine description so that Motorola's opcodes always produced fixed-size instructions (e.g. jsr), while synthetic instructions remained shrinkable (jbsr). John fixed many bugs, including true tested cross-compilation support, and one bug in relaxation that took a week and required the proverbial one-bit fix.

Ian Lance Taylor of Cygnus Solutions merged the Motorola and MIT syntaxes for the 68k, completed support for some COFF targets (68k, i386 SVR3, and SCO Unix), wrote the ECOFF support based on Michael Meissner's mips-tfile program, wrote the PowerPC and RS/6000 support, and made a few other minor patches. He handled the binutils releases for versions 2.7 through 2.9.

David Edelsohn contributed fixes for the PowerPC and AIX support.

Steve Chamberlin made gas able to generate listings.

Support for the HP9000/300 was contributed by Glenn Engel of HP.

Support for ELF format files has been worked on by Mark Eichin of Cygnus Solutions (original, incomplete implementation), Pete Hoogenboom at the University of Utah (HPPA mainly), Michael Meissner of the Open Software Foundation (i386 mainly), and Ken Raeburn of Cygnus Solutions (sparc, initial 64-bit support).

Several engineers at Cygnus Solutions have also provided many small
bug fixes and configuration enhancements.

The initial Alpha support was contributed by Carnegie-Mellon University. Additional work was done by Ken Raeburn of Cygnus Solutions. Richard Henderson then rewrote much of the Alpha support.

Ian Dall updated the support code for the National Semiconductor 32000 series, and added support for Mach 3 and NetBSD running on the PC532.

Klaus Kaempf ported the assembler and the binutils to openVMS/Alpha.

Steve Haworth contributed the support for the Texas Instruction c30 (tms320c30).

H.J. Lu has contributed many patches and much testing.

Alan Modra reworked much of the i386 backend, improving the error checking, updating the code, and improving the 16 bit support, using patches from the work of Martynas Kunigelis and H.J. Lu.

Many others have contributed large or small bug fixes and enhancements. If you've contributed significant work and are not mentioned on this list, and want to be, let us know. Some of the history has been lost; we aren't intentionally leaving anyone out.

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1.473 plugin-classloader 7.10.2

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  /opt/cola/permits/114728761_1616935430.08/0/plugin-classloader-7-10-2-sources-jar/org/elasticsearch/plugins/ExtendedPluginsClassLoader.java

1.474 antlr-runtime 4.5.3
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* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
jar/org/antlr/v4/runtime/misc/Args.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
jar/org/antlr/v4/runtime/misc/Predicate.java
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* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/antlr/v4/runtime/dfa/AbstractEdgeMap.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/antlr/v4/runtime/dfa/SingletonEdgeMap.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/antlr/v4/runtime/dfa/SparseEdgeMap.java
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   /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/org/antlr/v4/runtime/atn/ErrorInfo.java
   /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/org/antlr/v4/runtime/atn/DecisionEventInfo.java
   /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/org/antlr/v4/runtime/atn/PredicateEvalInfo.java
   /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/org/antlr/v4/runtime/VocabularyImpl.java
   /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/org/antlr/v4/runtime/atn/ContextSensitivityInfo.java
   /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/org/antlr/v4/runtime/atn/DecisionInfo.java
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ar/jar/org/antlr/v4/runtime/atn/ConflictInfo.java
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ar/jar/org/antlr/v4/runtime/atn/AmbiguityInfo.java
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jar/org/antlr/v4/runtime/tree/TokenFactory.java
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* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources.jar/antlr/v4/runtime/misc/RuleDependencyProcessor.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources.jar/antlr/v4/runtime/misc/RuleDependencyChecker.java

Found in path(s):
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources.jar/antlr/v4/runtime/lexer/LexerIndexedCustomAction.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources.jar/antlr/v4/runtime/lexer/LexerTypeAction.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources.jar/antlr/v4/runtime/atn/ATNTType.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources.jar/antlr/v4/runtime/atn/ATNDeserializationOptions.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources.jar/antlr/v4/runtime/lexer/LexerTypeAction.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources.jar/antlr/v4/runtime/lexer/LexerIndexedCustomAction.java

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* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/tree/pattern/ParseTreePatternMatcher.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/tree/pattern/TextChunk.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/InterpreterRuleContext.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/tree/pattern/TokenTagToken.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/tree/pattern/Chunk.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/tree/pattern/TagChunk.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/tree/pattern/ParseTreeMatch.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/tree/pattern/RuleTagToken.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/ParserInterpreter.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-
  jar/org/antlr/v4/runtime/tree/pattern/ParseTreePattern.java

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* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/org/antlr/v4/runtime/misc/Tuple3.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/org/antlr/v4/runtime/misc/Tuple2.java
* /opt/cola/permits/1000876358_1646171538.93/0/antlr4-runtime-4-5-3-sources-jar/org/antlr/v4/runtime/misc/Tuple.java

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

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* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

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* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Open Source Used In BGP TE Controller Version 4.3.0 5756
Oracle OpenJDK

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* java.sun.security.ssl

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http://openjdk.java.net/legal/gplv2+ce.html

OW2

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org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

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org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

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org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

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Mortbay

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

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Assorted

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1.488 hostname 3.20 6.el8

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hostname -- set the host name or show the host/domain name

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1.496 libmodman 2.0.1 17.el8

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1.505 javax-ws-rs-api 2.1.1

1.506 jackson-datatype-jdk8 2.12.3
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1.507 tzlocal 2.1
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1.508 pkgconf 1.4.2 1.el8
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1.509 x-oauth2 0.0.0-20210805134026-6f1e6394065a

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1.510 libyang 1.0.184-1.el8

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JUnit

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1.513 selinux 2.9-5.el8
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### <summary>Polaris dbgd Policy Rules.</summary>

```
interface(`polaris_dbgd_var_sock_write',`
    gen_require(`
        type polaris_dbgd_t;
        type polaris_dbgd_var_run_t;
        type var_run_t;
    `)
    write_sock_files_pattern($1, var_run_t, polaris_dbgd_var_run_t)
    allow $1 polaris_dbgd_t:unix_stream_socket { connectto };
    `)
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdbgd.if
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### <summary>Polaris cpp_stats Policy Rules.</summary>

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# Map GNSS TTY to correct device context
/dev/ttyS1 -c gen_context(system_u:object_r:polaris_cabo_gnss_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscabognss.fc

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policy_module(polarisnginx, 1.0);

gen_require(`
  type polaris_nginx_t;
`)

polaris_btrace_data_manage(polaris_nginx_t)
polaris_chasfs_manage(polaris_nginx_t)
polaris_tdldresolve_read(polaris_nginx_t)
polaris_tdlldb_list_dirs(polaris_nginx_t)
polaris_cpld_read(polaris_nginx_t)
polaris_lua_read(polaris_nginx_t)
polaris_flashlib_read(polaris_nginx_t)
polaris_crft_data_manage(polaris_nginx_t)

polaris_ripc_sman_ui_serv_connect(polaris_nginx_t)

polaris_lua_read(polaris_nginx_t)
polaris_disk_harddisk_read_lnk(polaris_nginx_t)

allow polaris_nginx_t self:tcp_socket { bind create listen accept setopt getopt shutdown};
allow polaris_nginx_t self:capability2 block_suspend;
allow polaris_nginx_t self:capability { setgid setuid sys_resource };

polaris_lfts_dev_use(polaris_nginx_t)
logging_send_syslog_msg(polaris_nginx_t)
corenet_tcp_connect_http_port(polaris_nginx_t)
corenet_tcp_bind_generic_node(polaris_nginx_t)
corenet_tcp_bind_http_port(polaris_nginx_t)
corenet_tcp_connect_pkiserver_port(polaris_nginx_t)
# FIXME:  add interface to allow bind to port 1025-65535
corenet_tcp_bind_all_ports(polaris_nginx_t)
#Allow the nginx to search/read the web servers config files
apache_read_config(polaris_nginx_t)
apache_search_config(polaris_nginx_t)
# allow read httpd_sys_content_t (/var/www/...)
apache_read_sys_content(polaris_nginx_t)

gen_require(
    type httpd_var_run_t;
    type syslogd_var_run_t;
)
setattr_dirs_pattern(polaris_nginx_t, httpd_var_run_t, httpd_var_run_t)
manage_dirs_pattern(polaris_nginx_t, httpd_var_run_t, httpd_var_run_t)
manage_files_pattern(polaris_nginx_t, httpd_var_run_t, httpd_var_run_t)
manage_sock_files_pattern(polaris_nginx_t, httpd_var_run_t, httpd_var_run_t)
files_pid_filetrans(polaris_nginx_t, httpd_var_run_t, [ file sock_file dir unix_stream_socket ])
polaris_socketat_nsfs_read(polaris_nginx_t)
# socketat does setsockopt SO_VRF
allow polaris_nginx_t self:capability net_admin;
auth_use_nsswitch(polaris_nginx_t)

allow polaris_nginx_t tmp_t:dir create_dir_perms;
files_tmp_filetrans(polaris_nginx_t, httpd_log_t, file, "ngx_access.log")
files_tmp_filetrans(polaris_nginx_t, httpd_log_t, file, "ngx_error.log")
files_tmp_filetrans(polaris_nginx_t, httpd_log_t, file, "nginx.pid")
files_tmp_filetrans(polaris_nginx_t, httpd_log_t, file, "nginx.lock.accept")
files_tmp_filetrans(polaris_nginx_t, httpd_log_t, file, "nginx.lock.cookie_tbl")
files_tmp_filetrans(polaris_nginx_t, httpd_log_t, file, "nginx.lock.login_count")
filetrans_pattern(polaris_nginx_t, syslogd_var_run_t, httpd_log_t, file, "openresty.log")
filetrans_pattern(polaris_nginx_t, syslogd_var_run_t, httpd_log_t, file, "ngxcsrf.log")
filetrans_pattern(polaris_nginx_t, syslogd_var_run_t, httpd_log_t, file, "ngxtest.log")
create_dirs_pattern(polaris_nginx_t, httpd_log_t, httpd_log_t)
manage_files_pattern(polaris_nginx_t, httpd_log_t, httpd_log_t)
polaris_read_log(polaris_nginx_t)
polaris_write_log(polaris_nginx_t)

polaris_restconf_tmp_use(polaris_nginx_t)
dev_read_sysfs(polaris_nginx_t)

# dev/zram0 needs fs_t:filesystem getattr
ifdef(`quake_platform',`
    fs_getattr_xattr_fs(polaris_nginx_t)
')

type polaris_nginx_tmp_t;
files_tmp_file(polaris_nginx_tmp_t)
manage_files_pattern(polaris_nginx_t, polaris_nginx_tmp_t, polaris_nginx_tmp_t)
manage_dirs_pattern(polaris_nginx_t, polaris_nginx_tmp_t, polaris_nginx_tmp_t)
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, file, "nginx_aaa")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, file, "nginx_master")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, file, "nginx_session")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, file, "ciscosdwan.cfg")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, dir, "proxy_temp")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, dir, "client_temp")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, dir, "fastcgi_temp")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, dir, "scgi_temp")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, dir, "uwsgi_temp")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, dir, "pki")
files_tmp_filetrans(polaris_nginx_t, polaris_nginx_tmp_t, dir, "auth")
polaris_restconf_read(polaris_nginx_t)

############################################################################
# webui_helper.sh/webui_helper_upgrade.sh
##########################################################################
polaris_process_domain_template(nginx_webui)
polaris_process_domain_template(nginx_webui_install)
polaris_nginx_exec_domain(polaris_nginx_webui_t, polaris_nginx_webui_exec_t)
polaris_nginx_exec_domain(polaris_nginx_webui_install_t, polaris_nginx_webui_install_exec_t)
corecmd_exec_bin(polaris_nginx_webui_t)
corecmd_exec_bin(polaris_nginx_webui_install_t)
# allow read of /etc/passwd
auth_use_nsswitch(polaris_nginx_webui_t)
auth_use_nsswitch(polaris_nginx_webui_install_t)

#allow polaris_nginx_webui_t/polaris_nginx_webui_install_t access to nginx webui /tmp base folder
#/tmp/nginx/webui_tmp
manage_files_pattern(polaris_nginx_webui_t, polaris_nginx_tmp_t, polaris_nginx_tmp_t)
manage_files_pattern(polaris_nginx_webui_install_t, polaris_nginx_tmp_t, polaris_nginx_tmp_t)

#allow polaris_file_transfer_client_t to access nginx webui /tmp base folder
#/tmp/nginx/webui_tmp. We also need to allow chvrf to use the FIFO in cases
# where we use the VRF interface
 gen_require(
    type polaris_file_transfer_client_t;
    type polaris_chvrf_t;
 )
manage_files_pattern(polaris_file_transfer_client_t, polaris_nginx_tmp_t, polaris_nginx_tmp_t)
manage_fifo_files_pattern(polaris_file_transfer_client_t, polaris_nginx_t, polaris_nginx_t)
manage_fifo_files_pattern(polaris_chvrf_t, polaris_nginx_t, polaris_nginx_t)

#fts_client binary requires access to chassis, tdlresolve and cpld
polaris_tdlresolve_read(polaris_file_transfer_client_t)
polaris_chasfs_manage(polaris_file_transfer_client_t)
polaris_cpld_read(polaris_file_transfer_client_t, polaris_sysfs_cpld_t, polaris_sysfs_cpld_t)

gen_require(
    type polaris_file_transfer_client_exec_t;
 )
polaris_bexecute_domain(polaris_file_transfer_client_t, polaris_file_transfer_client_exec_t)

type polaris_fts_client_tmp_t;
files_tmp_file(polaris_fts_client_tmp_t)
polaris_fts_client_tmp_manage(polaris_file_transfer_client_t)

# on ultra /var/www directory created by systemd unit that runs /mount_packages.sh
# under unconfined_service_t domain
 gen_require(
    type unconfined_service_t;
 )
files_var_filetrans(unconfined_service_t, httpd_sys_content_t, dir, "www")

allow polaris_nginx_t self:capability dac_override;

#iox local mgr in webui connects to caf service on port 8098
corennet_tcp_connect_polaris_caf_api_port(polaris_nginx_t)

# IOx downloads the application package using network protocol (e.g http)
gen_require("
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```c

    type fifo_var_run_t;

)'
    allow polaris_file_transfer_client_t fifo_var_run_t:fifo_file read;

    # webui connects to dbm backend service on port 9090
    corenet_tcp_connect_polaris_wnc_mgrd_port(polaris_nginx_t)

    # webui connects to poljvm service on port 9093
    corenet_tcp_connect_polaris_poljvm_websocket_port(polaris_nginx_t)

    # remote docker workflow
    corenet_tcp_connect_us_cli_port(polaris_nginx_t)

    # webui sw mgmt app which does install and smu, invokes webui helper shell
    # scripts which inturn invoke installer scripts. Hence need to provide transition
    # rule to polaris_install_engine_t domain
    polaris_install_engine_domtrans(polaris_nginx_webui_install_t)
    polaris_install_show_domtrans(polaris_nginx_webui_install_t)

    # Allow pipe operations during install command invocation
    polaris_nginx_manage_fifo_files(polaris_bexecute_t)
    polaris_nginx_manage_fifo_files(polaris_code_verify_t)
    polaris_nginx_manage_fifo_files(polaris_install_engine_t)
    polaris_nginx_manage_fifo_files(polaris_install_show_t)
    polaris_nginx_manage_fifo_files(rsync_t)

    # During install-add via WebUI, code_sign_verify generates a file:map denial
    # "/usr/bin/code_sign_verify package
    # /tmp/patch/smus/10_vwlc_apsp_ap3g3_17.6.bin/mount/C9800-CL-mono-patch.2021-01-11_11.31_radonep"
    require {
      type etc_runtime_t;
    }
    allow polaris_code_verify_t etc_runtime_t:file map;

    # Provide sys_resource capability to webui install scripts for sys_pipe calls.
    allow polaris_nginx_webui_install_t self:capability sys_resource;

    # nginx/webui File-manager app provides bootflash file-mgmt facility.
    # as part of this it needs RW access to bootflash.
    # TODO: Bug CSCvp83328 to isolate the access to another utility, which
    # can have its own domain and nginx_t can transition to it.
    polaris_bootflash_manage(polaris_nginx_t)

    # allow nginx to manage core files
    polaris_core_file_manage(polaris_nginx_t)

    # luajit module for nginx triggers execmem denial due to mprotect call.
    # TODO: cdets CSCvp70095 is used to track this vulnerability in
```
# current nginx component.
allow polaris_nginx_t self:process execmem;

# FIXME : allow shell/binary execution
# Elevated privilege needs to be addressed
# Tracked by Bugid : CSCvp93448
corecmd_exec_bin(polaris_nginx_t)
corecmd_exec_shell(polaris_nginx_t)

#FIXME
# Need to re-evaluate these privileges
#tracked by Bugid : CSCvp92908, CSCvt81963(fts_client)
polaris_file_transfer_client_domtrans(polaris_nginx_webui_install_t)
# nginx need access btrace fifo file:
polaris_use_btrace_fifo(polaris_nginx_t)
gen_require(
    type proc_t;
    )
manage_files_pattern(polaris_nginx_t, polaris_nginx_t, polaris_nginx_t)
allow polaris_nginx_t proc_t:filesystem { associate };
# nginx needs access to /dev/stdout which is owned by pman
allow polaris_nginx_t polaris_pman_t:fifo_file open;

############################################################################
# aireos_translate_helper.sh
# Invokes a python library that converts aireos config to ewlc config.
############################################################################
type polaris_aireos_translator_scripts_t;
files_type(polaris_aireos_translator_scripts_t)
polaris_process_domain_template(nginx_webui_aireos_translator)
polaris_nginx_exec_domain(polaris_nginx_webui_aireos_translator_t,
polaris_nginx_webui_aireos_translator_exec_t)
allow polaris_nginx_t polaris_aireos_translator_scripts_t:dir { getattr open read search };
allow polaris_nginx_t polaris_aireos_translator_scripts_t:file { getattr ioctl open read };
allow polaris_nginx_t polaris_nginx_webui_aireos_translator_exec_t:file ioctl;
allow polaris_nginx_t self:process setfscreate;
files_list_var(polaris_nginx_t)

############################################################################
# ra_trace_webui_helper.sh
# Invokes mcp_trace_filter.sh to perform radio active tracing.
############################################################################
polaris_process_domain_template(nginx_webui_trace_filter)
polaris_nginx_exec_domain(polaris_nginx_webui_trace_filter_t, polaris_nginx_webui_trace_filter_exec_t)
corecmd_exec_bin(polaris_nginx_webui_trace_filter_t)
manage_files_pattern(polaris_nginx_webui_trace_filter_t, polaris_nginx_tmp_t, polaris_nginx_tmp_t)
manage_dirs_pattern(polaris_nginx_webui_trace_filter_t, polaris_nginx_tmp_t, polaris_nginx_tmp_t)
auth_use_nsswitch(polaris_nginx_webui_trace_filter_t)
polaris_trace_filter_domtrans(polaris_nginx_webui_trace_filter_t)
polaris_nginx_manage_fifo_files(polaris_trace_filter_t)

#########################################################################
# nginx_helper.sh
# nginx show command helper run by pman invoking curl
#########################################################################
polaris_utility_domain_template(nginx_helper)
polaris_pman_entry(polaris_nginx_helper_t, polaris_nginx_helper_exec_t)

# allow execution of nginx_helper.sh
corecmd_exec_bin(polaris_nginx_helper_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_nginx_helper_t)

# allow access to the tmp fifo file
polaris_use_btrace_fifo(polaris_nginx_helper_t)

# nginx_helper.sh reads from chasfs
polaris_chasfs_manage(polaris_nginx_helper_t)

gen_require(
    type polaris_curl_t;
)

# allow execution of /usr/bin/curl on the pkiserver port
polaris_curl_domtrans(polaris_nginx_helper_t)
corenet_tcp_connect_pkiserver_port(polaris_curl_t)

# allow curl to write into chasfs
polaris_chasfs_manage(polaris_curl_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnginx.te
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#

## <summary>Polaris cpp_cdm Policy Rules.</summary>
## <summary>
##      Allow access to semaphore with type polaris_cpp_cdm_t
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(polaris_cpp_cdm_sem_use',`
    gen_require(
        type polaris_cpp_cdm_t;
        )
    allow $1 polaris_cpp_cdm_t:sem rw_sem_perms;
    )
#
###################################
## <summary>
##      Allow access to shared memory with type polaris_cpp_cdm_t
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(polaris_cpp_cdm_shm_use',`
    gen_require(
        type polaris_cpp_cdm_t;
        )
    allow $1 polaris_cpp_cdm_t:shm rw_shm_perms;
    )
#
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppcdm.if
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#
## <summary>Polaris dmi_ndbmand Policy Rules.</summary>

#################################################
## Work with NDBLOAD_LOCK_PATH.
## <summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
#
interface(`polaris_ndbload_lock_use',`
  gen_require(`
    type polaris_dmi_ndbutil_lock_t;
    type tmp_t;
  `)
  manage_files_pattern($1, tmp_t, polaris_dmi_ndbutil_lock_t)
  files_tmp_filetrans($1, polaris_dmi_ndbutil_lock_t, file, ".l.ndbutil-load")
  files_tmp_filetrans($1, polaris_dmi_ndbutil_lock_t, file, ".l.ndbutil-use")
`)

####################################################
## Manage polaris_ndbmand_ndbutil_t files
## <summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
#
interface(`polaris_ndbmand_ndbutil_manage',`
  gen_require(`
    type polaris_ndbmand_ndbutil_t;
    type polaris_confd_ndbutil_lock_t;
  `)
  manage_files_pattern($1, polaris_confd_ndbutil_lock_t, polaris_ndbmand_ndbutil_t)
`)

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmindbmand.if
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#
## <summary>Polaris sif_mgr Policy Rules.</summary>
## <summary>
##      Allow the specified domain able to read sif_mgr /tmp files.
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <param name="object">
##      <summary>
##      File name in /tmp that the sif_mgr domain creates and other domains
##      access.
##      </summary>
## </param>
#
# interface('polaris_sif_mgr_tmp_files_read',
    gen_require(
        type polaris_sif_mgr_tmp_t;
    )

    read_files_pattern($1, polaris_sif_mgr_tmp_t, polaris_sif_mgr_tmp_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissifmgr.if
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#
## <summary>Polaris Chasfs Policy Rules.</summary>

# Chasfs policy

## <summary>
##      Manage chasfs files
## </summary>
## <param name="domain">
##      <summary>
##      
##      </summary>
## </param>
## Domain allowed access.

```c
# interface('polaris_chasfs_manage',
gen_require(''
type polaris_chasfs_t;
')
manage_dirs_pattern($1, polaris_chasfs_t, polaris_chasfs_t)
manage_files_pattern($1, polaris_chasfs_t, polaris_chasfs_t)
manage_link_files_pattern($1, polaris_chasfs_t, polaris_chasfs_t)
manage_fifo_files_pattern($1, polaris_chasfs_t, polaris_chasfs_t)
manage_sock_files_pattern($1, polaris_chasfs_t, polaris_chasfs_t)

allow $1 polaris_chasfs_t:{file dir} watch;

# chasfs contains a lot of weird permission files
allow $1 self:capability dac_read_search;
')
```

```
######################################
## Read chasfs files
##
## Domain allowed access.
##
##<summary>
##<param name="domain">
##<summary>
##<рамe>
##<rolebase/>
##
## interface('polaris_chasfs_read',
##gen_require(''
type polaris_chasfs_t;
')
list_dirs_pattern($1, polaris_chasfs_t, polaris_chasfs_t)
read_files_pattern($1, polaris_chasfs_t, polaris_chasfs_t)
read_link_files_pattern($1, polaris_chasfs_t, polaris_chasfs_t)
read_fifo_files_pattern($1, polaris_chasfs_t, polaris_chasfs_t)
read_sock_files_pattern($1, polaris_chasfs_t, polaris_chasfs_t)

allow $1 polaris_chasfs_t:{file dir} watch;

# chasfs contains a lot of weird permission files
allow $1 self:capability dac_read_search;
')

```

```
### <summary>
### Manage chasync file(user_input_custom.xml)
### </summary>
### <param name="domain">
### <summary>
### getattr allowed access.
### </summary>
### </param>
### <rolebase/>

#
# interface('polaris_chasync_files_manage',
    gen_require(
        type polaris_chasync_files_t;
    )
    manage_files_pattern($1, polaris_chasync_files_t, polaris_chasync_files_t)
')

### <summary>
### Watch read chasfs directories
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
### <rolebase/>

#
# interface('polaris_chasfs_watch_read',
    gen_require(
        type polaris_chasfs_t;
    )
    allow $1 polaris_chasfs_t:dir watch_reads;
')

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#
#/dev/dev_lfts -c gen_context(system_u:object_r:polaris_lfts_device_t,s0)
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## <summary>Polaris GR Manager Policy Rules.</summary>

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#

policy_module(polarisngwc, 1.0);

# chdrvmmmap device (MMAP Driver for ASIC Memory mapping)
type polaris_chdrvmmmap_device_t;
dev_node(polaris_chdrvmmmap_device_t)

# gettysburg_fpga device (/dev/gettysburg_dev1)
type polaris_gettysburg_fpga_device_t;
dev_node(polaris_gettysburg_fpga_device_t)

# dplr io memory mapiing driver /dev/cisco/dplriomem

type polaris_dplr_iomem_mmapdrv_device_t;
dev_node(polaris_dplr_iomem_mmapdrv_device_t)

# /dev/shm/ngwc_shm shared memory

type polaris_ngwc_shm_t;
files_type(polaris_ngwc_shm_t)

# /dev/shm/ngwc_scc_shm shared memory

type polaris_ngwc_scc_shm_t;
files_type(polaris_ngwc_scc_shm_t)

# /dev/shm/iomd_to_fed_ptp_offload shared memory
# /dev/shm/sdm shared memory
type polaris_sdm_shm_t;
files_type(polaris_sdm_shm_t)

# /dev/shm/sem.i2c_sem00N quake sempahor
type polaris_quake_i2c_t;
files_type(polaris_quake_i2c_t)

#FPGA io memory mapping driver /dev/cisco/fpgaiomem
type polaris_fpga_iomem_mmapfpga_device_t;
dev_node(polaris_fpga_iomem_mmapfpga_device_t)

# Mapping permission for /dev/shm/<name>
ifdef('quake_platform',
   gen_require('
      type systemd_tmpfiles_t;
   ')
   mmap_files_pattern(systemd_tmpfiles_t, polaris_quake_i2c_t, polaris_quake_i2c_t)
')

# In combined image we have several policies and we choose
# one to use in run-time, but file system is shared and
# labeled with different file_context files, so it is
# possible that we may have some labels that other policy
# does not understand for now just hard missing entries
ifdef('nyquist_platform',
   type polaris_cm_cc_exec_t;
files_type(polaris_cm_cc_exec_t)
type polaris_cm_fp_exec_t;
files_type(polaris_cm_fp_exec_t)
type polaris_flashcheck_exec_t;
files_type(polaris_flashcheck_exec_t)
type polaris_emd_exec_t;
files_type(polaris_emd_exec_t)
type polaris_ngwc_ishow_exec_t;
files_type(polaris_ngwc_ishow_exec_t)

# Adding here as this unmount command is specific to Nyquist platform.
# /bin/cat9k_ssd_auth_cmds.sh
polaris_utility_domain_template(ssd_unmount)
corecmd_exec_bin(polaris_ssd_unmount_t)
storage_getattr_fixed_disk_dev(polaris_ssd_unmount_t)
fstools_domtrans(polaris_ssd_unmount_t)
mount_domtrans(polaris_ssd_unmount_t)
polaris_use_btrace_fifo(polaris_ssd_unmount_t)
#allow to read /etc/passwd
auth_use_nsswitch(polaris_ssd_unmount_t)
polaris_chasfs_read(polaris_ssd_unmount_t)
polaris_cpld_read(polaris_ssd_unmount_t)

#Read /tmp/sw/boot files
polaris_boot_tmp_read(polaris_ssd_unmount_t)
# Allow read to btrace tmp files
polaris_btrace_tmppub_read(polaris_ssd_unmount_t)
# Allow getattr to tmpfs
fs_getattr_tmpfs(polaris_ssd_unmount_t)
# Allow read to ssd auth tmp files /tmp/ssl_blk_device created by udev
polaris_read_ssd_tmp_files(polaris_ssd_unmount_t)

# allow creation/access of temporary files created by bash such as
# /tmp/sh-thd-1499428203 etc
type polaris_ssd_unmount_tmp_t;
files_tmp_file(polaris_ssd_unmount_tmp_t)
files_tmp_filetrans(polaris_ssd_unmount_t, polaris_ssd_unmount_tmp_t, file)
manage_files_pattern(polaris_ssd_unmount_t, polaris_ssd_unmount_tmp_t, polaris_ssd_unmount_tmp_t)
allow polaris_ssd_unmount_t polaris_ssd_unmount_tmp_t::file { unlink };

# Allow nfs dir/file read
rpc_manage_nfs_state_data_dir(polaris_ssd_unmount_t)
rpc_manage_nfs_state_data(polaris_ssd_unmount_t)
# Allow read access to files on nfsd file system
fs_read_nfsd_files(polaris_ssd_unmount_t)
kernel_rw_rpc_sysctls(polaris_ssd_unmount_t)
fs_getattr_xattr_fs(polaris_ssd_unmount_t)

# allow create/sendto/connect operations for logger
allow polaris_ssd_unmount_t self:unix_dgram_socket sendto;
allow polaris_ssd_unmount_t self:unix_dgram_socket create_socket_perms;
logging_create_devolg_dev(polaris_ssd_unmount_t)
logging_send_syslog_msg(polaris_ssd_unmount_t)
polaris_persistent_getattr(polaris_ssd_unmount_t)
# allow dir:search getattr read for udev tmp files
# allow file:write open for udev tmp files
polaris_udev_tmp_manage(polaris_ssd_unmount_t)
gen_require(''
    type rsync_exec_t;
    type rsync_port_t;
')
#allow tcp_socket:name_connect for rsync_port_t
#polaris_ssd_unmount_t has superset privileges of rsync, so its good
#to run rsync in unmount domain. This is not the case everywhere. Please use
#corenet_tcp_connect_rsync_port if rsync needs to be run in its own domain
allow polaris_ssd_unmount_t rsync_port_tcp_socket name_connect;
#allow file:get_attar exec read open map execute_no_trans for rsync_exec_t
allow polaris_ssd_unmount_t rsync_exec_t:file { execute exec_no_trans getattr map open read }
#allow dir:getattr for removable_t
polaris_getattr_removable(polaris_ssd_unmount_t)
)
ifdef(`passport_platform',
  type polaris_auto_upgrade_server_rp_exec_t;
files_type(polaris_auto_upgrade_server_rp_exec_t)
type polaris_bt_logger_exec_t;
files_type(polaris_bt_logger_exec_t)
type polaris_cmm_exec_t;
files_type(polaris_cmm_exec_t)
type polaris_ngwc_plfm_mgr_exec_t;
files_type(polaris_ngwc_plfm_mgr_exec_t)
type polaris_sif_mgr_exec_t;
files_type(polaris_sif_mgr_exec_t)
type polaris_torch_exec_t;
files_type(polaris_torch_exec_t)
type polaris_xcvr_test_exec_t;
files_type(polaris_xcvr_test_exec_t)
type polaris_faked_exec_t;
files_type(polaris_faked_exec_t)
type polaris_emd_exec_t;
files_type(polaris_emd_exec_t)
type polaris_ngwc_ishow_exec_t;
files_type(polaris_ngwc_ishow_exec_t)
type polaris_gr_mgr_exec_t;
files_type(polaris_gr_mgr_exec_t)
type polaris_ioxss_rp_exec_t;
files_type(polaris_ioxss_rp_exec_t)
')
ifdef(`starfleet_platform',
  type polaris_xcvr_test_exec_t;
files_type(polaris_xcvr_test_exec_t)
type polaris_auto_upgrade_server_rp_exec_t;
files_type(polaris_auto_upgrade_server_rp_exec_t)
type polaris_bt_logger_exec_t;
files_type(polaris_bt_logger_exec_t)
type polaris_cmm_exec_t;
files_type(polaris_cmm_exec_t)
type polaris_ngwc_plfm_mgr_exec_t;
files_type(polaris_ngwc_plfm_mgr_exec_t)
type polaris_sif_mgr_exec_t;
files_type(polaris_sif_mgr_exec_t)
type polaris_torch_exec_t;
files_type(polaris_torch_exec_t)
')
type polaris_disk_ucode0_t;
files_type(polaris_disk_ucode0_t);

type polaris_nplusm_power_file_t;
polaris_pfile_type(polaris_nplusm_power_file_t)

#permission for /ucode0
optional_policy(
    gen_require(
        type polaris_periodic_t;
    )
    polaris_disk_ucode0_read_link(polaris_periodic_t)
)

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwc.te
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### <summary>Polaris cfmgmr Policy Rules.</summary>

#######################################
## <summary>
##      Write cfmgmr /var/run socket file
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_cfmgmr_var_sock_write',`
    gen_require(`
        type polaris_cfmgmr_t;
        type polaris_cfmgmr_var_run_t;
        type var_run_t;
    )
    write_sock_files_pattern($1, var_run_t, polaris_cfmgmr_var_run_t)
    allow $1 polaris_cfmgmr_t:unix_stream_socket { connectto };
')
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscfgmgr.if
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#

policy_module(polarisstackmgr, 1.0);

gen_require('  
   type polaris_stack_mgr_t;
')
polaris_btrace_data_manage(polaris_stack_mgr_t)
polaris_crft_data_manage(polaris_stack_mgr_t)
polaris_chasfs_manage(polaris_stack_mgr_t)
polaris_tdlresolve_read(polaris_stack_mgr_t)
polaris_tdlldb_list_dirs(polaris_stack mgr_t)
polaris_cpld_read(polaris_stack mgr t)
polaris_lua_read(polaris_stack mgr t)
polaris_flashlib_read(polaris_stack mgr t)
polaris_ringerprint_ui_ser connect(polaris_stack mgr t)
polaris_db_tdlldb_dir_use(polaris_stack mgr t)

# allow to send message to /dev/log
logging_send_syslog_msg(polaris_stack mgr_t)

allow polaris_stack mgr_t self:capability { dac_override };
polaris_dyncfg_tmp_read(polaris_stack mgr t)
corecmd_exec_bin(polaris_stack mgr t)
corecmd_exec_shell(polaris_stack mgr t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_stack mgr t)

# read /proc/cmdline
kerner_read_system_state(polaris_stack mgr_t)

# open /dev/ttyS0 console in stack_console_write_init
term_use_unallocated_ttys(polaris_stack mgr_t)
# on ngwc/vwlc FIPS code reads /tmp/hw_entropy
polaris_hw_entropy_use(polaris_stack_mgr_t)

# stackmgr runs mcp_trace_request.sh
polaris_trace_request_domtrans(polaris_stack_mgr_t)

# stack_mgr needs to be able to access /tmp/issu_stk/prst_sync_rld_info_prcsd
polaris_issu_stack_tmp_manage(polaris_stack_mgr_t)

# may use mcp_chvrf.sh to access other nodes in system.
# Note that we do not actually need to transition to the chvrf domain, however
# a file descriptor leak can occur and the domain transition permission macro
# expands to allow polaris_chvrf_t to access the fifo
polaris_chvrf_domtrans(polaris_stack_mgr_t)

# Allow read on bootflash to be able to read reload_history
polaris_bootflash_read(polaris_stack_mgr_t)

# stackmgr tmp files
  type polaris_stack_mgr_tmp_t;
  files_tmp_file(polaris_stack_mgr_tmp_t)
  files_tmp_filetrans(polaris_stack_mgr_t, polaris_stack_mgr_tmp_t, file, "ngwc_reload_reason")
  manage_files_pattern(polaris_stack_mgr_t, polaris_stack_mgr_tmp_t, polaris_stack_mgr_tmp_t)

  allow polaris_stack_mgr_t self:capability sys_nice;
  allow polaris_stack_mgr_t self:process setsched;

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisstackmgr.te
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#
# January 2018, Manohar Hungund
#
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#

# polarisoctdplogrp file contexts place holder

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisoctdplogrp.fc
No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#

### <summary>Polaris cedge_start Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscedgestart.if

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dnl
define(`polaris_mqipc_service_server_aux',`dnl
type $1;
polaris_mqipc_type($1)
polaris_mqipc_$2_create_name($3))

define(`polaris_mqipc_service_server',`dnl
polaris_mqipc_service_server_aux(mqipc_label($1), mqipc_stem($1), process_label($2))dnl')

define(`polaris_mqipc_service_client_aux',`dnl
polaris_mqipc_$2_use($3))

define(`polaris_mqipc_service_client',`dnl
polaris_mqipc_service_client_aux(mqipc_label($1), mqipc_stem($1), process_label($2))dnl')

define(`polaris_mqipc_service_server_elastic_client',``)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_mqipc_te.m4

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#
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#
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#

### <summary>Polaris polarisqfp Policy Rules.</summary>

#
### <summary>

#
### <summary>

Open Source Used In BGP TE Controller Version 4.3.0 5941
## Work (read, write, ioctl) with /dev/netmap device

<param name="domain">
## Domain allowed access.
</param>

interface('polaris_netmap_dev_use',

gen_require(
    type device_t;

type polaris_netmap_device_t;
')

write_chr_files_pattern($1, device_t, polaris_netmap_device_t)
read_chr_files_pattern($1, device_t, polaris_netmap_device_t)
allow $1 polaris_netmap_device_t:chr_file_map;
')

## Work (read, write, ioctl) with /dev/svc_eng_puntNN devices

<param name="domain">
## Domain allowed access.
</param>

interface('polaris_svc_eng_punt_dev_use',

gen_require(
    type device_t;

type polaris_sep_device_t;
')

write_chr_files_pattern($1, device_t, polaris_sep_device_t)
read_chr_files_pattern($1, device_t, polaris_sep_device_t)
')

## Allow access to semaphore with type polaris_qfp_t

<param name="domain">
## Domain allowed access.
</param>

interface('polaris_qfp_sem_use',


gen_require(
    type polaris_qfp_t;
)
    allow $1 polaris_qfp_t:sem rw_sem_perms;
)

########################################
## <summary>
## Send messages to qfp unix datagram sockets.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_qfp_dgram_send',
    gen_require(
        type polaris_qfp_t;
    )
    allow $1 polaris_qfp_t:unix_dgram_socket sendto;
    )

# CSR & C8KV infiniband devices in Azure
interface(`polaris_infiniband_dev_use',
    gen_require(
        type device_t;
        type polaris_infiniband_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_infiniband_device_t)
    read_chr_files_pattern($1, device_t, polaris_infiniband_device_t)
    allow $1 polaris_infiniband_device_t:chr_file map;
    )

########################################
## Execute iodbd.sh script in the polaris_iodb_t domain.
## <param name="domain">
## Domain allowed to transition.
## </param>
#
interface(`polaris_iodbdomtrans',
    gen_require(
        type polaris_iodb_t, polaris_iodb_exec_t;
corecmd_search_bin($1)
domtrans_pattern($1, polaris_iodbd_exec_t, polaris_iodbd_t)

### <summary>
### Manage files and directories under /tmp/iodb
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
### <rolebase/>
#
interface(`polaris_iodb_tmp_manage',`
    gen_require(`
        type polaris_iodb_tmp_t;
    `)
    manage_files_pattern($1, polaris_iodb_tmp_t, polaris_iodb_tmp_t)
    manage_dirs_pattern($1, polaris_iodb_tmp_t, polaris_iodb_tmp_t)
    fs_getattr_tmpfs($1)
`)

### <summary>
### Manage files and directories under /tmp/memif
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
### <rolebase/>
#
interface(`polaris_qfp_memif_manage',`
    gen_require(`
        type polaris_qfp_memif_t;
    `)
    manage_files_pattern($1, polaris_qfp_memif_t, polaris_qfp_memif_t)
    manage_sock_files_pattern($1, polaris_qfp_memif_t, polaris_qfp_memif_t)
    gen_require(`
        type tmp_t;
    `)
manage_dirs_pattern($1, [ tmp_t polaris_qfp_memif_t ], polaris_qfp_memif_t)
allow $1 polaris_qfp_memif_t:file map;
')

#######################################
## <summary>
## polaris_qfp_log_manage
## </summary>
## <param name="filename">
## Name of the file being managed.
## </param>
## <rolebase/>
#
interface('polaris_qfp_log_manage',
  type polaris_qfp_var_log_t;
  logging_log_file(polaris_qfp_var_log_t)
  logging_log_filetrans(polaris_qfp_t, polaris_qfp_var_log_t, file, $1)
  manage_files_pattern(polaris_qfp_t, var_log_t, polaris_qfp_var_log_t)
')

#######################################
## <summary>
## Work (read, write, ioctl) with /dev/icp_adf_ctl and
## /dev/icp_dev_mem devices
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_icp_dev_use',
  gen_require(
    type device_t;
    type polaris_icp_device_t;
  )
  write_chr_files_pattern($1, device_t, polaris_icp_device_t)
  read_chr_files_pattern($1, device_t, polaris_icp_device_t)
  allow $1 polaris_icp_device_t:chr_file map;
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisqfp.if
No license file was found, but licenses were detected in source scan.
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisiosd.fc
No license file was found, but licenses were detected in source scan.

## <summary>Polaris cli_agent Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscliagent.if
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#
# August 2017, Shawn Lu
#
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#

# polarisrogued file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrogued.fc
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#    

## <summary>Polaris MCP Platform Policy Rules.</summary>

### <summary>
##      Work (read, write, ioctl) with /dev/scooby
### </summary>
## <param name="domain">
##      Domain allowed access.
## </param>

interface(`polaris_scooby_dev_use',
        gen_require(`
            type device_t;
type polaris_scooby_device_t;
        ')
        write_chr_files_pattern($1, device_t, polaris_scooby_device_t)
        read_chr_files_pattern($1, device_t, polaris_scooby_device_t)
    ')

### <summary>
##      Work (read, write, ioctl) with /dev/spa[0123]
### </summary>
## <param name="domain">
##      Domain allowed access.
## </param>

interface(`polaris_spa_dev_use',
        gen_require(`
            type device_t;
type polaris_spa_device_t;
        ')
        write_chr_files_pattern($1, device_t, polaris_spa_device_t)
        read_chr_files_pattern($1, device_t, polaris_spa_device_t)
        allow $1 polaris_spa_device_t:chr_file map;
### <summary>
## Work (read, write, ioctl) with /dev/htdp[0-9]*
### </summary>
### <param name="domain">
## Domain allowed access.
### </param>
#
interface('polaris_htdp_dev_use',``
gen_require(`
    type device_t;
type polaris_htdp_device_t;
``)
    write_chr_files_pattern($1, device_t, polaris_htdp_device_t)
    read_chr_files_pattern($1, device_t, polaris_htdp_device_t)
``)

### <summary>
## Work (read, write, ioctl) with /sys/devices/virtual/sys_platform
### </summary>
### <param name="domain">
## Domain allowed access.
### </param>
#
interface('polaris_sysfs_platform_dev_use',``
gen_require(`
    type polaris_sysfs_platform_t;
``)
    manage_files_pattern($1, polaris_sysfs_platform_t, polaris_sysfs_platform_t)
``)

### <summary>
## Work (read, write, ioctl) with /dev/ds31408
### </summary>
### <param name="domain">
## Domain allowed access.
### </param>
#
interface('polaris_ds31408_dev_use',
  gen_require(
    type device_t;
    type polaris_ds31408_device_t;
  )
  rw_chr_files_pattern($1, device_t, polaris_ds31408_device_t)
)

########################################
## <summary>
##      Allow access to /dev/cbdma
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_cbdma_dev_use',
  gen_require(
    type device_t;
    type polaris_cbdma_device_t;
  )
  write_chr_files_pattern($1, device_t, polaris_cbdma_device_t)
  read_chr_files_pattern($1, device_t, polaris_cbdma_device_t)
  allow $1 polaris_cbdma_device_t:chr_file map;
)

########################################
## <summary>
##      Allow access to /dev/cpp_htdp
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_cpp_htdp_dev_use',
  gen_require(
    type polaris_cpp_htdp_device_t;
  )
  write_chr_files_pattern($1, device_t, polaris_cpp_htdp_device_t)
  read_chr_files_pattern($1, device_t, polaris_cpp_htdp_device_t)
  allow $1 polaris_cpp_htdp_device_t:chr_file map;
)
## Allow access to /dev/n2_device

```c
#interface('polaris_n2_dev_use',
   gen_require(
       type device_t;
       type polaris_n2_device_t;
   )
   write_chr_files_pattern($1, device_t, polaris_n2_device_t)
   read_chr_files_pattern($1, device_t, polaris_n2_device_t)
)
```

## Allow access to /dev/cy2213

```c
#interface('polaris_cy2213_dev_use',
   gen_require(
       type device_t;
       type polaris_cy2213_device_t;
   )
   write_chr_files_pattern($1, device_t, polaris_cy2213_device_t)
   read_chr_files_pattern($1, device_t, polaris_cy2213_device_t)
)
```

## Allow access to /dev/vega

```c
#interface('polaris_vega_dev_use',
   gen_require(
       type device_t;
       type polaris_vega_device_t;
   )
   write_chr_files_pattern($1, device_t, polaris_vega_device_t)
   read_chr_files_pattern($1, device_t, polaris_vega_device_t)
)
```
type device_t;
type polaris_vega_device_t;
}
write_chr_files_pattern($1, device_t, polaris_vega_device_t)
read_chr_files_pattern($1, device_t, polaris_vega_device_t)
}

######################################
## <summary>
## Work (read, write, ioctl) with /dev/dash_fpga device
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_dash_dev_mcp_use',
gen_require(
  type device_t;
type polaris_dash_device_t;
)
write_chr_files_pattern($1, device_t, polaris_dash_device_t)
read_chr_files_pattern($1, device_t, polaris_dash_device_t)
allow $1 polaris_dash_device_t:chr_file map;
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismcp.if
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dnl
dnl Crankshaft (Overlord, Utah and Fugazi) Platform Max Bay Limits
max_bay_map_set('rp', 'per_bay', 3)
max_bay_map_set('cc', 'per_bay', 3)
max_bay_map_set('fp', 'per_bay', 3)

max_bay_ripc_map_set('rp', 'per_bay', 3)
max_bay_ripc_map_set('cc', 'per_bay', 3)
max_bay_ripc_map_set('fp', 'per_bay', 3)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/mcpmaps.m4
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#
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#
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#

policy_module(polarisiosd, 1.0);

gen_require(
    type polaris_iosd_t;
    
)

########################################################################
# mqipc manual, one that missing in platform tdl file
########################################################################

ifdef(`nyquist_platform',`

gen_require(`
    type polaris_bt_logger_iosd_mqipc_t;
    
)

# iosd may start first and create this mqipc channel
polaris_mqipc_create_name(polaris_iosd_t, polaris_bt_logger_iosd_mqipc_t, bt_logger_iosd)


polaris_btrace_data_manage_all(polaris_iosd_t)
polaris_chasfs_manage(polaris_iosd_t)
polaris_tdlresolve_read(polaris_iosd_t)
polaris_tdlldb_list_dirs(polaris_iosd_t)
polaris_cpld_read(polaris_iosd_t)
polaris_lua_read(polaris_iosd_t)
polaris_flashlib_read(polaris_iosd_t)
polaris_crft_data_manage_all(polaris_iosd_t)
optional_policy(`
polaris_gnmib_gnoi_images_manage(polaris_iosd_t)
')

polaris_ripc_sman_ui_serv_connect(polaris_iosd_t)

polaris_db_tdlldb_dir_use(polaris_iosd_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_iosd_t)

# allow iosd read/write via hostname <>
systemd_hostnamed_manage_config(polaris_iosd_t)
# creates /etc/netns/1/resolv.conf via ip domain-name <> command
# creates /etc/netns/vrf.VRFNAME via ip vfr VRFNAME command
# creates /etc/netns/vrf.VRFNAME/resolv.conf via ip
# domain-name vrf VRFNAME <> command

gen_require(
    type net_conf_t;
    )
files_etc_filetrans(polaris_iosd_t, net_conf_t, file, "resolv.conf")
files_etc_filetrans(polaris_iosd_t, net_conf_t, file, "hosts")
files_etc_filetrans(polaris_iosd_t, net_conf_t, file, "netns")
sysnet_manage_config(polaris_iosd_t)
sysnet_manage_config_dirs(polaris_iosd_t)

# for pluggable FS, allow iosd to access files on them.
polaris_getattr_removable(polaris_iosd_t)
polaris_removable_manage(polaris_iosd_t)
fs_read_removable_symlinks(polaris_iosd_t)

polaris_lsmpi_dev_use(polaris_iosd_t)
polaris_lsmpi_sysctl_read(polaris_iosd_t)
polaris_cfg_data_manage(polaris_iosd_t)
polaris_proc_rmonbifo_read(polaris_iosd_t)
polaris_icc_broken_relocations(polaris_iosd_t)

allow polaris_iosd_t self:capability { sys_nice chown fsetid sys_rawio dac_override dac_read_search ipc_lock };

gen_require(
    type httpd_config_t;
    type tmp_t;
    )

# iosd creates /tmp/nginx.conf file
manage_files_pattern(polaris_iosd_t, tmp_t, httpd_config_t)
# transition nginx.conf into httpd_config_t
files_tmp_filetrans(polaris_iosd_t, httpd_config_t, file, "nginx.conf")
# RW access to /usr/binos/conf/nginx-conf/servers (utd feature)
manage_dirs_pattern(polaris_iosd_t, httpd_config_t, httpd_config_t)

#iosd create /tmp/nginx/cert/ca.cert
polaris_nginx_tmp_manage(polaris_iosd_t)

# !!!LOOK AT ME!!! - we allow iosd to read raw memory
# dev_read_raw_memory(polaris_iosd_t)
polaris_flashlib_write(polaris_iosd_t)
polaris_nvram_manage(polaris_iosd_t)
polaris_persistent_manage(polaris_iosd_t)

# smu management in iosd (linked in via libbcrdu.so) accesses
# files created by the installer under /tmp/patch
polaris_install_tmp_read(polaris_iosd_t)

optional_policy('polaris_cpp_tmp_ifdev_use(polaris_iosd_t)
')

polaris_dyncfg_tmp_read(polaris_iosd_t)

# lsmpi_fetch_linux_ifindex tries to ioctl(skfd, SIOCGIFINDEX, &ifr) on
# non existent ethN interface, as result kernel triggers attempt to
# load kernel module that would correspond to such interface. Deny
# and don't audit iosd_t attempt to load kernel modules.
# LOOK AT ME: in long term we don't want iosd even try to load modules
# and we would actually would want to report and fail such
kernel_dontaudit_request_load_module(polaris_iosd_t)

# iosd calls nice function to change fast path priority (mcp_fastpath_thread_func)
allow polaris_iosd_t self:process setsched;

ifdef('crankshaft_family',
ifconfig_attach_tun_iface(polaris_iosd_t)
corenert_tun.tap_dev(polaris_iosd_t)
')

ifdef('mcp_family',
ifconfig_attach_tun_iface(polaris_iosd_t)
corenert_tun.tap_dev(polaris_iosd_t)
allow polaris_iosd.t polaris_iosd_t:tun_socket relabelfrom;
')

# on ultra iosd is figuring out parameters of interfaces of underlying
# hypervisors kvm, vmware, etc. See vxe_gethd_ifdb_scan
ifdef('crankshaft_family',
dev_rw_sysfs(polaris_iosd_t)
polaris_disk_objstore_manage(polaris_iosd_t)
')
ifdef('vxe_family',
dev_read_sysfs(polaris_iosd_t)
polaris_disk_objstore_manage(polaris_iosd_t)
polaris_objstore_sem_use(polaris_iosd_t)
')
ifdef('vwlc_platform',
polaris_disk_objstore_manage(polaris_iosd_t)
optional_policy('}
ifdef(`wlc_family',`

dev_read_sysfs(polaris_iosd_t)
polaris_tlscd_uds_manage(polaris_iosd_t)
gen_require(`

type polaris_tlscd_t;
')

allow polaris_iosd_t polaris_tlscd_t:unix_dgram_socket sendto;
')

# on 1ng mcppc-lc-ms reads /sys/devices/system/cpu/online
ifdef(`mcp_family',`

dev_read_sysfs(polaris_iosd_t)
')

# neptune need to figure fan type by reading
# /sys/bus/platform/devices/nios/n2h_fan_ctrl_fan_tray_status
ifdef(`neptune_platform',`

dev_read_sysfs(polaris_iosd_t)
')

# radium need to figure fan type by reading
# /sys/bus/platform/devices/nios/n2h_fan_ctrl_fan_tray_status
ifdef(`radium_platform',`

dev_read_sysfs(polaris_iosd_t)
')

# __get_nprocs opens /sys/devices/system/cpu/online
ifdef(`quake_platform',`

dev_read_sysfs(polaris_iosd_t)
')

# __get_nprocs opens /sys/devices/system/cpu/online
ifdef(`supernova_platform',`

dev_read_sysfs(polaris_iosd_t)
')

# work with /tmp/boottime, /tmp/booted files: create/write
type polaris_iosd_tmp_files_t;
files_tmp_file(polaris_iosd_tmp_files_t)
files_tmp_filetrans(polaris_iosd_t, polaris_iosd_tmp_files_t, file, "boottime")
files_tmp_filetrans(polaris_iosd_t, polaris_iosd_tmp_files_t, file, "booted")
create_files_pattern(polaris_iosd_t, polaris_iosd_tmp_files_t, polaris_iosd_tmp_files_t)

#allow polaris_iosd_t polaris_udev_tmp_files_t:dir { getattr open read search };
#allow polaris_iosd_t polaris_udev_tmp_files_t:file { open, read, write };
# LOOK AT ME (need to review write access with iosd team)
polaris_udev_tmp_manage(polaris_iosd_t)

# work with /tmp/restconf
type polaris_restconf_tmp_files_t;
files_tmp_file(polaris_restconf_tmp_t)
polaris_restconf_tmp_use(polaris_iosd_t)

files_tmp_filetrans(polaris_iosd_t, polaris_restconf_tmp_t, dir, "restconf")
filetrans_pattern(polaris_iosd_t, polaris_restconf_tmp_t, polaris_restconf_tmp_t, file)

# work with /tmp/netio0
files_tmp_filetrans(polaris_iosd_t, polaris_iosd_tmp_files_t, dir, "netio0")
# sockets and dirs created under /tmp/netio0
manage_dirs_pattern(polaris_iosd_t, polaris_iosd_tmp_files_t, polaris_iosd_tmp_files_t)
manage_sock_files_pattern(polaris_iosd_t, polaris_iosd_tmp_files_t, polaris_iosd_tmp_files_t)
allow polaris_iosd_t self:unix_dgram_socket create_socket_perms;

gen_require(' 
    type inetd_child_t;
')
# sendto permission for /tmp/netio0/ttyC100
allow polaris_iosd_t inetd_child_t:unix_dgram_socket sendto;

polaris_socketat_nsfs_read(polaris_iosd_t)

# onep uses TIPC sockets see onep_tipc_transport_start
allow polaris_iosd_t self:socket { bind create listen accept getattr read write ioctl getopt setopt };

# mcp_eoeb_create_socket creates UDP socket for eoeb
corenets_udp_bind_polaris_iosd_eoeb_port(polaris_iosd_t)
gen_require(' 
    type node_t;
')
allow polaris_iosd_t node_t:udp_socket node_bind;
allow polaris_iosd_t self:udp_socket { bind create ioctl setopt read write };

# direct access to serial TTY devices like /dev/ttyS1
term_use_unallocated_ttys(polaris_iosd_t)

# on ultra cvac_load_config function tried to access cdrom0:/iosxe_config.txt
# and if exists read
ifdef('vxe_family',
    fs_read_iso9660_files(polaris_iosd_t)
')
ifdef('wlc_family',
    fs_read_iso9660_files(polaris_iosd_t)
')

# ifs_get_free_bytes invokes mcp_fs_statfs and eventually mcp_wrapper_statvfs
# with "/bootflash"...this needs attr access for "/
fs_getattr_xattr_fs(polaris_iosd_t)
# iosd works with cpp /dev/shm/cpp_ifdev_shmem shared memory
optional_policy(
  polaris_cpp_tmptfs_ifdev_rw(polaris_iosd_t)
)

# iosd reads/writes into grubenv for confreg
optional_policy(
  polaris_grub_efi_use(polaris_iosd_t)
)

# when /bootflash or /harddisk are 100% full
allow polaris_iosd_t self:capability sys_resource;

# mcp_set_clock wants to call settimeofday
allow polaris_iosd_t self:capability sys_time;

# Need this for bluetooth to work. HCI library uses this
allow polaris_iosd_t self:capability net_raw;

ifdef(`mcp_family',`
  polaris_obfl_data_read(polaris_iosd_t)
')

# iosd uses quack on mcp and crankshaft and ngwc
ifdef(`mcp_family',`
  polaris_quack_dev_use(polaris_iosd_t)
')
ifdef(`crankshaft_family',`
  polaris_quack_dev_use(polaris_iosd_t)
')
ifdef(`ngwc_family',`
  polaris_quack_dev_use(polaris_iosd_t)
')
ifdef(`qwlc_platform',`
  polaris_quack_dev_use(polaris_iosd_t)
')
ifdef(`katar_platform',`
  polaris_quack_dev_use(polaris_iosd_t)
')

ifdef(`mcp_family',`
  polaris_spa_dev_use(polaris_iosd_t)
polaris_sysfs_platform_dev_use(polaris_iosd_t)
')

# on 1ng write/ioctl into /dev/cpld-ha
# on vwlc ha scenario, iosd needs write access to /dev/cpld-ha
optional_policy('  
polaris_cpld_dev_use(polaris_iosd_t)  
')

# deals with /dev/shm files semaphors; like uuid_sem semaphore  
# created by btrace_get_uuid function  
type polaris_iosd_tmpfs_t;  
files_tmpfs_file(polaris_iosd_tmpfs_t)  
fs_tmpfs_filetrans(polaris_iosd_t, polaris_iosd_tmpfs_t, file)  
manage_files_pattern(polaris_iosd_t, tmpfs_t, polaris_iosd_tmpfs_t)

optional_policy('  
polaris_iodb_tmp_manage(polaris_iosd_t)  
')

# on ngwc FIPS code reads /tmp/hw_entropy  
# seems like iosd can delete the file as well  
polaris_hw_entropy_create(polaris_iosd_t)

optional_policy('  
# on macallan iosd needs to access /dev/cpld  
polaris_cpld_dev_read(polaris_iosd_t)  
')

# on tsn iosd needs write access to  
# sys/devices/platform/cpld/reg_rp_reset_button_status  
# sys/devices/platform/cpn-110-master DSR/DTR status  
ifdef('crankshaft_family',  
type polaris_quake_i2c_t;  

polaris_cpld_write(polaris_iosd_t)  
polaris_ggpio_dev_read_write(polaris_iosd_t)  
polaris_quake_i2c_manage(polaris_iosd_t)  
')

ifdef('katar_platform',  
polaris_cpld_write(polaris_iosd_t)  
')

# on tsn iosd needs access to /sys/devices/platform/moka_fpga  
# /sys/devices/platform/moka_fpga/led_status  
optional_policy('  
polaris_mokafpga_rw(polaris_iosd_t)  
')

# iosd reads /tmp/iosd_level  
polaris_lm_tmp_read(polaris_iosd_t)
# iosd needs manage_dirs, manage_files and manage_lnk
# permissions at "/tmp/ufs/lic0/<remote_ip>/*"
optional_policy('polaris_ncd_tmp_manage(polaris_iosd_t)
')

# access NFS mounted directories from other nodes or members
fs_getattr_nfs(polaris_iosd_t)

# mcp/mcprp/if_unix_se.c code works with /sys/devices/virtual/contdev
# files and /proc/net/dev
polaris_manage_contdev_dev(polaris_iosd_t)
kernle_read_network_state(polaris_iosd_t)

# iosd creates /tmp/iox_xml.dat file
optional_policy('polaris_iox_manage_tmp_files(polaris_iosd_t)
')
polaris_caf_var_run_files_manage(polaris_iosd_t)  
container_read_lib_files(polaris_iosd_t)

# work with files like /tmp/rp/.shell_exec.5B1BF1D7648E21AEE3000002
# type polaris_iosd2iox_tmp_t;
files_tmp_file(polaris_iosd2iox_tmp_t)
files_tmp_filetrans(polaris_iosd2iox_tmp_t, polaris_iosd2iox_tmp_t, file)
polaris_iosd2iox_tmp_manage(polaris_iosd_t)

# work with response
optional_policy('polaris_iox2iosd_tmp_manage(polaris_iosd_t)
')
polaris_sandbox_file_dir_list(polaris_iosd_t)

# lfts 2.0 iosd provides route information to kernel. it talks
# using generic netlink family socket. See iosd bsock_sar_netlink_process
# process
allow polaris_iosd_t self:netlink_generic_socket create_socket_perms;
allow polaris_iosd_t self:netlink_socket create_socket_perms;

# LOOK AT ME
# on nyquist iosd accesses files like lic0-2:/sanosync.data/readLock
# from saLockCheck function and it happens just right after lic0-2 was
# mounted over NFSv4. It seems that labels from remote node did not
# take an effect yet. For now allow access to dir and files that
# are not yet labeled.
ifdef('nyquist_platform',
files_manage_isid_type_dirs(polaris_iosd_t)
files_manage_isid_type_files(polaris_iosd_t)
)

ifdef(`ngwc_family`,
polaris_getattr_filesystem_disk_ucode(polaris_iosd_t)
# policy needed for accessing sys/bus/usb/drivers/usb/*/authorized
dev_rw_sysfs(polaris_iosd_t)
)

ifdef(`passport_platform`,
polaris_cm_rp_tmp_manage(polaris_iosd_t)
)

polaris_lfts_dev_use(polaris_iosd_t)

# /dev/shm/vrf_shm access for show command
polaris_vrf_shm_manage(polaris_iosd_t)

# /dev/shm/sdm access
optional_policy(
polaris_sdm_shm_manage(polaris_iosd_t)
)

# iosd needs access to logging facility
logging_send_syslog_msg(polaris_iosd_t)

# iosd need access to /webui/*.odm files
polaris_read_webui_files(polaris_iosd_t)

# allow getting bins networking stats AF_NETLINK
allow polaris_iosd_t self:netlink_route_socket rw_netlink_socket_perms;

# confd needs to talk with IOSd via real linux udp snmp socket
allow polaris_iosd_t self:udp_socket { create_socket_perms recv_msg send_msg };
corennet_udp_bind_snmp_port(polaris_iosd_t)

# PLEASE LOOK AT code should not use sysv IPC ARIs,
# instead POSIX variants must be used. Remove after
# code changed in proper way
# allow access sysv semaphor created by qfp process
ifdef(`vxe_family`,
polaris_qfp_sem_use(polaris_iosd_t)
)
ifdef(`wlc_family`,
polaris_qfp_sem_use(polaris_iosd_t)
ifconfig_attach_tun_iface(polaris_iosd_t)
corennet_rw_tun_tap_dev(polaris_iosd_t)
)
# lsmpi replacement punt/inject over domain sockets
ifdef('vxe_family',
    polaris_pi_uds_manage(polaris_iosd_t)
polaris_qfp_dgram_send(polaris_iosd_t)
corentrw_tun_tap_dev(polaris_iosd_t)
ifconfig_attach_tun_iface(polaris_iosd_t)
')

# CSR when operating in VGA mode uses /dev/tty0 as the console for the system
# (including IOSD). IOSD setup scripts pass in the tty device(s) to use in the
# REAL_CONSOLE and REAL_AUX environment variables. IOSD configures the tty
# for its operation and hence need the capability.
allow polaris_iosd_t self:capability sys_tty_config;

# LOOK AT ME: hot patch upon a reboot requires execmem operation - which
# currently is not allowed. Remove the following policy when CSCvq59763
# has been completed.
allow polaris_iosd_t self:process execmem;

#/dev/epaN on qwlc/asr1k(mcp)
optional_policy(
    polaris_epa_dev_use(polaris_iosd_t)
')

#/dev/qae_mem device access on overlord
optional_policy(
    polaris_qae_dev_use(polaris_iosd_t)
')

# ioucon binary invoked on standby console attach.
polaris_ioucon_dgram_send(polaris_iosd_t)

# usb device requires read permissions.
kernel_read_debugfs(polaris_iosd_t)

# iosd requires access to /tmp/sv
ifdef('ngwc_family',
    polaris_sv_tmp_use(polaris_iosd_t)
ifconfig_attach_tun_iface(polaris_iosd_t)
corentrw_tun_tap_dev(polaris_iosd_t)
')
polaris_i2c_use(polaris_iosd_t)

# on CSR AWS deployment iosd needs read access to /dev/console
term_read_console(polaris_iosd_t)
# On vxe platforms the cloudint config is stored in /varied. We need
# to be able to read it.
ifdef(`vxe_family',`
    polaris_disk_varied_read(polaris_iosd_t)
')

# In stacked and ha setup secondary SUP bootflash and hardisk
# are mounted on active and is accessed by iosd.
polaris_getattr_bootflash(polaris_iosd_t)
polaris_getattr_harddisk(polaris_iosd_t)

# read access to /dev/random
dev_read_rand(polaris_iosd_t)

# Allow access of /tmp/maroon_stats files
polaris_maroon_data_manage_all(polaris_iosd_t)

#access to /dev/bp_async device on nanook platform
optional_policy(`
    polaris_bp_async_dev_use(polaris_iosd_t)
')

#Permission for access file attribute to list the file info
polaris_caf_tmp_files_getattr(polaris_iosd_t)

#DB persistence
polaris_tdldbpersist_setup(polaris_iosd_t)
polaris_tmp_tdldb_persist_setup(polaris_iosd_t)

# IOSCC needs access to /mnt/firmware for intelligent spa during bootup
polaris_firmware_read(polaris_iosd_t)

# On Sparrow platform: IOSd requires access to /dev/remap_mem0
# and /dev/usb_console for OOB management
# Also allows access to /dev/sparrow_psu and /dev/net/tun
# /dev/shm/sem._dev_i2c_0 sempaphor
ifdef(`sparrow_platform',`
gen_require(`
    type polaris_cm_cc_tmpfs_t;
')
polaris_remap_mem_dev_use(polaris_iosd_t)
term_use_usb_ttys(polaris_iosd_t)
polaris_sparrow_psu_dev_use(polaris_iosd_t)
polaris_i2c_sem_manage(polaris_iosd_t)
ifconfig_attach_tun_iface(polaris_iosd_t)
corenethlnet_RW_tun_TAPldev(polaris_iosd_t)
mmap_files_pattern(polaris_iosd_t, polaris_cm_cc_tmpfs_t, polaris_cm_cc_tmpfs_t)
')
# On Blackheart platform: /dev/shm/sem._dev_i2c_0 sempaphor
# Allow access to /tmp/udev/etc/udev/msata/udev-info and /dev/net/tun
# Allow access to /dev/remap_mem0 for alarm port
ifdef(`blackheart_platform',`
   gen_require(
      type polaris_cm_cc_tmpfs_t;
   )
polaris_udev_access(polaris_iosd_t)
polaris_remap_mem_dev_use(polaris_iosd_t)
polaris_i2c_sem_manage(polaris_iosd_t)
ifconfig_attach_tun iface(polaris_iosd_t)
corenet_rw_tun_tap_dev(polaris_iosd_t)
mmap_files_pattern(polaris_iosd_t, polaris_cm_cc_tmpfs_t, polaris_cm_cc_tmpfs_t)
')

# handle /tmp/rp/.iosp_client_app token
#define polaris_iosp_client_app_token_t;
files_tmp_file(polaris_iosp_client_app_token_t)
files_tmp_filetrans(polaris_iosd_t, polaris_iosp_client_app_token_t, file, ".iosp_client_app")
manage_files_pattern(polaris_iosd_t, polaris_iosp_client_app_token_t, polaris_iosp_client_app_token_t)

# handle /tmp/rp/.iosp_client_dmi token
#define polaris_iosp_client_dmi_token_t;
files_tmp_file(polaris_iosp_client_dmi_token_t)
files_tmp_filetrans(polaris_iosd_t, polaris_iosp_client_dmi_token_t, file, ".iosp_client_dmi")
manage_files_pattern(polaris_iosd_t, polaris_iosp_client_dmi_token_t, polaris_iosp_client_dmi_token_t)

# handle /tmp/rp/.iosp_dmiauthd token
#define polaris_dmiauthd_token_t;
files_tmp_file(polaris_dmiauthd_token_t)
files_tmp_filetrans(polaris_iosd_t, polaris_dmiauthd_token_t, file, ".iosp_dmiauthd")
manage_files_pattern(polaris_iosd_t, polaris_dmiauthd_token_t, polaris_dmiauthd_token_t)

# handle /tmp/rp/.iosp_gnmib token
#define polaris_gnmib_token_t;
files_tmp_file(polaris_gnmib_token_t)
files_tmp_filetrans(polaris_iosd_t, polaris_gnmib_token_t, file, ".iosp_gnmib")
manage_files_pattern(polaris_iosd_t, polaris_gnmib_token_t, polaris_gnmib_token_t)

polaris_udev_tmp_watch(polaris_iosd_t)

# Interfaces needed for Aventus platform, allow access to
# /dev/shm/sem._dev_i2c_0 sempaphor
# /dev/usb_console for OOB management
# /dev/net/tun
# brctl process needs access to fifo_file
ifdef(`aventus_platform',`

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gen_require(
    type brctl_t;
    type polaris_pman_t;
    type polaris_cm_cc_tmpfs_t;
    type ifconfig_t;
    type polaris_i2c_device_t;
')
polaris_i2c_sem_manage(polaris_iosd_t)
ifconfig_attach_tun_iface(polaris_iosd_t)
corenct_r_w_tun_iface(polaris_iosd_t)
term_use_usb_tty(polaris_iosd_t)
allow brctl_t polaris_pman_t:fifo_file append;
mmap_files_pattern(polaris_iosd_t, polaris_cm_cc_tmpfs_t, polaris_cm_cc_tmpfs_t)
allow ifconfig_t polaris_i2c_device_t:chr_file { read write };
')

# allow access and modify files in /tftp/inv directory
# TODO Need to revisit this for further analysis
ifdef(`mcp_family',`
    gen_require(
        type tftpdir_rw_t;
    ')
read_files_pattern(polaris_iosd_t, tftpdir_rw_t, tftpdir_rw_t)
')

#allow access and modify awips file in /bootflash
gen_require(
    type polaris_awips_signature_file_t;
')
filetrans_pattern(polaris_iosd_t, polaris_disk_bootflash_t, polaris_awips_signature_file_t, file, "awips.json")
allow polaris_iosd_t polaris_awips_signature_file_t:file { write create read open getattr unlink};

# handle geodb file access
type polaris_geodb_files_t;
polaris_disk_type(polaris_geodb_files_t)
filetrans_pattern(polaris_iosd_t, polaris_disk_bootflash_t, polaris_geodb_files_t, dir, ".geo")
filetrans_pattern(polaris_iosd_t, polaris_disk_harddisk_t, polaris_geodb_files_t, dir, ".geo")
polaris_geodb_files_manage(polaris_iosd_t)

# handle /var/ip_local_port_range
type polaris_ip_linux_port_var_t;
files_tmp_file(polaris_ip_linux_port_var_t)
files_var_filetrans(polaris_iosd_t, polaris_ip_linux_port_var_t, file, "ip_local_port_range")

# linux_iosd-imag access to file /var/ip_local_port_range
manage_files_pattern(polaris_iosd_t, var_t, polaris_ip_linux_port_var_t)

# Allow access to /bootflash/certs
```c
polaris_wlc_ap_cert_manage(polaris_iosd_t)

# commad "ls" on /var/ip_local_port_range
gen_require(
    type polaris_shell_t;
')
allow polaris_shell_t polaris_ip_linux_port_var_t:file getattr;

# handling /boot/vcpu_template.txt or /csl_p_0/vcpu_template.txt file
# created by iosd by platform resource config command
type polaris_iosd_vcpu_t;
files_type(polaris_iosd_vcpu_t)
gen_require(
    type polaris_disk_csl_p_t;
    type polaris_disk_varied_t;
')
filetrans_pattern(polaris_iosd_t, { polaris_disk_csl_p_t polaris_disk_varied_t }, polaris_iosd_vcpu_t, file, "vcpu_template.txt")
manage_files_pattern(polaris_iosd_t, { polaris_disk_csl_p_t polaris_disk_varied_t }, polaris_iosd_vcpu_t)

# allow open/read/search cgroup files like /sys/fs/cgroup/cpu,cpuacct/machine
fs_read_cgroup_files(polaris_iosd_t)
fs_search_cgroup_dirs(polaris_iosd_t)
# for Dynamic Core Allocation IOSd needs write access to cpu sets/shares
ifdef(`crankshaft_family',`
    fs_write_cgroup_files(polaris_iosd_t)
')

# sdwan_admintech_generate() creates admintech and admintech_trace files
gen_require(
    type polaris_admin_tech_data_t;
')
polaris_bootflash_filetrans(polaris_iosd_t, polaris_admin_tech_data_t, file, "admintech")
polaris_bootflash_filetrans(polaris_iosd_t, polaris_admin_tech_data_t, file, "admintech_trace")
filetrans_pattern(polaris_iosd_t, polaris_chasfs_t, polaris_admin_tech_data_t, file, "ios_admintech_done")
filetrans_pattern(polaris_iosd_t, polaris_chasfs_t, polaris_admin_tech_data_t, file, "ios_admintech_request")
polaris_admin_tech_data_manage(polaris_iosd_t)
# with "/bootflash"...this needs attr to access for logfile
polaris_user_file_getattr(polaris_iosd_t)
allow polaris_iosd_t polaris_user_file_t:file { open unlink };

# petra platform
ifdef(`petra_platform',`
    # iosd need access to petra fpga
    polaris_iots_fpga_dev_use(polaris_iosd_t)
    # iosd need access to memory devices
    polaris_iots_tm_dev_use(polaris_iosd_t)
    #allow map permission for /dev/shm/TM_A53_APIs
```
allow polaris_iosd_t polaris_iosd_tmpfs_t:file map;
#allow access to polaris_cm_rp_t sem
polaris_cm_rp_sem_use(polaris_iosd_t)
#allow access to userio
dev_rw_userio_dev(polaris_iosd_t)
allow polaris_iosd_t userio_device_t:chr_file { map };
#iosd need access to sysfs
dev_rw_sysfs(polaris_iosd_t)
allow polaris_iosd_t sysfs_t:file { create map };
dev_manage_sysfs_dirs(polaris_iosd_t)
# iosd need access to sdflash files image is stored
polaris_swipedriver_file_manage(polaris_iosd_t)
polaris_getattr_swipedriver(polaris_iosd_t)
#iosd need access to mmcblk0p3
gen_require(
    type polaris_disk_recovery_t;
)'
allow polaris_iosd_t polaris_disk_recovery_t:filesystem getattr;
#iosd need access to mmcblk0p2
polaris_getattr_filesystem_disk_ucode(polaris_iosd_t)
# iosd need access to /dev/mvDmaDrv
polaris_mvDmaDrv_dev_use(polaris_iosd_t)
# iosd need access to /dev/mvIntDrv
polaris_mvIntDrv_dev_use(polaris_iosd_t)
#iosd need permission for LED
polaris_led_dev_use(polaris_iosd_t)
#iosd need access to rawip socket by initscripts/rc.d/init.d/iptables
allow polaris_iosd_t self:rawip_socket create_socket_perms;
#iosd needs access to /opt/cisco/caf/config/system-config.ini
polaris_caf_files_read(polaris_iosd_t)
#iosd need permission to /dev/rtc0 done via imsp_update_sw_hwclock()
dev_rw_realtime_clock(polaris_iosd_t)
)
# work with /tmp/usb-disable: create/write
type polaris_iosd_usb_disable_tmp_t;
files_tmp_file(polaris_iosd_usb_disable_tmp_t);
polaris_iosd_usb_disable_tmp_manager(polaris_iosd_t)

ifdef('ngwc_family',`
    # SELINUX Mismatch warning when doing power redundancy configuration commands
    # Allow access /bootflash/nplusm-power
    polaris_nplusm_power_manage(polaris_iosd_t)
')

optional_policy(`
    polaris_efi_files_list_dirs(polaris_iosd_t)
')

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# work with /dev/shm/mq.-iosd_to_timingd

type polaris_iosd_timing_mqipc_t;
polaris_mqipc_type(polaris_iosd_timing_mqipc_t)

polaris_mqipc_create_name(polaris_iosd_t, polaris_iosd_timing_mqipc_t, iosd_to_timingd)

# watch /tmp
allow polaris_iosd_t tmp_t:dir watch;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisiosd.te
No license file was found, but licenses were detected in source scan.

#
# January 2018, Manohar Hungund
#
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#
#
## <summary>Polaris oct_dp_log_rp Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisocdplogrp.if
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#
# February 2020, Victor Kamensky
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#
#
## <summary>Polaris cedge Policy Rules.</summary>

####################################
## <summary>
## Manage /tmp/xml files and directories
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
#
interface(`polaris_cedge_xml_tmp_manage',
  gen_require(`
    type polaris_cedge_xml_tmp_t;

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manage_dirs_pattern($1, polaris_cedge_xml_tmp_t, polaris_cedge_xml_tmp_t)
manage_files_pattern($1, polaris_cedge_xml_tmp_t, polaris_cedge_xml_tmp_t)
files_tmp_filetrans($1, polaris_cedge_xml_tmp_t, dir, "xml")

allow $1 polaris_cedge_xml_tmp_t:dir { watch mounton ];
allow $1 polaris_cedge_xml_tmp_t:file map;

######################################
## <summary>
##      Manage /tmp/tmp files and directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_cedge_tmp_manage',
#       gen_require(
#           type polaris_cedge_tmp_t;
#       ')
#       manage_dirs_pattern($1, polaris_cedge_tmp_t, polaris_cedge_tmp_t)
#       manage_files_pattern($1, polaris_cedge_tmp_t, polaris_cedge_tmp_t)
#       files_tmp_filetrans($1, polaris_cedge_tmp_t, dir, "tmp")
#

######################################
## <summary>
##      Manage /etc/viptela files and directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_cedge_etc_manage',
#       gen_require(
#           type polaris_cedge_etc_t;
#       ')
#       manage_dirs_pattern($1, polaris_cedge_etc_t, polaris_cedge_etc_t)
#       manage_files_pattern($1, polaris_cedge_etc_t, polaris_cedge_etc_t)
#       manage_lnk_files_pattern($1, polaris_cedge_etc_t, polaris_cedge_etc_t)
#       files_etc_filetrans($1, polaris_cedge_etc_t, dir, "viptela")
#)
### <summary>
### Read /etc/viptela files and directories
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
#
#
interface('polaris_cedge_etc_read',
    gen_require(''
        type polaris_cedge_etc_t;
    ')
    search_dirs_pattern($1, polaris_cedge_etc_t, polaris_cedge_etc_t)
    read_files_pattern($1, polaris_cedge_etc_t, polaris_cedge_etc_t)
    read_link_files_pattern($1, polaris_cedge_etc_t, polaris_cedge_etc_t)
    files_etc_filetrans($1, polaris_cedge_etc_t, dir, "viptela")
')

### <summary>
### Watch cedge_etc directories and files
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
##<rolebase/>
#
#
interface('polaris_cedge_etc_watch',
    gen_require('
        type polaris_cedge_etc_t;
    ')
    allow $1 polaris_cedge_etc_t:{ dir file } watch;
')

### <summary>
### Read access /var/run/netns/* performed from vip_util_set_ns
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
interface('polaris_cedge_set_ns',`
  init_read_state($1)
  fs_read_nsfs_files($1)
  sysnet_manage_ifconfig_run($1)
`)

#########################################################################
## <summary>
##      Read access /proc/1/ns/net performed from vip_util_reset_ns
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_cedge_reset_ns',`
  init_read_state($1)
`)

#########################################################################
## <summary>
##      Manage /dev/shm viptela files
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_cedge_tmpfs_manage',`
  gen_require(`
      type polaris_cedge_tmpfs_t;
      type tmpfs_t;
  `)
  fs_tmpfs_filetrans($1, polaris_cedge_tmpfs_t, file)
  manage_files_pattern($1, tmpfs_t, polaris_cedge_tmpfs_t)
  allow $1 polaris_cedge_tmpfs_t::file map;
`)

#########################################################################
## <summary>
##      Manage /tmp/.econfd2sysmgr-ipc files and directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
interface('polaris_econfd2sysmgr_tmp_manage',
   gen_require(
      type polaris_econfd2sysmgr_tmp_t;
   )
   manage_dirs_pattern($1, polaris_econfd2sysmgr_tmp_t, polaris_econfd2sysmgr_tmp_t)
   manage_files_pattern($1, polaris_econfd2sysmgr_tmp_t, polaris_econfd2sysmgr_tmp_t)
   files_tmp_filetrans($1, polaris_econfd2sysmgr_tmp_t, dir, ".econfd2sysmgr-ipc")
   allow $1 polaris_econfd2sysmgr_tmp_t:dir watch;
)

Manage /tmp/* labeled with polaris_vconfd_cert_tmp_t for vconfd_script_upload_root_ca_crt_chain.sh to access

interface('polaris_vconfd_cert_tmp_manage',
   gen_require(
      type polaris_vconfd_cert_tmp_t;
   )
   manage_dirs_pattern($1, polaris_vconfd_cert_tmp_t, polaris_vconfd_cert_tmp_t)
   manage_files_pattern($1, polaris_vconfd_cert_tmp_t, polaris_vconfd_cert_tmp_t)
)

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#

### <summary>Polaris cpp_driver Policy Rules.</summary>

### <summary>Allow access to semaphore with type polaris_cpp_driver_t
## <summary>
## Domain allowed access.
## </summary>

```
interface('polaris_cpp_driver_sem_use',
    gen_require(''
        type polaris_cpp_driver_t;
    ')
    allow $1 polaris_cpp_driver_t:sem rw_sem_perms;
')
```

### <summary>
### Allow access to shared memory with type polaris_cpp_driver_t

```
interface('polaris_cpp_driver_shm_use',
    gen_require(''
        type polaris_cpp_driver_t;
    ')
    allow $1 polaris_cpp_driver_t:shm rw_shm_perms;
')
```

```
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppdriver.if
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```
## param name="domain"
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolecap/>
#
interface('polaris_autoupgrade_domtrans',
    gen_require('
        type polaris_autoupgrade_t;
        type polaris_autoupgrade_exec_t;
    ')
)

domtrans_pattern($1, polaris_autoupgrade_exec_t, polaris_autoupgrade_t)
')

################################################
## <summary>
##      Manage tmp files created by autoupgrade.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolecap/>
#
interface('polaris_autoupgrade_tmp_manage',
    gen_require('
        type polaris_autoupgrade_tmp_t;
    ')
)

manage_files_pattern($1, polaris_autoupgrade_tmp_t, polaris_autoupgrade_tmp_t)
manage_lnk_files_pattern($1, polaris_autoupgrade_tmp_t, polaris_autoupgrade_tmp_t)
manage_fifo_files_pattern($1, polaris_autoupgrade_tmp_t, polaris_autoupgrade_tmp_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisautoupgrade.if
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#
# October 2019, Patrick O'Halloran
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#
## <summary>Polaris CRFT Policy Rules.</summary>

# CRFT policy

## <summary>
## Allow read-only access to CRFT generated files
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <param name="file_type">
## File type of crft that corresponds to given domain.
## </param>
## <rolebase/>

```c
interface(`polaris_crft_data_read',`
    gen_require(
        type polaris_crft_data_t;
        type polaris_crft_request_t;
        type polaris_crft_request_crft_t;
    )
    read_lnk_files_pattern($1, polaris_crft_data_t, polaris_crft_data_t)
    polaris_disk_bootflash_read_lnk($1)
    polaris_disk_harddisk_read_lnk($1)
    read_files_pattern($1, polaris_crft_request_crft_t, polaris_crft_request_crft_t)
    allow $1 polaris_crft_request_t:fifo_file { ioctl write };
)
```

## <summary>
## Manage crft persistent files
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <rolebase/>

# interface(`polaris_crft_data_manage',`

---

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gen_require(`
    type polaris_crft_data_t;
`)

manage_dirs_pattern($1, polaris_crft_data_t, polaris_crft_data_t)
manage_lnk_files_pattern($1, polaris_crft_data_t, polaris_crft_data_t)
manage_files_pattern($1, polaris_crft_data_t, polaris_crft_data_t)
# Note: Based on discussion with SELinux team, we need to call this
# out specifically here for lnk file access, as:
# - NGWC /harddisk -(symlink)-> /misc/scratch -(symlink)-> /mnt/sda3/user
polaris_disk_bootflash_read_lnk($1)
polaris_disk_harddisk_read_lnk($1)
allow $1 polaris_crft_data_t:file map;
`)

########################################################################
## <summary>
## Manage crft files
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <rolebase/>
#
interface(`polaris_crft_data_manage_all',``
polaris_crft_data_manage($1)

    gen_require(`
        attribute polaris_crft_data_domain;
        type polaris_crft_data_t;
`)

manage_files_pattern($1, polaris_crft_data_t, polaris_crft_data_domain)
manage_lnk_files_pattern($1, polaris_crft_data_t, polaris_crft_data_domain)
allow $1 polaris_crft_data_domain:file map;
`)

########################################################################
## <summary>
## Make the specified type usable as crft data file type.
## </summary>
## <param name="type">
## Type to be used for files.
## </param>
## <summary>
interface('polaris_crtf_data_type',
files_type($1)
polaris_pfile_type($1)
gen_require(
    attribute polaris_crtf_data_domain;
    
    typeattribute $1 polaris_crtf_data_domain;
    ')'  
)

#######################################
## <summary>
##      Process to manage its own crft files
## </summary>
## <param name="domain">
##     <summary>
##     Domain allowed access.
##     </summary>
## </param>
## <param name="file_type">
##     <summary>
##     File type of crft that corresponds to given domain.
##     </summary>
## </param>
## <rolebase/>
#
# interface('polaris_crtf_data_client',`
gen_require(
    type polaris_crtf_data_t;
    ')  

manage_dirs_pattern($1, polaris_crtf_data_t, $2)
manage_files_pattern($1, polaris_crtf_data_t, $2)
manage_lnk_files_pattern($1, polaris_crtf_data_t, $2)
filetrans_pattern($1, polaris_crtf_data_t, $2, file)
allow $1 $2:file map;
')

#######################################
## <summary>
##      Process to manage its own crft files
## </summary>
## <param name="domain_stem">
##     <summary>
##     Steam of domain allowed access.
##     </summary>
## </param>
## <rolebase/>
interface('polaris_crft_data_client_template',
   gen_require(
      attribute polaris_crft_data_domain;
      type polaris_crft_data_t;
   )
)

type polaris$_1$ crft_t;
polaris crft_data_type(polaris$_1$ crft_t)
polaris crft_data_client(polaris$_1$ t, polaris$_1$ crft_t)
')

policy_module(polariscfg, 1.0);

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#
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#

/usr/cpp/bin/cpp_ha_top_level_server -- gen_context(system_u:object_r:polaris_cpp_ha_exec_t,s0)
/usr/cpp/bin/cpp_ha_top_level_server_ledp -- gen_context(system_u:object_r:polaris_cpp_ha_exec_t,s0)
/usr/cpp/bin/cpp_ha_top_level_server_us_ledp -- gen_context(system_u:object_r:polaris_cpp_ha_exec_t,s0)
/usr/cpp/bin/cpp_ha_top_level_server_vwl -- gen_context(system_u:object_r:polaris_cpp_ha_exec_t,s0)
/usr/cpp/bin/cpp_ha_top_level_server_vwl_ledp -- gen_context(system_u:object_r:polaris_cpp_ha_exec_t,s0)

policy_module(polariscfg, 1.0);

# Cfg files policy

# Cfg files policy

type polaris_cfg_data_t;
files_type(polaris_cfg_data_t)
gen_require('  
    attribute polaris_extended_domain;
')

files_tmp_filetrans(polaris_extended_domain, polaris_cfg_data_t, dir, "cfg")

############################################################################
# cfg_sync.sh policy
############################################################################
polaris_utility_domain_template(cfg_sync)
polaris_bexecute_domain(polaris_cfg_sync_t, polaris_cfg_sync_exec_t)
polaris_boot_tmp_read(polaris_cfg_sync_t)
polaris_btrace_data_manager(polaris_cfg_sync_t)
polaris_chasfs_read(polaris_cfg_sync_t)
polaris_cpld_read(polaris_cfg_sync_t)
polaris_use_btrace_fifo(polaris_cfg_sync_t)
corecmd_exec_bin(polaris_cfg_sync_t)
auth_use_nsswitch(polaris_cfg_sync_t)
polaris_bootflash_read(polaris_cfg_sync_t)
polaris_nvram_manage(polaris_cfg_sync_t)
telnet_use_ptys(polaris_cfg_sync_t)

gen_require('  
    type rsync_t;
')
rsync_entry_domaintrans(polaris_cfg_sync_t, rsync_t)
allow rsync_t polaris_cfg_sync_t:process sigchld;
# file descriptor leak when rsync is called
allow rsync_t polaris_cfg_sync_t:fifo_file { write getattr };
logging_send_syslog_msg(polaris_cfg_sync_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscfg.te
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dnl
dnl April 2018, Victor Kamensky
dnl
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# polarisvxeipbaseauto file contexts place holder

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_base_fc.m4
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#

### <summary>Polaris cm_fp Policy Rules.</summary>

########################################################################
### <summary>
### Execute cmand_fp in the polaris_cm_fp_t domain.
### </summary>
### <param name="domain">
### Domain allowed to transition.
### </param>
#
interface(`polaris_cm_fp_domtrans`,
  gen_require(`
    type polaris_cm_fp_t, polaris_cm_fp_exec_t;
  `)

corecmd_search_bin($1)
domtrans_pattern($1, polaris_cm_fp_exec_t, polaris_cm_fp_t)
`)

########################################################################
### <summary>
### Allow the specified domain to manage cm_fp_tmp files
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
interface(`polaris_cm_fp_tmp_manage`,
  gen_require(`
    type polaris_cm_fp_tmp_t;
    type tmp_t;
  `)

Open Source Used In BGP TE Controller Version 4.3.0 5979
manage_files_pattern($1, { polaris_cm_fp_tmp_t tmp_t }, polaris_cm_fp_tmp_t)

### <summary>
### Create objects in /tmp with a polaris_cm_fp_tmp_t type using a type_transition.
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>

# interface('polaris_cm_fp_tmp_filetrans',
gen_require(
  type polaris_cm_fp_tmp_t;
')
  files_tmp_filetrans($1, polaris_cm_fp_tmp_t, file, "octeon-remote-lock-pci:0")
')

### <summary>
### Allow access to semaphore with type polaris_cm_fp_t
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>

# interface('polaris_cm_fp_sem_use',
  gen_require(
    type polaris_cm_fp_t;
  )
  allow $1 polaris_cm_fp_t:sem rw_sem_perms;
')

### <summary>
### Allow access to shared memory with type polaris_cm_fp_t
### </summary>
### <param name="domain">
### Domain allowed access.
### </summary>
## </param>
#
interface('polaris_cm_fp_shm_use',
    gen_require('type polaris_cm_fp_t;
    ')
    allow $1 polaris_cm_fp_t:shm rw_shm_perms;
')

########################################
## </summary>
## Allow access to /dev/hkp with type polaris_cm_fp_t
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_hkp_dev_use',
    gen_require('type device_t;
    type polaris_hkp_device_t;
    ')
    write_chr_files_pattern($1, device_t, polaris_hkp_device_t)
    read_chr_files_pattern($1, device_t, polaris_hkp_device_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmfp.if
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#  
# August 2017, Shawn Lu
#  
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#  
# polarisifmgr file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisifmgr.fc
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#  
# August 2017, Victor Kamensky
#
## <summary>Polaris crankshaft Platform Policy Rules.</summary>

### Work (read, write, ioctl) with /dev/linux-(user|kernel)-bde devices

### <param name="domain">

Domain allowed access.

### </param>

```
# interface('polaris_bde_dev_use',
    gen_require(
        type device_t;
        type polaris_bde_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_bde_device_t)
    read_chr_files_pattern($1, device_t, polaris_bde_device_t)
    allow $1 polaris_bde_device_t:chr_file map;
)
```

### Work (read, write, ioctl) with /dev/dash_fpga device

### <param name="domain">

Domain allowed access.

### </param>

```
# interface('polaris_dash_dev_use',
    gen_require(
        type device_t;
        type polaris_dash_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_dash_device_t)
    read_chr_files_pattern($1, device_t, polaris_dash_device_t)
    allow $1 polaris_dash_device_t:chr_file map;
)
```
## Work (read, write, ioctl) with /dev/huron_fpga device
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_huron_dev_use',
    gen_require(
        type device_t;
        type polaris_huron_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_huron_device_t)
    read_chr_files_pattern($1, device_t, polaris_huron_device_t)
    allow $1 polaris_huron_device_t:chr_file map;
')

######################################
## Work (read, write, ioctl) with /dev/dplr_sumatra
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_sumatra_doppler_dev_use',
    gen_require(
        type device_t;
        type polaris_sumatra_doppler_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_sumatra_doppler_device_t)
    read_chr_files_pattern($1, device_t, polaris_sumatra_doppler_device_t)
    allow $1 polaris_sumatra_doppler_device_t:chr_file map;
')

######################################
## Work (open, read, write, ioctl) with /dev/sirius_fpga device
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_sirius_fpga_dev_use',
  gen_require('  
    type device_t;
    type polaris_siriusfpga_device_t;
  ')
  rw_chr_files_pattern($1, device_t, polaris_siriusfpga_device_t);
')

####################
## <summary>
##      Work (read, write, ioctl) with /dev/nios device
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_nios_dev_use',
  gen_require('  
    type device_t;
    type polaris_nios_device_t;
  ')
  write_chr_files_pattern($1, device_t, polaris_nios_device_t)
  read_chr_files_pattern($1, device_t, polaris_nios_device_t)
')

####################
## <summary>
##      Work (read, write, ioctl) with /dev/qae_mem device
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_qae_dev_use',
  gen_require('  
    type device_t;
    type polaris_qae_device_t;
  ')
  write_chr_files_pattern($1, device_t, polaris_qae_device_t)
  read_chr_files_pattern($1, device_t, polaris_qae_device_t)
')
### Read mokafpga files in /sys/devices/platform directory
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
#
# interface('polaris_mokafpga_read',
  gen_require(
    type polaris_sysfs_mokafpga_t;
    type sysfs_t;
  ')
read_files_pattern($1, polaris_sysfs_mokafpga_t, polaris_sysfs_mokafpga_t)
list_dirs_pattern($1, polaris_sysfs_mokafpga_t, polaris_sysfs_mokafpga_t)
')

######################################
## Read/Write mokafpga files in /sys/devices/platform directory
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
#
# interface('polaris_mokafpga_rw',
  gen_require(
    type polaris_sysfs_mokafpga_t;
    type sysfs_t;
  ')
rw_files_pattern($1, polaris_sysfs_mokafpga_t, polaris_sysfs_mokafpga_t)
list_dirs_pattern($1, polaris_sysfs_mokafpga_t, polaris_sysfs_mokafpga_t)
')

######################################
## Work (read, write, ioctl) with /dev/moka_fpga
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
#
# interface('polaris_mokafpga_dev_use',
  gen_require('}
type device_t;
    type polaris_mokafpga_device_t;

    write_chr_files_pattern($1, device_t, polaris_mokafpga_device_t)
    read_chr_files_pattern($1, device_t, polaris_mokafpga_device_t)

    ####################################
    ## <summary>
    ##      Work (read, write, ioctl) with /dev/nim_dm_0_1 and
    ## /dev/nim_dm devices
    ## </summary>
    ## <param name="domain">
    ##      Domain allowed access.
    ## </param>
    #
    interface(`polaris_nim_dm_dev_use',`
    gen_require(`
        type device_t;
        type polaris_nim_dm_device_t;
    `)
    write_chr_files_pattern($1, device_t, polaris_nim_dm_device_t)
    read_chr_files_pattern($1, device_t, polaris_nim_dm_device_t)
    allow $1 polaris_nim_dm_device_t:chr_file map;
    allow $1 device_t:chr_file map;
    `)

    ####################################
    ## <summary>
    ##      Execute a domain transition to run load_usbnet.sh.
    ## </summary>
    ## <param name="domain">
    ##      Domain allowed to transition.
    ## </param>
    #
    interface(`polaris_load_usbnet_domtrans',`
    gen_require(`
        type polaris_load_usbnet_t, polaris_load_usbnet_exec_t;
    `)
    domtrans_pattern($1, polaris_load_usbnet_exec_t, polaris_load_usbnet_t)
    `)
### <summary>
### Label and allow access to i2c semaphore files.
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
interface('polaris_i2c_sem_manage',
        
    gen_require(
    
        type tmpfs_t;
        type polaris_cm_cc_tmpfs_t;
    )

    manage_files_pattern($1, tmpfs_t, polaris_cm_cc_tmpfs_t)
    mmap_files_pattern($1, polaris_cm_cc_tmpfs_t, polaris_cm_cc_tmpfs_t)
)

### <summary>
### Work (read, write, ioctl) with /dev/bp_async device
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
interface('polaris_bp_async_dev_use',
        
    gen_require(
    
        type device_t;
        type polaris_bp_async_device_t;
    )

    write_chr_files_pattern($1, device_t, polaris_bp_async_device_t)
    read_chr_files_pattern($1, device_t, polaris_bp_async_device_t)
    allow $1 polaris_bp_async_device_t:chr_file map;
)
interface('polaris_udev_access',
    gen_require(
        type tmpfs_t;
        type polaris_udev_tmp_files_t;
    )
    manage_files_pattern($1, tmpfs_t, polaris_udev_tmp_files_t)
)

## <summary>
## Work (read, write, ioctl) with /dev/sparrow_psu device
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
#
interface('polaris_sparrow_psu_dev_use',
    gen_require(
        type device_t;
        type polaris_sparrow_psu_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_sparrow_psu_device_t)
    read_chr_files_pattern($1, device_t, polaris_sparrow_psu_device_t)
)

######################################
## <summary>
## Work (read, write, ioctl) with /dev/nutella_fpga device
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
#
interface('polaris_nutella_fpga_dev_use',
    gen_require(
        type device_t;
        type polaris_nutella_fpga_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_nutella_fpga_device_t)
    read_chr_files_pattern($1, device_t, polaris_nutella_fpga_device_t)
)
## Read and write to qcqmi devices.

## <summary>
## Domain allowed access.
## </summary>

```c
interface('polaris_qcqmi_dev_use',
    gen_require(
        type device_t, qcqmi_device_t;
    )
)

rw_chr_files_pattern($1, device_t, qcqmi_device_t)
)
```

```
######################################
## Work (read, write, ioctl) with /dev/sm_nim_adpt device files
## <summary>
## Domain allowed access.
## </summary>

```
```
```
```c
interface('polaris_sm_nim_adpt_dev_use',
    gen_require(
        type device_t;
        type polaris_sm_nim_adpt_device_t;
    )
)

write_chr_files_pattern($1, device_t, polaris_sm_nim_adpt_device_t)
read_chr_files_pattern($1, device_t, polaris_sm_nim_adpt_device_t)
allow $1 polaris_sm_nim_adpt_device_t:chr_file map;
)
```

```
```
```
```c
```
```
```
```c
```
```
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```c
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```c
```
gen_require(
    type device_t;
    type polaris_dio_device_t;
)
write_chr_files_pattern($1, device_t, polaris_dio_device_t)
read_chr_files_pattern($1, device_t, polaris_dio_device_t)
allow $1 polaris_dio_device_t:chr_file map;
)

########################################################
## <summary>
##      Read /dev/dio-*
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_dio_dev_read',
    gen_require(
        type device_t;
        type polaris_dio_device_t;
    )
    read_chr_files_pattern($1, device_t, polaris_dio_device_t)
)

########################################################
## <summary>
##      Work (read, write, ioctl) with /dev/ttyNMEA* and /dev/ttyTunNMEA*
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_tty_NMEA_dev_use',
    gen_require(
        type device_t;
        type polaris_tty_NMEA_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_tty_NMEA_device_t)
    read_chr_files_pattern($1, device_t, polaris_tty_NMEA_device_t)
    allow $1 polaris_tty_NMEA_device_t:chr_file map;
)
## <summary>
## Read /dev/ttyNMEA* and /dev/ttyTunNMEA*
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_tty_NMEA_dev_read',
    gen_require(
        type device_t;
        type polaris_tty_NMEA_device_t;
    )
    read_chr_files_pattern($1, device_t, polaris_tty_NMEA_device_t)
)

### Work (read, write, ioctl) with /dev/nim_phy
### <param name="domain">
### Domain allowed access.
### </param>
#
interface('polaris_nim_phy_dev_use',
    gen_require(
        type device_t;
        type polaris_nim_phy_device_t;
    )
    rw_chr_files_pattern($1, device_t, polaris_nim_phy_device_t)
    allow $1 polaris_nim_phy_device_t:chr_file map;
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscrankshaft.if
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dnl
    July 2020, Victor Kamensky
dnl
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dnl
dnl c8kv Platform Max Bay Limits
max_bay_map_set('rp', 'per_bay', 0)
max_bay_map_set(`cc', `per_bay', 3)
max_bay_map_set(`fp', `per_bay', 0)

max_bay_ripc_map_set(`rp', `per_bay', 0)
max_bay_ripc_map_set(`cc', `per_bay', 3)
max_bay_ripc_map_set(`fp', `per_bay', 0)

max_bay_ripc_map_set(`rp', `global', 0)
max_bay_ripc_map_set(`cc', `global', 3)
max_bay_ripc_map_set(`fp', `global', 0)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/c8kvmaps.m4

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#
# August 2017, Victor Kamensky
#
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#

# /bootflash labels
/bootflash(/.*)? gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
/bootflash/ssh(/.*)? gen_context(system_u:object_r:ssh_home_t,s0)
/bootflash/ssh/ssh_host.*_key\.* gen_context(system_u:object_r:sshd_key_t,s0)
/bootflash/ssh/ssh_host.*_key   gen_context(system_u:object_r:sshd_key_t,s0)
/bootflash/tracelogs(/.*)? gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/bootflash/tan(/.*)? gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/bootflash/core(/.*)? gen_context(system_u:object_r:polaris_core_file_t,s0)
/bootflash/debug.conf gen_context(system_u:object_r:polaris_debug_conf_t,s0)
/bootflash/packages.conf gen_context(system_u:object_r:polaris_packages_conf_t,s0)

# /objstore/.swtam for hybrid TAM access
/objstore(/.*)? gen_context(system_u:object_r:polaris_disk_objstore_t,s0)

/csl_p_0(/.*)? gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)
/csl_p_1(/.*)? gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)
/csl_s_0(/.*)? gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)
/csl_s_1(/.*)? gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)
/obfl(/.*)? gen_context(system_u:object_r:polaris_obfl_data_t,s0)

# not really a license file stored by iosd during platform resource config command
/csl_p_0/vcpu_template.txt gen_context(system_u:object_r:polaris_iosd_vcpu_t,s0)

# nvram devices
/dev/bootflash2 -b gen_context(system_u:object_r:polaris_nvram_file_t,s0)
/dev/bootflash3 -b gen_context(system_u:object_r:polaris_nvram_file_t,s0)
/dev/sda2 -b gen_context(system_u:object_r:polaris_nvram_file_t,s0)
/dev/sda3 -b gen_context(system_u:object_r:polaris_nvram_file_t,s0)
/dev/linux-user-bde -c gen_context(system_u:object_r:polaris_bde_device_t,s0)
/dev/linux-kernel-bde -c gen_context(system_u:object_r:polaris_bde_device_t,s0)
/dev/dash_fpga -c gen_context(system_u:object_r:polaris_dash_device_t,s0)
/dev/dash_fpga_cc0 -c gen_context(system_u:object_r:polaris_dash_device_t,s0)
/dev/dash_fpga_cc1 -c gen_context(system_u:object_r:polaris_dash_device_t,s0)
/dev/dash_fpga_cc2 -c gen_context(system_u:object_r:polaris_dash_device_t,s0)
/dev/dash_fpga_cc3 -c gen_context(system_u:object_r:polaris_dash_device_t,s0)
/dev/dash_fpga_nios -c gen_context(system_u:object_r:polaris_dash_device_t,s0)
/dev/huron_fpga -c gen_context(system_u:object_r:polaris_huron_device_t,s0)
/dev/dplr_sumatra -c gen_context(system_u:object_r:polaris_sumatra_doppler_device_t,s0)
/dev/nios -c gen_context(system_u:object_r:polaris_nios_device_t,s0)
/dev/qae_mem -c gen_context(system_u:object_r:polaris_qae_device_t,s0)
/dev/icp_adf_gige_wd -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev0_csr -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev0_ring -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev_mem -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev_mem_page -c gen_context(system_u:object_r:polaris_icp_device_t,s0)

# moka fpga
/dev/moka_fpga -c gen_context(system_u:object_r:polaris_mokafpga_device_t,s0)
/dev/moka_fpga_cc -c gen_context(system_u:object_r:polaris_mokafpga_device_t,s0)

# for load usbnet module
/usr/bin/os/conf/load_usbnet.sh -- gen_context(system_u:object_r:polaris_load_usbnet_exec_t,s0)

/dev/nim_dm -c gen_context(system_u:object_r:polaris_nim_dm_device_t,s0)
/dev/nim_dm_0_1 -c gen_context(system_u:object_r:polaris_nim_dm_device_t,s0)
/dev/nim_phy -c gen_context(system_u:object_r:polaris_nim_phy_device_t,s0)

# file-system on blackheart/sparrow
# /crashinfo is symbolic link to /flash1
/crashinfo gen_context(system_u:object_r:polaris_disk_crashinfo_t,s0)

# /flash is symbolic link to /flash1
/flash gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

# /flash0 NVRAM
/flash0(/.*)? gen_context(system_u:object_r:polaris_nvram_file_t,s0)
# /flash1 Bootflash
/flash1(/.*)?                      gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
/flash1/tracelogs(/.*)?           gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/flash1/geo(/.*)?                 gen_context(system_u:object_r:polaris_geodb_files_t,s0)
/flash1/USWAP(/.*)?               gen_context(system_u:object_r:polaris_uswap_files_t,s0)
/flash1/dbpersist(/.*)?           gen_context(system_u:object_r:polaris_disk_dbm_t,s0)
/flash1/debug.conf --             gen_context(system_u:object_r:polaris_debug_conf_t,s0)
/flash1/packages.conf             gen_context(system_u:object_r:polaris_packages_conf_t,s0)
/flash1/core(/.*)?                gen_context(system_u:object_r:polaris_core_file_t,s0)
/flash1/rollback_timer(/.*)?      gen_context(system_u:object_r:polaris_rbtimer_bootflash_t,s0)
/flash1/installer(/.*)?           gen_context(system_u:object_r:polaris_disk_install_t,s0)
/flash1/ssh(/.*)?                 gen_context(system_u:object_r:ssh_home_t,s0)
/flash1/ssh/ssh_host.*_key.pub    gen_context(system_u:object_r:sshd_key_t,s0)
/flash1/ssh/ssh_host.*_key        gen_context(system_u:object_r:sshd_key_t,s0)

# /flash3 OBFL
/flash3(/.*)?                      gen_context(system_u:object_r:polaris_obfl_data_t,s0)
/flash3/OBFL(/.*)?                 gen_context(system_u:object_r:polaris_obfl_data_t,s0)

# harddisk
/vol/harddisk(/.*)?                gen_context(system_u:object_r:polaris_disk_harddisk_t,s0)
/mnt/msata(/.*)?                   gen_context(system_u:object_r:polaris_disk_harddisk_t,s0)

# for usage by IOx
/vol/usb1(/.*)?                    gen_context(system_u:object_r:polaris_disk_harddisk_t,s0)
/dev/shm/sem\._dev_i2c_0           gen_context(system_u:object_r:polaris_cm_cc_tmpfs_t,s0)
/dev/shm/sem\._dev_i2c_1           gen_context(system_u:object_r:polaris_cm_cc_tmpfs_t,s0)
/dev/shm/sem\._dev_i2c_2           gen_context(system_u:object_r:polaris_cm_cc_tmpfs_t,s0)
/tmp/udev/etc/udev/msata/udev-info gen_context(system_u:object_r:polaris_udev_tmp_files_t,s0)

# Nvram symlink on Aventus platform
/aventus_config/nvram             gen_context(system_u:object_r:polaris_nvram_file_t,s0)

# Nvram symlink on Cabo platform
/cabo_config/nvram                gen_context(system_u:object_r:polaris_nvram_file_t,s0)

# Device applicable to Betelgeuse platform
/dev/sirius_fpga                  gen_context(system_u:object_r:polaris_siriusfpga_device_t,s0)

# Device applicable to Nanook platform
/dev/bp_async -c gen_context(system_u:object_r:polaris_bp_async_device_t,s0)

# Device applicable to Sparrow platform
/dev/remap_mem0 -c gen_context(system_u:object_r:polaris_remap_mem_device_t,s0)
/dev/sparrow_psu -c gen_context(system_u:object_r:polaris_sparrow_psu_device_t,s0)
/dev/dio-upstream -c gen_context(system_u:object_r:polaris_dio_device_t,s0)
/dev/dio-[1-4] -c gen_context(system_u:object_r:polaris_dio_device_t,s0)
/dev/ttyNMEA[0-1] -c gen_context(system_u:object_r:polaris_tty_NMEA_device_t,s0)
/dev/ttyTunNMEA[0-1] -c gen_context(system_u:object_r:polaris_tty_NMEA_device_t,s0)

# Device applicable to Nutella platform
/dev/nutella_fpga -c gen_context(system_u:object_r:polaris_nutella_fpga_device_t,s0)

# Only qcqmi0 and qcqmi1 are generated for Telit/SWI modems
/dev/qcqmi0  -c gen_context(system_u:object_r:qcqmi_device_t,s0)
/dev/qcqmi1  -c gen_context(system_u:object_r:qcqmi_device_t,s0)

# SM NIM Adapter Switzer-CC device files
/dev/sm_nim_adpt_fpga_1 -c gen_context(system_u:object_r:polaris_sm_nim_adpt_device_t,s0)
/dev/sm_nim_adpt_nim_oir_1_0 -c gen_context(system_u:object_r:polaris_sm_nim_adpt_device_t,s0)
/dev/sm_nim_adpt_nim_oir_1_1 -c gen_context(system_u:object_r:polaris_sm_nim_adpt_device_t,s0)
/dev/sm_nim_adpt_fpga_2 -c gen_context(system_u:object_r:polaris_sm_nim_adpt_device_t,s0)
/dev/sm_nim_adpt_nim_oir_2_0 -c gen_context(system_u:object_r:polaris_sm_nim_adpt_device_t,s0)
/dev/sm_nim_adpt_nim_oir_2_1 -c gen_context(system_u:object_r:polaris_sm_nim_adpt_device_t,s0)

# CLI: show platform hardware msata
/usr/bin/os/bin/msata_info.sh -c gen_context(system_u:object_r:polaris_msata_info_exec_t,s0)
/tmp/sata_status -- gen_context(system_u:object_r:polaris_sata_status_tmp_t,s0)

# Memory blocks and gpp for Nutella platform
/dev/mmcblk0gp0p1  gen_context(system_u:object_r:polaris_nutella_gp0_t,s0)
/gpp  gen_context(system_u:object_r:polaris_nutella_gpp_t,s0)

# CLI: show platform hardware slot p[x] fan eeprom
/usr/bin/os/conf/mcp_fan_eeprom_cmd.sh -- gen_context(system_u:object_r:polaris_smart_fan_exec_t,s0)

/var/run/cwan_ezmanage_cwan_server -- gen_context(system_u:object_r:polaris_cwan_svr_var_run_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscrankshaft.fc
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#
# March 2017, Victor Kamensky
#
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#

policy_module(polariscmfp, 1.0);

gen_require(
    type polaris_cm_fp_t;
)
polaris_btrace_data_manage(polaris_cm_fp_t)
polaris_crft_data_manage(polaris_cm_fp_t)
polaris_chasfs_manage(polaris_cm_fp_t)
polaris_tdlresolve_read(polaris_cm_fp_t)
polaris_tdl_db_list_dirs(polaris_cm_fp_t)
polaris_cpld_read(polaris_cm_fp_t)
polaris_flashlib_read(polaris_cm_fp_t)
polaris_ripc_sman_ui_serv_connect(polaris_cm_fp_t)
polaris_cpld_dev_use(polaris_cm_fp_t)
polaris_proc_rmonbifo_read(polaris_cm_fp_t)
polaris_obfl_data_read(polaris_cm_fp_t)
polaris_persistent_list_dirs(polaris_cm_fp_t)
polaris_chasync_files_manage(polaris_cm_fp_t)

# cman_fp creates /tmp/cpp_anon_db file, instead of adding it to polaris_cpp_domain
# let us just grant access to cpp tmp files
polaris_cpp_tmp_files_use(polaris_cm_fp_t, "cpp_anon_db")
# on 1ng works with /dev/cpp
polaris_cpp_dev_use(polaris_cm_fp_t)

# work with /dev/i2c devices
polaris_i2c_use(polaris_cm_fp_t)

# on ultra read eeprom through i2c
# type=AVC msg=audit(1479556298.842:11): avc: denied { getattr } for pid=5464 comm="cman_fp"
path="/sys/devices/i2c-0/i2c-1/1-0056/eeprom" dev="sysfs" ino=25556
scontext=system_u:system_r:polaris_cm_fp_t:s0 tcontext=system_u:object_r:sysfs_t:s0 tclass=file
# type=AVC msg=audit(1479556298.842:12): avc: denied { read write } for pid=5464 comm="cman_fp"
name="eeprom" dev="sysfs" ino=25556 scontext=system_u:system_r:polaris_cm_fp_t:s0
tcontext=system_u:object_r:sysfs_t:s0 tclass=file
dev_rw_sysfs(polaris_cm_fp_t)

polaris_icc_broken_relocations(polaris_cm_fp_t)

allow polaris_cm_fp_t self:udp_socket { create ioctl };

# cman_fp can start dyncfg_setup.sh, allow its transition to dyncfg_t type
polaris_dyncfg_domtrans(polaris_cm_fp_t)

# on 1ng cman_fp write into /bootflash/crypto/octeon_pci_console_dev0_20170723_075412.log
polaris_bootflash_manage(polaris_cm_fp_t)

polaris_disk_harddisk_read_lnk(polaris_cm_fp_t)
# write to devices like this /proc/bus/pci/04/00.0
kernel_read_system_state(polaris_cm_fp_t)
kernell_write_proc_files(polaris_cm_fp_t)

# cm_fp tmp files like /tmp/octeon-remote-lock-pci:0
type polaris_cm_fp_tmp_t;
files_tmp_file(polaris_cm_fp_tmp_t)
polaris_cm_fp_tmp_filetrans(polaris_cm_fp_tmp_t)
polaris_cm_fp_tmp_manage(polaris_cm_fp_tmp_t)
# besides /tmp/octeon-remote-lock-pci:0 all other files in /tmp
# are ours
files_tmp_filetrans(polaris_cm_fp_t, polaris_cm_fp_tmp_t, file)

# LOOK AT ME: raw memory write access
ifdef(`mcp_family'`,
polaris_dev_mem_use(polaris_cm_fp_t)
')

# LOOK AT ME: raw memory access in cavium vendor SDK
# related to octeon driver (BUG CSCvh55517)
ifdef(`crankshaft_family'`,
polaris_dev_mem_use(polaris_cm_fp_t)
')

# LOOK AT ME: raw memory access in dopler SDK remove after
# CSCvm34516 is fixed using CSCvm34630
ifdef(`starfleet_platform'`,
polaris_dev_mem_use(polaris_cm_fp_t)
')

# "show platform hardware slot F0 eobc interface standby rmon" leads to
# ioctl() call from cmlib_get_eobc_drv_info().
kernell_request_load_module(polaris_cm_fp_t)

# needed for "show platform hardware slot F0 eobc interface standby rmon"
kernell_read_network_state(polaris_cm_fp_t)

# on RP2/RP3 linecard cyan init happens within cm
ifdef(`mcp_family'`,
polaris_dyncfg_setup(polaris_cm_fp_t)
')

allow polaris_cm_fp_t self:capability dac_override;
polaris_obfl_data_manage(polaris_cm_fp_t)

allow polaris_cm_fp_t self:netlink_route_socket rw_netlink_socket_perms;
ifdef(`ngwc_family',` 
# cmfp_asic_mmap_func() function in cmfp module uses 
# /dev/chdrvmmap for asic memory mapping 
polaris_chdrvmmap_dev_use(polaris_cm_fp_t) 

# on macallan cman_fp needs access to /dev/cisco/dplriomem 
# for mapping dplr io memory to application space. 
polaris_dplr_iomem_mmapdrv_dev_use(polaris_cm_fp_t); 

# on macallan iomd needs access to /dev/cisco/fpgaio mem 
# for mapping FPGA io memory to application space. 
polaris_fpga_iomem_mmapfpga_dev_use(polaris_cm_fp_t); 
')

optional_policy(` 
# Allow /dev/dmammap access 
polaris_dmammap_dev_use(polaris_cm_fp_t) 
')

# on starfleet need access to 
# /sys/device/platform/cpld/reg_fan_control 
polaris_cpld_write(polaris_cm_fp_t)

# /dev/shm/sdm access 
optional_policy(` 
polaris_sdm_shm_manage(polaris_cm_fp_t) 
')

logging_send_syslog_msg(polaris_cm_fp_t)

# /dev/epactrlN on qwlc 
optional_policy(` 
polaris_epa_dev_use(polaris_cm_fp_t) 
')

# /dev/astro on qwlc 
optional_policy(` 
polaris_astro_dev_use(polaris_cm_fp_t) 
')

# /dev/cpp_il on qwlc 
optional_policy(` 
polaris_cpp_il_dev_use(polaris_cm_fp_t) 
')

# on radium need to get model info 
optional_policy(` 
polaris_dash_dev_use(polaris_cm_fp_t) 
')
# on neptune, cavium library in o2_cavm_mem_map wants access to
# /sys/devices/pci0000:00/0000:00:01.0/0000:01:00.0/resource0
optional_policy(
  polaris_cpp_cavium_dma_map(polaris_cm_fp_t)
)

# /dev/aikido access
polaris_aikido_dev_use(polaris_cm_fp_t)

optional_policy(
  # betelgeuse need access to /dev/sirius_fpga
  polaris_sirius_fpga_dev_use(polaris_cm_fp_t)
)

# access SERDES /tmp/serdes_asic_key_dir/*
optional_policy(
  polaris_serdes_asic_key_tmp_manage(polaris_cm_fp_t)
)

type polaris_hkp_device_t;
dev_node(polaris_hkp_device_t)

# access /dev/iocp0
optional_policy(
  polaris_spa_dev_use(polaris_cm_fp_t)
)

optional_policy(
  # access /dev/hkp
  polaris_hkp_dev_use(polaris_cm_fp_t)
  
polaris_n2_dev_use(polaris_cm_fp_t)
polaris_cy2213_dev_use(polaris_cm_fp_t)
polaris_ddr_dev_use(polaris_cm_fp_t)
polaris_vega_dev_use(polaris_cm_fp_t)
)
polaris_firmware_read(polaris_cm_fp_t)

# allow access to /csl_p_0/vcpu_template.txt
polaris_iosd_vcpu_read(polaris_cm_fp_t)

# allow Cabo access to i2c semaphores
ifdef(`cabo_platform',`
polaris_i2c_sem_manage(polaris_cm_fp_t)
')
ifdef(`sumatra_platform',`

# access huron fpga on sumatra
polaris_huron_dev_use(polaris_cm_fp_t)
`

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmfp.te
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#
# December 2018, Victor Kamensky
#
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#

# polarisezmancc file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisezmancc.fc
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#
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#
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#

policy_module(polarisripc, 1.0);

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#

# polarisripc file contexts place holder

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dnl

dnl April 2018, Victor Kamensky

dnl

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dnl

divert(-1)

include(`polaris_process.m4')
include(`polaris_process_fc.m4')

include(`polaris_ipc_mqipc.m4')
include(`polaris_ipc_mqipc_fc.m4')

include(`polaris_ipc_ripc.m4')
include(`polaris_ipc_ripc_fc.m4')

include(`polaris_ipc_lipc.m4')
include(`polaris_ipc_lipc_fc.m4')


dnl Stub out non existent one
define(`polaris_websocket_service_server',`')
define(`polaris_cipc_service_server',`')

include(`polaris_max_scope.m4')

divert(0)dnl
#
# This is a generated file! Instead of modifying this file,
# modify proper platform TDL file.
#

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_fc.m4
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#
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#

policy_module(polarisstorage, 1.0);

##########################################################################
# Persistent storage policy

attribute polaris_disk;

# Default disk types

type polaris_disk_bootflash_t;
polaris_disk_type(polaris_disk_bootflash_t)

type polaris_disk_varied_t;
polaris_disk_type(polaris_disk_varied_t)

type polaris_disk_harddisk_t;
polaris_disk_type(polaris_disk_harddisk_t)

type polaris_disk_csl_p_t;
polaris_disk_type(polaris_disk_csl_p_t)

type polaris_disk_csl_s_t;
polaris_disk_type(polaris_disk_csl_s_t)

type polaris_disk_objstore_t;
polaris_disk_type(polaris_disk_objstore_t)

type polaris_disk_crashinfo_t;
polaris_disk_type(polaris_disk_crashinfo_t)

type polaris_disk_license_t;
polaris_disk_type(polaris_disk_license_t)

type polaris_disk_ucode_t;
polaris_disk_type(polaris_disk_ucode_t)

type polaris_disk_recovery_t;
polaris_disk_type(polaris_disk_recovery_t)

type polaris_disk_config_t;
polaris_disk_type(polaris_disk_config_t)

# Persistent files types

type polaris_system_report_t;
polaris_pfile_type(polaris_system_report_t)

type polaris_core_file_t;
polaris_pfile_type(polaris_core_file_t)

type polaris_debug_conf_t;
polaris_pfile_type(polaris_debug_conf_t)
type polaris_packages_conf_t;
polaris_pfile_type(polaris_packages_conf_t)

type polaris_grub_efi_t;
polaris_pfile_type(polaris_grub_efi_t)

# we label .ssh files residing on persistent storage as ssh_home_t
# and sshd_key_t
#
# below statement could/should be moved into ssh te file?
gen_require(
    type ssh_home_t;
    type sshd_key_t;
    ')
polaris_disk_type(ssh_home_t)
polaris_disk_type(sshd_key_t)

# handling /bootflash directory - created by systemd unit, note normally
# something will be mounted on top of it, but in some cases like RP2 line
# cards it will be ramfs directory.
gen_require(
    type root_t;
    type unconfined_service_t;
    ')
filetrans_pattern(unconfined_service_t, root_t, polaris_disk_bootflash_t, dir, "bootflash")

# nfsd accesses different persistent storage directories and it needs getattr
gen_require(
    type nfsd_t;
    ')
polaris_persistent_getattr(nfsd_t)

# on qwlc /misc/scratch symbolic link created by systemd-tmpfile, but then
# removed and recreated by harddisk mount systemd unit
gen_require(
    type unconfined_service_t;
    type mnt_t;
    ')
filetrans_pattern(unconfined_service_t, mnt_t, polaris_disk_bootflash_t, lnk_file, "scratch")

gen_require(
    type polaris_confd_t;
    type tmp_t;
    ')
filetrans_pattern(polaris_confd_t, tmp_t, polaris_packages_conf_t, file, "packages.conf")

# first time creation of /bootflash/core directory
gen_require(
    type initrc_t;
    type init_t;
)
filetrans_pattern({initrc_t init_t unconfined_service_t}, {polaris_disk_bootflash_t polaris_disk_harddisk_t} , polaris_core_file_t, dir, "core")

gen_require(
    type init_t;
)
files_tmp_filetrans(init_t, polaris_packages_conf_t, file, "packages.conf")

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#
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#
/usr/bin/os/conf/run_ioxin_gs_ha.sh -- gen_context(system_u:object_r:polaris_gsd_rp_exec_t,s0)

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisgsdrp.fc
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#
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#
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#
/usr/cpp/bin/cpp_sp_svr -- gen_context(system_u:object_r:polaris_cpp_sp_exec_t,s0)
/usr/cpp/bin/cpp_sp_svr_ledp -- gen_context(system_u:object_r:polaris_cpp_sp_exec_t,s0)
/usr/cpp/bin/cpp_sp_svr_us_ledp -- gen_context(system_u:object_r:polaris_cpp_sp_exec_t,s0)
/usr/cpp/bin/cpp_sp_svr_vwlc -- gen_context(system_u:object_r:polaris_cpp_sp_exec_t,s0)
/usr/cpp/bin/cpp_sp_svr_vwlcli -- gen_context(system_u:object_r:polaris_cpp_sp_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppsp.fc
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#
# March 2017, Victor Kamensky
### <summary>Polaris Btrace Policy Rules.</summary>

###########################################################
# Btrace policy
###########################################################

###########################################################
# <summary>
# Manage btrace auxilary files
# </summary>
# <param name="domain">
# Domain allowed access.
# </param>
#
interface(`polaris_btrace_data_manage',
gen_require(
  type polaris_btrace_base_t;
type polaris_btrace_tmpfs_t;
type tmpfs_t;
'))
manage_dirs_pattern($1, polaris_btrace_base_t, polaris_btrace_base_t)

# work with cache files and dirs under /tmp/tmppub, like /tmp/tmppub/libs_cache
polaris_btrace_tmppub_manage($1)

fs_tmpfs_filetrans($1, polaris_btrace_tmpfs_t, file, "oper_uuid_shm")
manage_files_pattern($1, tmpfs_t, polaris_btrace_tmpfs_t)
allow $1 polaris_btrace_tmpfs_t:file map;
')

###########################################################
# <summary>
# Manage temporary (not yet persistent) btrace files
# </summary>
# <param name="domain">
# Domain allowed access.
# </param>
#

### <rolebase/>

```haskell
#
interface('polaris_btrace_data_manage_all',`
polaris_btrace_data_manage($1)
```

gen_require('`
  attribute polaris_btrace_data_domain;
type polaris_btrace_base_t;
')

manage_files_pattern($1, polaris_btrace_base_t, polaris_btrace_data_domain)
manage_lnk_files_pattern($1, polaris_btrace_base_t, polaris_btrace_data_domain)
allow $1 polaris_btrace_data_domain:file map;

# create temporary files in trace directory
manage_files_pattern($1, polaris_btrace_base_t, polaris_btrace_base_t)
manage_lnk_files_pattern($1, polaris_btrace_base_t, polaris_btrace_base_t)

# watch btrace data directory for changes
allow $1 polaris_btrace_base_t:dir watch;
```
# <summary>
# Domain allowed access.
# </summary>
#
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_btrace_persistent_data_read,'
  gen_require(
      type polaris_btrace_data_t;
  )
)

search_dirs_pattern($1, polaris_btrace_data_t, polaris_btrace_data_t)
read_files_pattern($1, polaris_btrace_data_t, polaris_btrace_data_t)
'
)

#<summary>
# Search btrace persistent files
#</summary>
#<param name="domain">
# Domain allowed access.
#</param>
#
interface(`polaris_btrace_persistent_data_search','
  gen_require(
      type polaris_btrace_data_t;
  )
)

search_dirs_pattern($1, polaris_btrace_data_t, polaris_btrace_data_t)
'
)

#<summary>
# Search tracelogs directions in bootflash, harddisk or crashinfo
directories
#</summary>
#<param name="domain">
# Domain allowed access.
#</param>
#
interface(`polaris_btrace_search_tracelogs','
  gen_require(
      type polaris_btrace_data_t;
  )
)

search_dirs_pattern($1, polaris_btrace_data_t, polaris_btrace_data_t)
type polaris_disk_harddisk_t;
    type polaris_disk_bootflash_t;
    type polaris_disk_crashinfo_t;
  
  search_dirs_pattern($1, polaris_disk_harddisk_t, polaris_btrace_data_t)
  search_dirs_pattern($1, polaris_disk_bootflash_t, polaris_btrace_data_t)
  search_dirs_pattern($1, polaris_disk_crashinfo_t, polaris_btrace_data_t)

  ##################################################################
  ## <summary>
  ##      Manage btrace boot level config files
  ## </summary>
  ## <param name="domain">
  ##      Domain allowed access.
  ## </param>
  ## <rolebase/>
  #
  interface('polaris_btrace_lvl_config_manage',
    gen_require(
      type polaris_btrace_lvl_config_t;
      type polaris_btrace_data_t;
    )
  )

  manage_dirs_pattern($1, polaris_btrace_lvl_config_t, polaris_btrace_lvl_config_t)
  manage_files_pattern($1, polaris_btrace_lvl_config_t, polaris_btrace_lvl_config_t)
  filetrans_pattern($1, polaris_btrace_data_t, polaris_btrace_lvl_config_t, dir, "level_config")

  polaris_btrace_search_tracelogs($1)

  polaris_disk_bootflash_read_lnk($1)
  polaris_disk_harddisk_read_lnk($1)
  polaris_disk_crashinfo_read_lnk($1)

  ##################################################################
  ## <summary>
  ##      Read ldb tmp btrace meta data files
  ## </summary>
  ## <param name="domain">
  ##      Domain allowed access.
  ## </param>
  ## <rolebase/>
# interface('polaris_btrace_ldb_tmp_read',
    gen_require('type polaris_ldb_tmp_t;
     ')

    read_files_pattern($1, polaris_ldb_tmp_t, polaris_ldb_tmp_t)
     ')

#################################################################
## <summary>
##	Read and write all btrace or pman fifo file, used as
##	standard input/output.
## </summary>
## <param name="domain">
##<summary>
##	Domain allowed access.
## </summary>
## </param>
## <rolecap/>
#
interface('polaris_use_btrace_fifo',
    gen_require('type polaris_fifo_stdout_t;
     ')

allow $1 polaris_fifo_stdout_t:fifo_file { rw_term_perms lock append create unlink getattr };

# For pmanlite, allow pman's grand-children to be able to operate on
# pipe created by pman.
polaris_use_pman_fifo($1)
     ')

#################################################################
## <summary>
##	Execute create_luid_file_db in the its domain.
## </summary>
## <param name="domain">
##<summary>
##	Domain allowed to transition.
## </summary>
## </param>
## interface('polaris_create_ldb_domtrans',
    gen_require('type polaris_create_ldb_t, polaris_create_ldb_exec_t;
     ')

    create_luid_file_db($1, polaris_create_ldb_t, polaris_create_ldb_exec_t);
     ')
corecmd_search_bin($1)
domtrans_pattern($1, polaris_create_ldb_exec_t, polaris_create_ldb_t)
')

Helper functions

### <summary>
### Make the specified type usable as btrace data file type.
### </summary>
### <param name="type">
### Type to be used for files.
### </param>
#
interface('polaris_btrace_data_type',
    files_type($1)
gen_require(
    attribute polaris_btrace_data_domain;
    )
typeattribute $1 polaris_btrace_data_domain;
')

### <summary>
### Process to manage its own btrace files
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
### <param name="file_type">
### File type of btrace that corresponds to given domain.
### </param>
### <rolebase/>
#
interface('polaris_btrace_data_client',
gen_require(
type polaris_btrace_base_t;
')
manage_files_pattern($1, polaris_btrace_base_t, $2)
manage_lnk_files_pattern($1, polaris_btrace_base_t, $2)
filetrans_pattern($1, polaris_btrace_base_t, $2, { file lnk_file })
# all clients check for /tmp/rp/trace/publish/timed/enabled control
# file presence, created by btman, may need its own type
gen_require(
    type polaris_btman_bt_t;
)
getattr_files_pattern($1, polaris_btrace_base_t, polaris_btman_bt_t)

allow $1 $2:file map;
)

#########################################################################
## <summary>
##    Process to manage its own btrace files
## </summary>
## <param name="domain_stem">
##    <summary>
##    Stream of domain allowed access.
##    </summary>
## </param>
#
interface(`polaris_btrace_data_client_template',`
    gen_require(`
        attribute polaris_btrace_data_domain;
        type polaris_btrace_base_t;
    )

    type polaris_$1_bt_t;
    polaris_btrace_data_type(polaris_$1_bt_t)

    polaris_btrace_data_client(polaris_$1_t, polaris_$1_bt_t)
    )

#########################################################################
## <summary>
##   Execute mcp_trace_request.sh in its domain.
## </summary>
## <param name="domain">
##   <summary>
##   Domain allowed to transition.
##   </summary>
## </param>
#
interface(`polaris_trace_request_domtrans',`
    gen_require(`
        type polaris_trace_request_t, polaris_trace_request_exec_t;
    )
corecmd_search_bin($1)
domtrans_pattern($1, polaris_trace_request_exec_t, polaris_trace_request_t)
')

#############################################################################
## <summary>
##      Watch btrace directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolebase/>
#
interface('polaris_btrace_data_watch',
  gen_require(
    type polaris_btrace_base_t;
    type polaris_btrace_data_t;
  )
    allow $1 polaris_btrace_base_t:dir watch;
    allow $1 polaris_btrace_data_t:dir watch;
  )

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbtrace.if
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#
#
policy_module(polaristamsrp, 1.0);

gen_require(
  type polaris_tams_rp_t;
)

polaris_btrace_data_manage(polaris_tams_rp_t)
polaris_crft_data_manage(polaris_tams_rp_t)
polaris_chasfs_manage(polaris_tams_rp_t)
polaris_tdlresolve_read(polaris_tams_rp_t)
polaris_tdldb_list_dirs(polaris_tams_rp_t)
polaris_flashlib_read(polaris_tams_rp_t)
polaris_cpld_read(polaris_tams_rp_t)

polaris_ripc_sman_ui_serv_connect(polaris_tams_rp_t)

# tams_tamc_tipc_listener_init function create tipc socket
allow polaris_tams_rp_t self:socket { bind create listen accept getattrib read write };

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#
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#

policy_module(polarisiomd, 1.0);

gen_require(`
    type polaris_iomd_t;
')

polaris_btrace_data_manage(polaris_iomd_t)
polaris_crft_data_manage(polaris_iomd_t)
polaris_chasfs_manage(polaris_iomd_t)
polaris_tdlresolve_read(polaris_iomd_t)
polaris_tdldb_list_dirs(polaris_iomd_t)
polaris_cpld_read(polaris_iomd_t)
polaris_flashlib_read(polaris_iomd_t)
polaris_ripc_sman_ui_serv_connect(polaris_iomd_t)
polaris_db_tdldb_dir_use(polaris_iomd_t)
polaris_dyncfg_tmp_read(polaris_iomd_t)
optional_policy(`
    polaris_spa_dev_use(polaris_iomd_t)
')

# allow objstore access
polaris_disk_objstore_read(polaris_iomd_t)
polaris_ngio_dev_use(polaris_iomd_t)
# deals with /dev/shm files semaphors; like uuid_sem semaphore
# created by btrace_get_uuid function
type polaris_iomd_tmpfs_t;
files_tmpfs_file(polaris_iomd_tmpfs_t)
fs_tmpfs_filetrans(polaris_iomd_t, polaris_iomd_tmpfs_t, file)
manage_files_pattern(polaris_iomd_t, tmpfs_t, polaris_iomd_tmpfs_t)
# sem_open through where_is_shmfs does stat on /dev/shm
fs_getattr_tmpfs(polaris_iomd_t)

#allow /dev/i2c device file
polaris_i2c_use(polaris_iomd_t)

ifdef(`ngwc_family',`
# On Macallan platforms the following api call from iomd process,
# ngmodslot_is_upper_sup_present() does a read access of /dev/cpld
polaris_cpld_dev_read(polaris_iomd_t)
polaris_cpld_dev_use(polaris_iomd_t)

#allow cpp tmp file
polaris_cpp_tmp_files_use(polaris_iomd_t)

# In Macallan cards which use Doppler ASIC,
# IOMD module uses ngmod_doppler_mmap() api to get hold of
# MMapped Asic address. As part of the operation it uses
# /dev/chdrvmmap device.
polaris_chdrvmmap_dev_use(polaris_iomd_t)

# IOMD module invokes ASIC Scan functionality
# and calls asic_register_intr_handler () , which
# needs to access the doppler MSI devices
# /dev/msi/Slot[0-9]*/Doppler[0-9]/Group[0-9]
polaris_dplr_dev_use(polaris_iomd_t)
# but above still not enough at some point
# device like /dev/msi/Slot8/Doppler0/Group0 still
# considered as device_t, not clear need to look a bit more
dev_rw_generic_chr_files(polaris_iomd_t)

# on macallan iomd needs access to /dev/cisco/dplrionem
# for mapping dplr io memory to application space.
polaris_dplr_iomem_mmapdrv_dev_use(polaris_iomd_t);

# IOMD calls ngmod_obfl_errmsg_app_init() to initialize
# OBFL.
polaris_obfl_data_manage(polaris_iomd_t)

# IOMD fast path code invokes ngmod_fastpath_thread_func(),
# which increases the scheduler priority.
allow polaris_iomd_t self:capability sys_nice;
allow polaris_iomd_t self:process setsched;
# on macallan iomd needs access to /dev/cisco/fpgaionem
# for mapping FPGA io memory to application space.
polaris_fpga_iomem_mmapfpga_dev_use(polaris_iomd_t);

optional_policy(
# ASIC related mmap code in IOMD needs to acces PCI scan related
# rescan shm mutex
polaris_cm_cc_tmpfs_manage(polaris_iomd_t)
')

# both utah and macallan text relocations in libcpp_common_os.so
ifdef(`crankshaft_family',`
polaris_icc_broken_relocations(polaris_iomd_t)
# Nightwatch switch module needs to access the doppler devices
polaris_dplr_dev_use(polaris_iomd_t)
dev_rw_generic_chr_files(polaris_iomd_t)
allow polaris_iomd_t self:capability sys_nice;
allow polaris_iomd_t self:process setsched;
')

optional_policy(
# Allow /dev/dmammap access
polaris_dmammap_dev_use(polaris_iomd_t)
')

optional_policy(
# on starfleet access gettysburg_fpga
polaris_gettysburg_fpga_dev_use(polaris_iomd_t)
')

type polaris_iomd_tmp_t;
files_tmp_file(polaris_iomd_tmp_t)
manage_dirs_pattern(polaris_iomd_t, polaris_iomd_tmp_t, polaris_iomd_tmp_t)
manage_files_pattern(polaris_iomd_t, polaris_iomd_tmp_t, polaris_iomd_tmp_t)
manage_fifo_files_pattern(polaris_iomd_t, polaris_iomd_tmp_t, polaris_iomd_tmp_t)

# on macallan MRVL88X5113_DRV_PRINT macro outputs into /tmp/mrvl88x5113.log file
files_tmp_filetrans(polaris_iomd_t, polaris_iomd_tmp_t, file, "mrvl88x5113.log")

logging_send_syslog_msg(polaris_iomd_t)

ifdef(`ngwc_family',`
# from in115050_test_app_thread_create in
# drivers/userspace/inphi/dev_ephy_in115050/src/dev_ephy_in115050.c
# For macallan in115025_test_app_thread_create in
# drivers/userspace/inphi/dev_ephy_in115025/src/dev_ephy_in115025.c
files_tmp_filetrans(polaris_iomd_t, polaris_iomd_tmp_t, dir, "test_inphi")
In case of starfleet fixed the following module creates folder in /tmp
# /drivers/userspace/mrvl_phy/dev_ephy_mrvl88ec808/srcc/dev_ephy_m88ec808.c
files_tmp_filetrans(polaris_iomd_t, polaris_iomd_tmp_t, dir, "test_mrvlphy")

#allow access to /tmp/serdes_asic_key_dir as this path is used both by
cman_fp for programming DPP serdes and IOMD for programming n/w serdes
optional_policy(`
polaris_serdes_asic_key_tmp_manage(polaris_iomd_t)
')

#Doppler E mac creates lockfiles with names following
#the pattern /tmp/nug_asic_key_dir/nug_asic_key_[0-9]_[0-9]_[0-9]
files_tmp_filetrans(polaris_iomd_t, polaris_iomd_tmp_t, dir, "nug_asic_key_dir")

#Doppler ES mac creates lockfiles with names following
#the pattern /tmp/rmt_asic_key_dir/rmt_asic_key_[0-9]_[0-9]_[0-9]
files_tmp_filetrans(polaris_iomd_t, polaris_iomd_tmp_t, dir, "rmt_asic_key_dir")

# from etopus_spawn_serdes_tool_thread in
# binos/platforms/ngwc/doppler_sdk/drivers/serdes/Vendor/src/etopus_serdes.c
files_tmp_filetrans(polaris_iomd_t, polaris_iomd_tmp_t, dir, "test_etp")

#on starfleet access /dev/cpld, in iomd_starfleet_create_mmap()
polaris_cpld_dev_use(polaris_iomd_t)
')

optional_policy(`
polaris_ngwc_itfpo_manage(polaris_iomd_t)
')

# ngio device
type polaris_ngio_device_t;
dev_node(polaris_ngio_device_t)

#For NGIO modules iomd uses netlink socket (via backplane switch)
allow polaris_iomd_t self:netlink_socket { bind create };

ifdef(`sumatra_platform',`
#on Sumatra access /dev/cpld from iomd
polaris_cpld_dev_use(polaris_iomd_t)
# LOOK AT ME: After direct usage of /dev/mem is removed (CSCvw80796)
polaris_dev_mem_use(polaris_iomd_t)
polaris_sumatra_doppler_dev_use(polaris_iomd_t)

#access SERDES /tmp/serdes_asic_key_dir/
polaris_serdes_asic_key_tmp_manage(polaris_iomd_t)
# access /dev/huron_fpga
polaris_huron_dev_use(polaris_iomd_t)

# manage "sysctrl_i2c.lck"
gen_require(' type polaris_cm_rp_tmp_t;
   ')
files_tmp_filetrans(polaris_iomd_t, polaris_cm_rp_tmp_t, file, "sysctrl_i2c.lck")
polaris_cm_rp_tmp_manage(polaris_iomd_t)

# comm="iomd" kmod="netdev-bp246"
kernel_request_load_module(polaris_iomd_t)

# work with /sys/devices/i2c-15/15-0076/...
dev_rw_sysfs(polaris_iomd_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisiomd.te
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dnl
dnl April 2018, Victor Kamensky
dnl
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define(`polaris_lipc_service_server_many',
   `ifelse($3, `',
      polaris_lipc_create_name(dollarsone, $1, "$2"),
      polaris_lipc_create_name(dollarsone, $1, "$2-b$3")
   `ifelse($3, 0, `polaris_lipc_create_name(dollarsone, $1, "$2"), `polaris_lipc_service_server_many($1, $2, eval($3 - 1))')'))

define(`polaris_lipc_service_server_aux',`dnl

"polaris_lipc_$1_create_name",``
gen_require("
type $2;
')
$3
")

########################################
## <summary>
## Write $2 lipc chanell.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <param name="server">
## Domain of owner of lipc channel.
## </param>
## <infoflow type="none"/>
#
interface(`polaris_lipc_$1_write''`,
  gen_require(`
    type $2;
  ')
  polaris_lipc_write(dollarsone, $2, dollarstwo)
  ')
)

define(`polaris_lipc_service_server',
  polaris_lipc_service_server_aux(lipc_stem($1), lipc_label($1),
    polaris_lipc_service_server_many(lipc_label($1), $5, max_scope_map($3, $4, $2)))
)

define(`polaris_lipc_service_client','

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_lipc_if.m4
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# # March 2017, Victor Kamensky # # Copyright (c) 2017-2021 by Cisco Systems, Inc. # All rights reserved #

policy_module(polarisncd, 1.0);
# allow sntp transition in its own domain when started by ncd
ntp_domtrans_ntpdate(polaris_ncd_t)

corecmd_exec_bin(polaris_ncd_t)
corecmd_exec_shell(polaris_ncd_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_ncd_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_ncd_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_ncd_t)

# work with /tmp files (/tmp/ncd)
type polaris_ncd_tmp_t;
files_tmp_file(polaris_ncd_tmp_t)
manage_dirs_pattern(polaris_ncd_t, tmp_t, polaris_ncd_tmp_t)
manage_files_pattern(polaris_ncd_t, tmp_t, polaris_ncd_tmp_t)
manage_fifo_files_pattern(polaris_ncd_t, polaris_ncd_tmp_t, polaris_ncd_tmp_t)
files_tmp_filetrans(polaris_ncd_t, polaris_ncd_tmp_t, file)

# create /tmp/ncd and /tmp/etc/ncd_work_dir directories

gen_require(
    type polaris_etc_t;
    )
manage_dirs_pattern(polaris_ncd_t, { tmp_t polaris_etc_t }, polaris_ncd_tmp_t)
files_tmp_filetrans(polaris_ncd_t, polaris_ncd_tmp_t, dir, "ncd")

# /tmp/etc/ncd_work_dir
filetrans_pattern(polaris_ncd_t, polaris_etc_t, polaris_ncd_tmp_t, dir, "ncd_work_dir")

# work with /tmp/ncd/inot_fifo
files_tmp_filetrans(polaris_ncd_t, polaris_ncd_tmp_t, fifo_file, "inot_fifo")
manage_fifo_files_pattern(polaris_ncd_t, tmp_t, polaris_ncd_tmp_t)

# allow sntp to read out fifo file

gen_require(
    type ntpd_t;
    )
read_fifo_files_pattern(ntpd_t, polaris_ncd_tmp_t, polaris_ncd_tmp_t)

# work with /tmp/ufs directory. the ufs directory can be created
# by both polaris_ncd_t and udev_t subjects (depending upon platform
# logic)
gen_require(
    type udev_t;
    type unconfined_service_t;
  )
files_tmp_filetrans( { polaris_ncd_t udev_t unconfined_service_t }, polaris_ncd_tmp_t, dir, "ufs")
polaris_btrace_data_manage(polaris_ncd_t)
polaris_cpld_read(polaris_ncd_t)
polaris_proc_rmonbifo_read(polaris_ncd_t)
polaris_rmonbifo_tmp_read(polaris_ncd_t)
polaris_boot_tmp_read(polaris_ncd_t)
polaris_disk_crashinfo_getattr(polaris_ncd_t)
polaris_disk_bootflash_read_lnk(polaris_ncd_t)
polaris_flashlib_lock(polaris_ncd_t)
polaris_flashlib_read(polaris_ncd_t)
polaris_read_debug_conf(polaris_ncd_t)
polaris_read_packages_conf(polaris_ncd_t)
brctl_domtrans(polaris_ncd_t)
sysnet_domtrans_ifconfig(polaris_ncd_t)

type polaris_ncd_etc_t;
files_config_file(polaris_ncd_etc_t)
gen_require(
    attribute domain;
  )
files_etc_filetrans(domain, polaris_ncd_etc_t, file, "mount_data")
manage_dirs_pattern(polaris_ncd_t, polaris_ncd_etc_t, polaris_ncd_etc_t)
manage_files_pattern(polaris_ncd_t, polaris_ncd_etc_t, polaris_ncd_etc_t)

# runs exportsfs command
rpc_read_exports(polaris_ncd_t)
rpc_write_exports(polaris_ncd_t)
rpcManage_nfs_state_data_dir(polaris_ncd_t)
rpc_manage_nfs_state_data(polaris_ncd_t)
fs_rw_nfsd_fs(polaris_ncd_t)
kernel_rw_rpc_sysctls(polaris_ncd_t)
fs_getattr_xattr_fs(polaris_ncd_t)

# reloads xinetd@/tmp/etc/xinetd.conf.consolidated.service and
# systemctl reload xinetd_brelay@eobc.service
systemd_exec_systemctl(polaris_ncd_t)
systemd_reload_all_services(polaris_ncd_t)
systemd_status_all_unit_files(polaris_ncd_t)

polaris_chvrf_domtrans(polaris_ncd_t)
# ncd process calls ifconfig and route and mcp_chvrf
gen_require(
    type polaris_chvrf_t;
)
sysnet_domtrans_ifconfig(polaris_chvrf_t)
allow polaris_chvrf_t self:capability net_admin;
allow polaris_chvrf_t self:udp_socket { create ioctl };
allow polaris_ncd_t self:process setpgid;

polaris_persistent_getattr(polaris_ncd_t)

# access to /etc/sysconfig/network-scripts
sysnet_read_config(polaris_ncd_t)

fs_getattr_tmpfs(polaris_ncd_t)

# manage file under /tmp/etc/ncd_work_dir
gen_require(
    type initrc_tmp_t;
type initrc_t;
)
filetrans_pattern(polaris_ncd_t, initrc_tmp_t, polaris_ncd_tmp_t, dir,"ncd_work_dir")
polaris_ncd_tmp_manage(polaris_ncd_t)
# /tmp/root/loopback is created by initrc_t, but managed by ncd.sh.
# dynamic label directory "/tmp/root/loopback" as polaris_ncd_tmp_t
files_tmp_filetrans(initrc_t, polaris_ncd_tmp_t, dir,"loopback")
# flashutil has wrong file permission
allow polaris_ncd_t self:capability { dac_override sys_resource };

# access to /tmp/etc/xinetd.conf.consolidated
init_read_script_tmp_files(polaris_ncd_t)

allow polaris_ncd_t self:capability net_admin;

# search/getattr of /tmp/udev/etc/udev
polaris_udev_tmp_list_dirs(polaris_ncd_t)

# ncd calls mount to handle nfs directories
mount_domtrans(polaris_ncd_t)

#rsync_exec(polaris_ncd_t)
gen_require(
    type rsync_t;
type rsync_tmp_t;
rsync_entry_domtrans(polaris_ncd_t, rsync_t)
allow rsync_t polaris_ncd_t:process sigchld;
# file descriptor leak when rsync is called
allow rsync_t polaris_ncd_t:fifo_file write;
# PLEASE LOOK AT ME: probably /tmp/active_epoch deserves its own type
# /tmp/active_epoch on its way to /tmp/chassis/local/rp/chasfs/rp/0/0/epoch
manage_files_pattern(polaris_ncd_t, rsync_tmp_t, rsync_tmp_t)

# creates files under /tmp/udev/etc/udev/
polaris_udev_tmp_manage(polaris_ncd_t)
allow polaris_ncd_t self:process setfscreate;

# run /sbin/hwclock in its own domain
clock_domtrans(polaris_ncd_t)
# stdin file descriptor leak when hwclock started
gen_require(''
    type hwclock_t;
    ''
allow hwclock_t polaris_ncd_tmp_t:fifo_file read;

ifdef('ngwc_family',''
polaris_getattr_filesystem_disk_ucode(polaris_ncd_t)
''

# update /tmp/etc/xinetd.conf.consolidated file
polaris_etc_append(polaris_ncd_t)

# ncd.sh adds entries to /etc/exports file
gen_require(''
    type etc_t;
    ''
append_files_pattern(polaris_ncd_t, etc_t, etc_t)

# create and write into /tmp/unifiedfs/unifiedfs_log
manage_files_pattern(polaris_ncd_t, polaris_ufs_tmp_t, polaris_ufs_tmp_t)
polaris_ncd_rpcinfo_net(polaris_ncd_t)

# accessing /mnt/usb0
fs_search_removable(polaris_ncd_t)
polaris_getattr_removable(polaris_ncd_t)
polaris_getattr_removable(polaris_ufs_helper_t)

# ncd.sh calls ps command
# ps needs access to /sys/devices/system/cpu/online
# write/create to "/sys/module/nfs/parameters/nfs4_unique_id"
dev_rw_sysfs(polaris_ncd_t)
dev_manage_sysfs_dirs(polaris_ncd_t)
gen_require('  
    type sysfs_t;
')
create_files_pattern(polaris_ncd_t, sysfs_t, sysfs_t)

# ps needs access to proc_t
kernel_read_system_state(polaris_ncd_t)
# ps needs access to state of all domains
domain_read_all_domains_state(polaris_ncd_t)

# send signal to ntpd
ntp_signal(polaris_ncd_t)

# ncd.sh executes hostname
hostname_exec(polaris_ncd_t)

# ncd.sh runs mcp_trace_request.sh
polaris_trace_request_domtrans(polaris_ncd_t)

# handling /usr/binos/conf/iosd_consoie_attach.sh
polaris_utility_domain_template(console_attach)
polaris_bexecute_domain(polaris_console_attach_t, polaris_console_attach_exec_t)
corecmd_exec_bin(polaris_console_attach_t)
auth_use_nsswitch(polaris_console_attach_t)

# execute ping over liin: /usr/binos/conf/mcp_chvrf.sh liin /bin/ping -c 1 -w 300 192.168.1.6
polaris_chvrf_domtrans(polaris_console_attach_t)
# from chvrf.sh code executes ping command
gen_require('  
    type polaris_chvrf_t;
')
netutils_domtrans_ping(polaris_chvrf_t)
# send sigchld when it is done
gen_require('  
    type ping_t;
')
allow ping_t polaris_console_attach_t:process sigchld;
polaris_boot_tmp_read(polaris_console_attach_t)
polaris_btrace_data_manage(polaris_console_attach_t)
polaris_chasfs_read(polaris_console_attach_t)
polaris_cpld_read(polaris_console_attach_t)
polaris_disk_bootflash_search(polaris_console_attach_t)
polaris_disk_crashinfo_getattr(polaris_console_attach_t)
polaris_ncd_tmp_read(polaris_console_attach_t)
polaris_read_debug_conf(polaris_consoleAttach_t)
polaris_monbifo_tmp_read(polaris_console_attach_t)
polaris_use_btrace_fifo(polaris_console_attach_t)

# read /proc/cmdline
kernel_read_system_state(polaris_consoleAttach_t)

# read /tmp/myhostname file
polaris_hm_tmp_read(polaris_consoleAttach_t)
telnet_use_ptys(polaris_consoleAttach_t)

allow polaris_consoleAttach_t self:capability sys_resource;
allow polaris_consoleAttach_t self:process setrlimit;

# getty starts /usr/binos/conf/iosd_console_attach.sh through brelay
gen_require(‘
    type getty_t;
  ’)
polaris_bconsole_domtrans(getty_t)

# console_attach.sh start btelnet.sh over chvrf and bexecute
gen_require(‘
    type polaris_bexecute_t;
  ’)
allow polaris_bexecute_t polaris_consoleAttach_t:process sigchld;
corenent_tcp_connect_telnetd_port(polaris_bexecute_t)

# handling /usr/binos/conf/unifiedfs/unifiedfs_helper.sh
polaris_utility_domain_template(ufs_helper)
corecmd_exec_bin(polaris_ufs_helper_t)
auth_use_nsswitch(polaris_ufs_helper_t)

# rsync calls unifiedfs_helper.sh
gen_require(‘
    type rsync_t;
  ’)
polaris_ufs_helper_domtrans(rsync_t);

# unifiedfs_helper.sh calls mount to handle nfs directories
mount_domtrans(polaris_ufs_helper_t)

# creates files under /tmp/udev/etc/udev/
polaris_udev_tmp_manage(polaris_ufs_helper_t)
polaris_disk_bootflash_search(polaris_ufs_helper_t)
polaris_ncd_tmp_manage(polaris_ufs_helper_t)
polaris_ncd_etc_read(polaris_ufs_helper_t)

# stat over /tmp/ufs/crashinfo/10.1.1.1
polaris_disk_crashinfo_getattr(polaris_ufs_helper_t)

# unifiedfs_helper.sh creates /tmp/unifiedfs and manages underlying dirs
type polaris_ufs_tmp_t;
files_tmp_file(polaris_ufs_tmp_t)
files_tmp_filetrans(polaris_ufs_helper_t, polaris_ufs_tmp_t, { file dir })
manage_dirs_pattern(polaris_ufs_helper_t, polaris_ufs_tmp_t, polaris_ufs_tmp_t)
manage_files_pattern(polaris_ufs_helper_t, polaris_ufs_tmp_t, polaris_ufs_tmp_t)
manage_lnk_files_pattern(polaris_ufs_helper_t, polaris_ufs_tmp_t, polaris_ufs_tmp_t)

# Required for /tmp/unifiedfs access on vWLC
ifdef(`vwlc_platform',
files_tmp_filetrans(unconfined_service_t, polaris_ufs_tmp_t, dir, "unifiedfs")
')
polaris_ncd_rpcinfo_net(polaris_ufs_helper_t)
polaris_persistent_getattr(polaris_ufs_helper_t)

# rm from coreutils-8.30 wants to know filesystem type
fs_getattr_tmpfs(polaris_ufs_helper_t)

# ncd.sh read,search,open, creates, add_name and writes to /proc/hanet/tun_local_ip
gen_require(''
type polaris_hanet_proc_t;
type proc_t;
')
manage_files_pattern(polaris_ncd_t, polaris_hanet_proc_t, polaris_hanet_proc_t)
allow polaris_hanet_proc_t proc_t:filesystem associate;

allow polaris_ufs_helper_t self:capability sys_resource;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisncd.te
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dnl
dnl May 2018, Manohar Hungund
dnl
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dnl
dnl Starfleet Platform Max Bay Limits
max_bay_map_set('rp', 'per_bay', 0)
max_bay_map_set('cc', 'per_bay', 5)
max_bay_map_set('fp', 'per_bay', 5)

min_bay_ripc_map_set('rp', 'per_bay', 0)
min_bay_ripc_map_set('cc', 'per_bay', 1)
min_bay_ripc_map_set('fp', 'per_bay', 0)

max_bay_ripc_map_set('rp', 'per_bay', 2)
max_bay_ripc_map_set('cc', 'per_bay', 6)
max_bay_ripc_map_set('fp', 'per_bay', 1)

min_bay_ripc_map_set('rp', 'global', 0)
min_bay_ripc_map_set('cc', 'global', 1)
min_bay_ripc_map_set('fp', 'global', 0)

max_bay_ripc_map_set('rp', 'global', 2)
max_bay_ripc_map_set('cc', 'global', 6)
max_bay_ripc_map_set('fp', 'global', 1)

dnl in elastic scope each process has its own value
max_elastic_map_set('rp', 'elastic', BPROC_ODM, 0)
max_elastic_map_set('cc', 'elastic', BPROC_ODM, 0)
max_elastic_map_set('fp', 'elastic', BPROC_ODM, 0)

max_elastic_map_set('rp', 'elastic', BPROC_WNCD, 0)
max_elastic_map_set('cc', 'elastic', BPROC_WNCD, 0)
max_elastic_map_set('fp', 'elastic', BPROC_WNCD, 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/starfleetmaps.m4
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#
# November 2020, Christine Hwang
#
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#
#
# Map BBU TTY to correct device context
/dev/ttyS2 -c gen_context(system_u:object_r:polaris_bbu_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbbu.fc
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# February 2018, Manohar Hungund
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#

## <summary>Polaris ACT2 Chip Device Access Policy Rules.</summary>

### ACT2 Chip Driver policy

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### <summary>
## Work (read, write, ioctl) with /dev/act2
### </summary>

```c
interface(`polaris_act2_dev_use',`
gen_require(`
    type device_t;
type polaris_act2_device_t;
')
    read_chr_files_pattern($1, device_t, polaris_act2_device_t)
    write_chr_files_pattern($1, device_t, polaris_act2_device_t)
')
```

---

### <summary>
## Create /tmp/hw_entropy file. Certain platforms save entropy from main board ACT-2 chip in this file.
### </summary>

```c
interface(`polaris_hw_entropy_create',`
gen_require(`
    type polaris_hw_entropy_t;
type tmp_t;
')
```

---
files_tmp_filetrans($1, polaris_hw_entropy_t, file, "hw_entropy")
manage_files_pattern($1, tmp_t, polaris_hw_entropy_t)
')

********************************************************************************
## <summary>
## Use /tmp/hw_entropy file. For some reason, iosd opens file in rw mode,
## not clear why it couldn't just read it.
## Certain platforms save entropy from main board ACT-2 chip in this file.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_hw_entropy_use',
    gen_require(
        type polaris_hw_entropy_t;
        type tmp_t;
    )
)

rw_files_pattern($1, tmp_t, polaris_hw_entropy_t)
')

********************************************************************************
## <summary>
## Read /tmp/hw_entropy file.
## Certain platforms save entropy from main board ACT-2 chip in this file.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_hw_entropy_read',
    gen_require(
        type polaris_hw_entropy_t;
    )
)

read_files_pattern($1, tmp_t, polaris_hw_entropy_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisact2.if
No license file was found, but licenses were detected in source scan.
policy_module(polarisdmindbmand, 1.0);

gen_require(
    type polaris_dmi_ndbmand_t;
)

polaris_btrace_data_manage(polaris_dmi_ndbmand_t)
polaris_crft_data_manage(polaris_dmi_ndbmand_t)
polaris_chasfs_manage(polaris_dmi_ndbmand_t)
polaris_tdlresolve_read(polaris_dmi_ndbmand_t)
polaris_tdlldb_list_dirs(polaris_dmi_ndbmand_t)
polaris_cpld_read(polaris_dmi_ndbmand_t)
polaris_flashlib_read(polaris_dmi_ndbmand_t)
polaris_ripc_sman_ui_serv_connect(polaris_dmi_ndbmand_t)
polaris_db_tdlldb_dir_use(polaris_dmi_ndbmand_t)

# work with NDBLOAD_LOCK_PATH
type polaris_dmi_ndbutil_lock_t;
files_tmp_file(polaris_dmi_ndbutil_lock_t)
polaris_ndbload_lock_use(polaris_dmi_ndbmand_t)

optional_policy(
    # deals with /dev/shm/confd setup (schema and pid)
polaris_confed_shm_setup(polaris_dmi_ndbmand_t)
    # and allow read shared schema
polaris_confed_shared_schema_read(polaris_dmi_ndbmand_t)
    # read /proc/confd_pid/exe file
polaris_confed_read(polaris_dmi_ndbmand_t)
    )

allow polaris_dmi_ndbmand_t self:capability { dac_override dac_read_search sys_resource };
polaris_confd_shared_schema_watch(polaris_dmi_ndbmand_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmindbmand.te

No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#

policy_module(polarisomp, 1.0);

gen_require(`
   type polaris_omp_t;
`)
polaris_chasfs_manage(polaris_omp_t)
polaris_cpld_read(polaris_omp_t)
polaris_flashlib_read(polaris_omp_t)
polaris_tdlresolve_read(polaris_omp_t)
polaris_ripc_sman_ui_serv_connect(polaris_omp_t)
polaris_db_tdlldb_dir_use(polaris_omp_t)
logging_send_syslog_msg(polaris_omp_t)

# vconfd_load_shared_schemas
polaris_confdf_shared_schema_read(polaris_omp_t)

# omp_daemon_init calls posix_sysconf
dev_read_sysfs(polaris_omp_t)

# reads /sys/fs/cgroup/cpuset/iosxe_control_processes/cpuset.cpus
fs_read_cgroup_files(polaris_omp_t)

# vip_util_set_fd_limits set files limits
allow polaris_omp_t self:process setrlimit;

# omp connects to omp listener tcp port 17900
corenet_tcp_connect_polaris_omp_port(polaris_omp_t)
# vip_util_reset_ns opens /proc/1/ns/net
polaris_cedge_reset_ns(polaris_omp_t)
# vip_util_set_ns opens /var/run/nets/*
polaris_cedge_set_ns(polaris_omp_t)
#omp_peer_active_connect() binds to OMP address
corenet_tcp_bind_generic_node(polaris_omp_t)
allow polaris_omp_t self:tcp_socket { bind connect create getopt setopt };

# omp starts worker thread under CPU affinity
allow polaris_omp_t self:process setsched;

# connects to ttm unix domain socket in msgq_connect_timer
polaris_ttm_var_sock_write(polaris_omp_t)
# connects to ftm unix domain socket in msgq_connect_timer
polaris_ftm_var_sock_write(polaris_omp_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.10/selinux-tar/selinux/polarisomp.te
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#

## <summary>Polaris htx Policy Rules.</summary>

#######################################
## <summary>
##      Manage polaris_htx_iox_tmp_t in /tmp/HTX-IOX.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
interface(`polaris_htx_iox_tmp_manage',
    gen_require(`
        type polaris_htx_iox_tmp_t;
    `)
    manage_files_pattern($1, polaris_htx_iox_tmp_t, polaris_htx_iox_tmp_t)
    manage_sock_files_pattern($1, polaris_htx_iox_tmp_t, polaris_htx_iox_tmp_t)
    manage_dirs_pattern($1, polaris_htx_iox_tmp_t, polaris_htx_iox_tmp_t)
    allow $1 polaris_htx_iox_tmp_t:dir watch;

    allow $1 polaris_htx_iox_tmp_t:file map;
    `)
Send messages to htx unix datagram sockets.

Domain allowed access.

Domain allowed access.

Domain allowed access.
gen_require(
    type polaris_htx_t;
)
allow $1 polaris_htx_t:unix_stream_socket connectto;

policy_module(polarisesgtamcfg, 1.0);

generate

policy_module(polarisfmanfp, 1.0);

gen_require(
   type polaris_fman_fp_t;
)

polaris_btrace_data_manage(polaris_fman_fp_t)
polaris_crft_data_manage(polaris_fman_fp_t)
polaris_chasfsmanage(polaris_fman_fp_t)
polaris_tdlresolve_read(polaris_fman_fp_t)
polaris_tdldb_list_dirs(polaris_fman_fp_t)
polaris_cpld_read(polaris_fman_fp_t)
polaris_lua_read(polaris_fman_fp_t)
polaris_flashlib_read(polaris_fman_fp_t)
polaris_ripc_sman_ui_serv_connect(polaris_fman_fp_t)

# allow to send message to /dev/log
logging_send_syslog_msg(polaris_fman_fp_t)

# mqipc manual, one that missing in platform tdl file

# mq.-iosd-thr-fmanrp-R0:0
# mq.-iosd-thr-fmanrp-1:R0:0
type polaris_iosd_thr_fmanrp_mqipc_t;
polaris_mqipc_type(polaris_iosd_thr_fmanrp_mqipc_t)

# mq.-mobilityd-thr-fmanrp-1:R0:0
type polaris_mobilityd_thr_fmanrp_mqipc_t;
polaris_mqipc_type(polaris_mobilityd_thr_fmanrp_mqipc_t)

# mq.-smd-thr-fmanrp-1:R0:0
type polaris_smd_thr_fmanrp_mqipc_t;
polaris_mqipc_type(polaris_smd_thr_fmanrp_mqipc_t)

# mq.-wncd_0-thr-fmanrp-1:R0:0
type polaris_wncd_thr_fmanrp_mqipc_t;
polaris_mqipc_type(polaris_wncd_thr_fmanrp_mqipc_t)

# mq.-wncmgrd_0-thr-fmanrp-1:R0:0
type polaris_wncmgrd_thr_fmanrp_mqipc_t;
polaris_mqipc_type(polaris_wncmgrd_thr_fmanrp_mqipc_t)

polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-1:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-3:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-4:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-5:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-6:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-7:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-8:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-R1:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-1:R1:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-2:R1:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-3:R1:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-4:R1:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-5:R1:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-6:R1:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-7:R1:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_iosd_thr_fmanrp_mqipc_t, iosd-thr-fmanrp-8:R1:0)

polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-1:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-3:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-4:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-5:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-6:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-7:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-8:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_mobilityd_thr_fmanrp_mqipc_t, mobilityd-thr-fmanrp-R1:0)

polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-1:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-3:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-4:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-5:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-5:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-6:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-7:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-8:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_smd_thr_fmanrp_mqipc_t, smd-thr-fmanrp-R1:0)

polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncmgrd_thr_fmanrp_mqipc_t, wncmgrd-thr-fmanrp-1:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncmgrd_thr_fmanrp_mqipc_t, wncmgrd-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncmgrd_thr_fmanrp_mqipc_t, wncmgrd-thr-fmanrp-3:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncmgrd_thr_fmanrp_mqipc_t, wncmgrd-thr-fmanrp-4:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncmgrd_thr_fmanrp_mqipc_t, wncmgrd-thr-fmanrp-5:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncmgrd_thr_fmanrp_mqipc_t, wncmgrd-thr-fmanrp-6:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncmgrd_thr_fmanrp_mqipc_t, wncmgrd-thr-fmanrp-7:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncmgrd_thr_fmanrp_mqipc_t, wncmgrd-thr-fmanrp-8:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncmgrd_thr_fmanrp_mqipc_t, wncmgrd-thr-fmanrp-R1:0)

polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_0-thr-fmanrp-1:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_0-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_0-thr-fmanrp-3:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_0-thr-fmanrp-4:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_0-thr-fmanrp-5:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_0-thr-fmanrp-6:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_0-thr-fmanrp-7:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_0-thr-fmanrp-8:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_0-thr-fmanrp-R1:0)

optional_policy('}
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-1:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-3:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-4:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-5:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-6:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-7:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-8:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-R1:0)

polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-1:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-3:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-4:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-5:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-6:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-7:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-8:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_2-thr-fmanrp-R1:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_5-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_6-thr-fmanrp-1:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_6-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_7-thr-fmanrp-1:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_7-thr-fmanrp-2:R0:0)
polaris_mqipc_create_name(polaris_fman_fp_t, polaris_wncd_thr_fmanrp_mqipc_t, wncd_1-thr-fmanrp-R1:0)
')
polaris_cpld_dev_use(polaris_fman_fp_t)

# cpp bleeds into switching platforms through fman_fp and fed
# apparently even on nyquist fed creates /tmp/cpp_anon_db
polaris_cpp_process(polaris_fman_fp_t)
polaris_cpp_tmp_files_use(polaris_fman_fp_t)

optional_policy(')
polaris_cpp_dev_use(polaris_fman_fp_t)
polaris_cpp_cavium_sdk_ipc_use(polaris_fman_fp_t)
')
polaris_persistent_manage(polaris_fman_fp_t)
polaris_icc_broken_relocations(polaris_fman_fp_t)

allow polaris_fman_fp_t self:capability dac_override;
allow polaris_fman_fp_t self:capability2 block_suspend;

# when /bootflash or /harddisk are 100% full
allow polaris_fman_fp_t self:capability sys_resource;

# write to devices like this /proc/bus/pci/04/00.0
kernel_read_system_state(polaris_fman_fp_t)
kernell_write_proc_files(polaris_fman_fp_t)

ifdef('mcp_family','
polaris_cm_fp_tmp_filetrans(polaris_fman_fp_t)
polaris_cm_fp_tmp_manage(polaris_fman_fp_t)
')

# LOOK AT ME: raw memory write access
ifdef('mcp_family','
polaris_dev_mem_use(polaris_fman_fp_t)
')

# LOOK AT ME: raw memory access in cavium vendor SDK
# related to octeon driver (BUG CSCvh58515)
ifdef('crankshaft_family','
polaris_dev_mem_use(polaris_fman_fp_t)
')
polaris_dyncfg_tmp_read(polaris_fman_fp_t)

# /dev/qae_mem device access on overlord
optional_policy(  
  polaris_qae_dev_use(polaris_fman_fp_t)
)

# access to /dev/icp_XXX device on crankshaft platforms
optional_policy(  
  polaris_icp_dev_use(polaris_fman_fp_t)
)

# on qwlc work with /tmp/octeon-remote-lock-pci:0
ifdef( qwlc_platform',  
  polaris_cm_fp_tmp_manage(polaris_fman_fp_t)
')

ifdef( katar_platform',
  polaris_cm_fp_tmp_manage(polaris_fman_fp_t)
')

optional_policy(  
  #fman-fp creates tmp files in acl-mgmt workflow.
  polaris_fman_acl_iptbl_tmp_file(polaris_fman_fp_t)
)

polaris_iosd_vcpu_read(polaris_fman_fp_t)

# allow open/read/search cgroup files like /sys/fs/cgroup/cpu,cpuacct/machine
fs_read_cgroup_files(polaris_fman_fp_t)
fs_search_cgroup_dirs(polaris_fman_fp_t)

optional_policy(  
  # Access /dev/cbdma
  polaris_cbdma_dev_use(polaris_fman_fp_t)
)

# Access /dev/n2_device
polaris_n2_dev_use(polaris_fman_fp_t)
)

polaris_cpp_tmpfs_manage(polaris_fman_fp_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfmanfp.te
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#
# August 2017, Shawn Lu
#

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#

### <summary>Polaris wncmgrd Policy Rules.</summary>

----------
### <summary>
### Read access to /bootflash/NACert.pem
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
### </param>
#
interface('polaris_read_icap_cert_file',
  gen_require(
    type polaris_icap_cert_t;
  )
  allow $1 polaris_icap_cert_t:file read_file_perms;
  )

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswncmgrd.if
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# polariskeyman file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariskeyman.fc
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# polarisnvram file contexts place holder
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# /3pa staff
/3pa/usr/(.*)?lib64/(.*)? -- gen_context(system_u:object_r:lib_t:s0)
/3pa/usr/(.*)?lib/(.*)? -- gen_context(system_u:object_r:lib_t:s0)
/3pa/(.*)?lib64/(.*)? -- gen_context(system_u:object_r:lib_t:s0)
/3pa/(.*)?lib/(.*)? -- gen_context(system_u:object_r:lib_t:s0)
/3pa/usr/(.*)?sbin/(.*)? -- gen_context(system_u:object_r:bin_t:s0)
/3pa/usr/(.*)?bin/(.*)? -- gen_context(system_u:object_r:bin_t:s0)
/3pa/usr/sbin/libvirt_lxc -- gen_context(system_u:object_r:libvirt_lxc_exec_t:s0)
/usr/lib/libvirt/libvirt_lxc -- gen_context(system_u:object_r:libvirt_lxc_exec_t:s0)
/usr/sbin/libvirt_lxc -- gen_context(system_u:object_r:libvirt_lxc_exec_t:s0)
/3pa/usr/sbin/libvirt -- gen_context(system_u:object_r:libvirt_exec_t:s0)
/3pa/usr/sbin/virtlogd -- gen_context(system_u:object_r:virtlogd_exec_t:s0)
/3pa/usr/bin/virsh -- gen_context(system_u:object_r:virsh_exec_t:s0)
/3pa/usr/bin/qemu.* -- gen_context(system_u:object_r:qemu_exec_t:s0)
/usr/binos/conf/libvirtd.sh -- gen_context(system_u:object_r:libvirtd_initrc_exec_t:s0)
/3pa/etc/libvirt/(.*)? -- gen_context(system_u:object_r:virt_etc_t:s0)
/3pa/etc/logrotate.d/(.*)? -- gen_context(system_u:object_r:etc_t:s0)

# should go into contrib/telnet.fc?
/usr/binos/sbin/in.telnetd -- gen_context(system_u:object_r:telnetd_exec_t:s0)

# load_crash_kernel.sh loads crash kernel - it should be executable
/crashkernel/load_crash_kernel.sh -- gen_context(system_u:object_r:bin_t:s0)

# /etc/lablogin.sh is executed during telnet login over management port
# it should be executable. Also having shell_exec_t label will allow it
# to transition into unconfined domain
/etc/lablogin.sh -- gen_context(system_u:object_r:shell_exec_t:s0)

# /etc/init.d/*functions files should be actually in bin_t domain, the same
# as /etc/init.d/functions. Note using /etc/rc.d/init.d/ instead of
# /etc/init.d/ because we have substitution rule in file_contexts.subs_dist
/etc/rc.d/init.d/ binaries -- gen_context(system_u:object_r:bin_t:s0)
/etc/rc.d/init.d/ binaries-pd -- gen_context(system_u:object_r:bin_t:s0)
/etc/rc.d/init.d/chasxml_functions -- gen_context(system_u:object_r:bin_t:s0)
/etc/rc.d/init.d/common-utility-functions -- gen_context(system_u:object_r:bin_t:s0)
# tftp directories
/tftp/ -d gen_context(system_u:object_r:tftpdir_rw_t,s0)
/tftp/.* -d gen_context(system_u:object_r:tftpdir_rw_t,s0)

# /tmp/sw
/tmp/sw -d gen_context(system_u:object_r:tmp_t,s0)
/tmp/rp -d gen_context(system_u:object_r:tmp_t,s0)
/tmp/fp -d gen_context(system_u:object_r:tmp_t,s0)
/tmp/cc -d gen_context(system_u:object_r:tmp_t,s0)

# /tmp/etc
/tmp/etc -d gen_context(system_u:object_r:polaris/etc_t,s0)

# /tmp/sv
/tmp/sv -d gen_context(system_u:object_r:polaris_sv_tmp_t,s0)

# firmware files
/firmware(/.*)? gen_context(system_u:object_r:polaris_firmware_t,s0)
/upgrade(/.*)? gen_context(system_u:object_r:polaris_firmware_t,s0)
/golden(/.*)? gen_context(system_u:object_r:polaris_firmware_t,s0)
# CC card fpd files mark it as usr_t for now
/fpd(/.*)? gen_context(system_u:object_r:polaris_firmware_t,s0)
/tmp/debug\/*.conf -l gen_context(system_u:object_r:polaris_debug_conf_t,s0)
/var/ODM/ios_core.p7b -- gen_context(system_u:object_r:etc_t,s0)
/dev/ddr -c gen_context(system_u:object_r:polaris_ddr_device_t,s0)
/dev/i2c-[0-9]* -c gen_context(system_u:object_r:polaris_i2c_device_t,s0)

/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/bin/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/wbin/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/lib/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/lib64/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/usr/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/usr/bin/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/usr/bin64/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/usr/binos/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/usr/binos/bin/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/usr/binos/sbin/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/usr/binos/lib/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/usr/binos/lib64/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
/opt/confd/lib/confd/lib/core/confd/priv/\.(.*)?/.ebf((.*)?) gen_context(system_u:object_r:polaris_ebf_t,s0)
# interpreter for CRDL 32bit IOSD setup proper memory map
/usr/bin/os/bin/crdl_mini_loader gen_context(system_u:object_r:ld_so_t,s0)

# firmware package mount point on asr1k platforms
/mnt/firmware(/.*)? gen_context(system_u:object_r:polaris_firmware_t,s0)

/bootflash/USWAP(/.*)? gen_context(system_u:object_r:polaris_uswap_files_t,s0)

# Nutella EFI folder
/bootflash/EFI(/.*)? gen_context(system_u:object_r:polaris_efi_files_t,s0)

# for cat9k platform
/mnt/sd3/user/.USWAP(/.*)? gen_context(system_u:object_r:polaris_uswap_files_t,s0)

/tmp/rsync_log_dir(/.*)? gen_context(system_u:object_r:polaris_rsync_tmp_t,s0)

# for wlc awips feature
/bootflash/awips.json gen_context(system_u:object_r:polaris_awips_signature_file_t,s0)

# for wlc iot-gw feature to access /bootflash/certs dir
/bootflash/certs -d gen_context(system_u:object_r:polaris_ap_cert_file_t,s0)

# for curl - and allowing ip nets exec X curl
/usr/bin/curl -- gen_context(system_u:object_r:polaris_curl_exec_t,s0)

# Katar WLC needs access to /tmp/ldwm_envelope
/tmp/ldwm_envelope -- gen_context(system_u:object_r:polaris_ldwm_envelope_tmp_t,s0)

# CLI: show platform software tech-support
/usr/bin/os/conf/platform_tech_support.sh -- gen_context(system_u:object_r:polaris_tech_support_exec_t,s0)

# Tamlib debug file
/bootflash/tamlib_dbg_log -- gen_context(system_u:object_r:polaris_tamlib_dbg_file_t,s0)

# crypsetup - some platforms copy crypsetup in /bin
/bin/cryptsetup -- gen_context(system_u:object_r:lvm_exec_t,s0)
/usr/bin/cryptsetup -- gen_context(system_u:object_r:lvm_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscommon.fc
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dnl
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dnl
define('polaris_process', '')
dnl

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*/opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_process_if.m4
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#
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#

policy_module(polarisiptbl, 1.0);

#############################################################################
# iptbl.sh manual
#############################################################################

polaris_process_domain_template(iptbl)

corecmd_exec_bin(polaris_iptbl_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_iptbl_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_iptbl_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_iptbl_t)

# work with /tmp files
type polaris_iptbl_tmp_t;
files_tmp_file(polaris_iptbl_tmp_t)
manage_dirs_pattern(polaris_iptbl_t, tmp_t, polaris_iptbl_tmp_t)
manage_files_pattern(polaris_iptbl_t, polaris_iptbl_tmp_t, polaris_iptbl_tmp_t)
manage_fifo_files_pattern(polaris_iptbl_t, polaris_iptbl_tmp_t, polaris_iptbl_tmp_t)
files_tmp_filetrans(polaris_iptbl_t, polaris_iptbl_tmp_t, { file dir })

allow polaris_iptbl_t self:capability sys_resource;
allow polaris_iptbl_t self:process setpgid;

polaris_btrace_data_manage(polaris_iptbl_t)
polaris_cpld_read(polaris_iptbl_t)
polaris_chasfs_manage(polaris_iptbl_t)
polaris_boot_tmp_read(polaris_iptbl_t)
polaris_rmonbifo_tmp_read(polaris_iptbl_t)
polaris_proc_rmonbifo_getattr(polaris_iptbl_t)
polaris_proc_rmonbifo_read(polaris_iptbl_t)
polaris_disk_crashinfo_getattr(polaris_iptbl_t)

# execute /etc/init.d/iptables in its own domain
iptables_initrc_domtrans(polaris_iptbl_t)

# LOOK AT ME iptbl.sh puts symbolic links into /sbin directory
# need to fix manifest instead, so it will be static
gen_require(
  type bin_t;
')
manage_lnk_files_pattern(polaris_iptbl_t, bin_t, bin_t)

modutils_domtrans_insmmod(polaris_iptbl_t)
iptables_domtrans(polaris_iptbl_t)

# iptbl.sh calls /etc/init.d/iptables restart and that needs
# read /proc/pid/net/ip_tables_names file
kernel_read_network_state(polaris_iptbl_t)
# creates /var/lock/subsys/iptables
type polaris_iptables_lock_t;
files_lock_file(polaris_iptables_lock_t)
manage_files_pattern(polaris_iptbl_t, polaris_iptables_lock_t, polaris_iptables_lock_t)
files_lock_filetrans(polaris_iptbl_t, polaris_iptables_lock_t, file)

# needs access to /run/netns as part of chvrfs invocation
fs_read_nsfs_files(polaris_iptbl_t)
# iptbl.sh invokes iptable command which runs in iptables_t label and needs
# access to meta files created by iptbl.sh with label polaris_iptbl_tmp_t
allow iptables_t polaris_iptbl_tmp_t:fifo_file read_file_perms;
allow iptables_t polaris_iptbl_tmp_t:file read_file_perms;

# Allow /tmp/ufs/bootflash & /tmp/ufs/harddisk read access
ifdef(`vwlc_platform',
  optional_policy(`
polaris_ncd_tmp_read(polaris_iptbl_t)
')
')

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#
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#
policy_module(polarisautoupgrade, 1.0);

gen_require(
    type polaris_autoupgrade_t;
')

corecmd_exec_bin(polaris_autoupgrade_t)
corecmd_exec_shell(polaris_autoupgrade_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_autoupgrade_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_autoupgrade_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_autoupgrade_t)

allow polaris_autoupgrade_t self:capability { sys_resource dac_override };
allow polaris_autoupgrade_t self:process setpgid;

polaris_tlldb_listDirs(polaris_autoupgrade_t)
polaris_btrace_data_manage(polaris_autoupgrade_t)
polaris_chasfs_manage(polaris_autoupgrade_t)
polaris_cpld_read(polaris_autoupgrade_t)
polaris_proc_rmonbifo_read(polaris_autoupgrade_t)
polaris_rmonbifo_tmp_read(polaris_autoupgrade_t)
polaris_boot_tmpManage(polaris_autoupgrade_t)
polaris_read_debug_conf(polaris_autoupgrade_t)
polaris_disk_crashinfogetattr(polaris_autoupgrade_t)
type polaris_autoupgrade_tmp_t;
files_tmp_file(polaris_autoupgrade_tmp_t)
# /tmp/etc/installer
gen_require(
    type polaris_etc_t;
')
filetrans_pattern(polaris_autoupgrade_t, polaris_etc_t, polaris_autoupgrade_tmp_t, dir, "installer")
manage_fifo_files_pattern(polaris_autoupgrade_t, polaris_autoupgrade_tmp_t, polaris_autoupgrade_tmp_t)
manage_dirs_pattern(polaris_autoupgrade_t, polaris_etc_t, polaris_autoupgrade_tmp_t)
manage_files_pattern(polaris_autoupgrade_t, polaris_autoupgrade_tmp_t, polaris_autoupgrade_tmp_t)

# Allow access to bootflash
polaris_bootflash_read(polaris_autoupgrade_t)

# Allow access to packages.conf
polaris_read_packages_conf(polaris_autoupgrade_t)

# needs to run pidof
dev_read_sysfs(polaris_autoupgrade_t)
kernel_read_system_state(polaris_autoupgrade_t)
domain_read_all_domains_state(polaris_autoupgrade_t)

# send syslog
logging_send_syslog_msg(polaris_autoupgrade_t)

# script starts rsync with mcp_chvrf.sh
polaris_chvrf_domtrans(polaris_autoupgrade_t)
gen_require(
    type rsync_t;
')
allow rsync_t polaris_autoupgrade_t:process sigchld;

# /tmp/ufs/crashinfo access
optional_policy(
    polaris_ncd_tmp_read(polaris_autoupgrade_t)
')

# autoupgrade script in case of HA setup invokes brelay to trigger install of stand-by
polaris_bexecute_domtrans(polaris_autoupgrade_t)

polaris_flashlib_lock(polaris_autoupgrade_t)
polaris_flashlib_read(polaris_autoupgrade_t)
polaris_disk_install_read(polaris_autoupgrade_t)
polaris_install_engine_domtrans(polaris_autoupgrade_t)

#add transition to create /var/installer by autoupgrade
type polaris_autoupgrade_var_t;
files_tmp_file(polaris_autoupgrade_var_t)
files_var_filetrans(polaris_autoupgrade_t, polaris_autoupgrade_var_t, {file dir})
gen_require('  
  type polaris_autoupgrade_exec_t;
')

# add transition to create /var/installer/auto_upgrade_helper.sh by autoupgrade
filetrans_pattern(polaris_autoupgrade_t,polaris_autoupgrade_var_t, polaris_autoupgrade_exec_t, file, "auto_upgrade_helper.sh")
manage_files_pattern(polaris_autoupgrade_t, polaris_autoupgrade_var_t, polaris_autoupgrade_var_t)
manage_dirs_pattern(polaris_autoupgrade_t, polaris_autoupgrade_var_t, polaris_autoupgrade_var_t)

# add transition to create files/dir in /tmp
files_tmp_filetrans(polaris_autoupgrade_t, polaris_autoupgrade_tmp_t, {file dir})

# access to /tmp/installer
polaris_install_tmp_manage(polaris_autoupgrade_t)

fs_getattr_tmpfs(polaris_autoupgrade_t)

# access to /tmp/rsync_log_dir
polaris_manage_rsync_tmplog_dir(polaris_autoupgrade_t)

# access to /harddisk link (accessed by flashutil and rotee call)
polaris_disk_harddisk_read_lnk(polaris_autoupgrade_t)

csync_entry_domtrans(polaris_chvrf_t, rsync_t)
gen_require('  
  type polaris_autoupgrade_t;
  type polaris_autoupgrade_exec_t;
')
csync_entry_domtrans(polaris_autoupgrade_t, rsync_t)
polaris_bexecute_domain(polaris_autoupgrade_t, polaris_autoupgrade_exec_t)

fs_getattr_xattr_fs(polaris_autoupgrade_t)

# auto_upgrade_helper.sh creates /var/installer/auto_upgrade_helper.sh
allow polaris_autoupgrade_t polaris_autoupgrade_exec_t:file { create setattr write };

# rsync operations for members and standby rps on autoupgrade
gen_require('  
  type rsync_port_t;
')
allow polaris_autoupgrade_t rsync_port_t:tcp_socket name_connect;

# rsync requires to relabel /var/installer/auto_upgrade_helper.sh on standby
gen_require('  
  type polaris_autoupgrade_t;
')
type var_t;

allow rsync_t var_t:file relabelfrom;
allow rsync_t polaris_autoupgrade_exec_t:file relabelto;

# access to /vol/harddisk/*.pkg
polaris_getattr_file_harddisk(polaris_autoupgrade_t)

# access to /cdrom0/ when *ova image is booted during
# first instance of vwl on ucs server
polaris_removable_read(polaris_autoupgrade_t)

polaris_getattr_file_harddisk(polaris_autoupgrade_t)

# auto_upgrade_client.sh access to "/tmp/sw/rp/0/0/rp_base/mount/bin/cut"
polaris_issu_tmp_files_read(polaris_autoupgrade_t)

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#
/usr/binos/conf/run_ioxn_caf.sh -- gen_context(system_u:object_r:polaris_caf_exec_t,s0)
/usr/binos/conf/iox_reset.sh -- gen_context(system_u:object_r:polaris_caf_exec_t,s0)

ifdef(`nyquist_platform',`
/usr/binos/conf/standby_ioxcfg.sh -- gen_context(system_u:object_r:polaris_sioxcd_rp_exec_t,s0)
/tmp/app_host(/.*)? gen_context(system_u:object_r:polaris_sioxcd_rp_tmp_t,s0)
/mnt/sd3/iox_alt_hdd.dsk gen_context(system_u:object_r:polaris_iox_alt_hdd_files_t,s0)
/mnt/sd3/iox_alt_hdd_mount_dir(/.*)? gen_context(system_u:object_r:polaris_iox_files_t,s0)
/mnt/sd3/iox_alt_hdd_mount_dir/caf(/.*)? gen_context(system_u:object_r:polaris_caf_tmp_files_t,s0)
/mnt/sd3/iox_alt_hdd_mount_dir/iox(/.*)? gen_context(system_u:object_r:polaris_iox_tmp_files_t,s0)
/mnt/sd3/iox_alt_hdd_mount_dir/iox_data_share(/.*)? gen_context(system_u:object_r:polaris_iox_files_t,s0)
/mnt/sd3/iox_alt_hdd_mount_dir/iox_host_data_share(/.*)? gen_context(system_u:object_r:polaris_iox_files_t,s0)
/mnt/sd3/iox_alt_hdd_mount_dir/guest_share(/.*)? gen_context(system_u:object_r:polaris_iox_shared_files_t,s0)
/mnt/sd3/user/gs_script/sss(/.*)? gen_context(system_u:object_r:polaris_iox_ss_disk_t,s0)
')

ifdef(`passport_platform',`
/flash1/iox_alt_hdd.dsk gen_context(system_u:object_r:polaris_iox_alt_hdd_files_t,s0)
/flash1/iox_alt_hdd_mount_dir(/.*)? gen_context(system_u:object_r:polaris_iox_alt_hdd_files_t,s0)
Open Source Used In BGP TE Controller Version 4.3.0  6049

#All possible accesses from /bootflash/iox_alt_hdd_mount_dir (iox_polaris.conf)
/flash1/iox_alt_hdd_mount_dir/iox(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/flash1/iox_alt_hdd_mount_dir/call(\.*)?
   gen_context(system_u:object_r:polaris_caf_tmp_files_t,s0)
/flash1/iox_alt_hdd_mount_dir/iox_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/flash1/iox_alt_hdd_mount_dir/iox_host_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/flash1/iox_alt_hdd_mount_dir/guest_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_shared_files_t,s0)
/flash1/user/gs_script/sss(\.*)?
   gen_context(system_u:object_r:polaris_iox_ss_disk_t,s0)
/usr/binofs/conf/standby_ioxcfg.sh
   gen_context(system_u:object_r:polaris_sioxcd_rp_exec_t,s0)
/tmp/app_host(\.*)?
   gen_context(system_u:object_r:polaris_sioxcd_rp_tmp_t,s0)
)

#All the possible IOX guestshell_dir from iox_polaris.conf
/guestshell/(\.*)(\.*).sh
   gen_context(system_u:object_r:polaris_guestshell_exec_t,s0)
/guestshell(\.*)?
   gen_context(system_u:object_r:polaris_guestshell_t,s0)

#All the possible IOX flash_dir/harddisk_dir from iox_polaris.conf
/boostfa$h/iox(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/mnt/sd3/iox(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/flash1/iox(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/flash1/iox(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/vol/harddisk/iox(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/vol/disk0/iox(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/vol/usb1/iox(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)

/boostfa$h/iox_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/mnt/sd3/iox_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/flash1/iox_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/flash1/iox_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/vol/harddisk/iox_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/vol/disk0/iox_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/vol/usb1/iox_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)

/boostfa$h/iox_host_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/mnt/sd3/iox_host_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
/flash1/iox_host_data_share(\.*)?
   gen_context(system_u:object_r:polaris_iox_files_t,s0)
# All the possible IOX bootflash/guest-share directory. This directory is shared between IOS and IOX

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# polarisfnfagg file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfnfagg.fc
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#
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#
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#

## <summary>Polaris cmm Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmm.if
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#
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#

# polarisplogd file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisplogd.fc
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dnl
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dnl
dnl divert(-1)

include('polaris_process.m4')
include('polaris_process_if.m4')

include('polaris_ipc_mqipc.m4')
include('polaris_ipc_mqipc_if.m4')

include('polaris_ipc_ripc.m4')
/dev/octeon_device -c gen_context(system_u:object_r:polaris_cpp_device_t,s0)
/dev/cpp_pdma -c gen_context(system_u:object_r:polaris_cpp_device_t,s0)
/dev/i95_[0-9]* -c gen_context(system_u:object_r:polaris_i95_device_t,s0)

/dev/shm/cpp_.* -- gen_context(system_u:object_r:polaris_cpp_tmpfs_t,s0)
/dev/shm/sem\.[CPE]* -- gen_context(system_u:object_r:polaris_cpp_tmpfs_t,s0)
/dev/shm/sem\.[CGM_SHM_SEM] -- gen_context(system_u:object_r:polaris_cpp_tmpfs_t,s0)
/dev/shm/cpp_ucode_dram -- gen_context(system_u:object_r:polaris_cpp_tmpfs_t,s0)
/dev/shm/cpp_sbs_shm -- gen_context(system_u:object_r:polaris_cpp_tmpfs_t,s0)

/mnt/huge/cpp_ucode_dram -- gen_context(system_u:object_r:polaris_cpp_tmpfs_t,s0)
/tmp/cpp_ifdev_rep -p gen_context(system_u:object_r:polaris_cpp_tmpfs_t,s0)
/tmp/cpp_ifdev_req -p gen_context(system_u:object_r:polaris_cpp_tmpfs_t,s0)
/tmp/cpp_anon_db -- gen_context(system_u:object_r:polaris_cpp_tmpfs_t,s0)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscpp.fc
No license file was found, but licenses were detected in source scan.

#
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#

policy_module(polarisservicemgr, 1.0);

gen_require("
    type polaris_service_mgr_t;
"
)

polaris_btrace_data_manage(polaris_service_mgr_t)
polaris_crtft_data_manage(polaris_service_mgr_t)
polaris_chasfs_manage(polaris_service_mgr_t)
polaris_cpld_read(polaris_service_mgr_t)
polaris_flashlib_read(polaris_service_mgr_t)
polaris_lua_read(polaris_service_mgr_t)
polaris_tdlresolve_read(polaris_service_mgr_t)
polaris_ripc_sman_ui_serv_connect(polaris_service_mgr_t)
polaris_db_tdlldb_dir_use(polaris_service_mgr_t)

# Use REPM MQIPC for replication
polaris_repm_peer_mqipc_manage(polaris_service_mgr_t)
#watches of /tmp/[rp][p]cc[/pvp/process_state directory
polaris_process_state_watch(polaris_service_mgr_t)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisservicemgr.te
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#
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#

policy_module(polarispvp, 1.0);

polaris_process_domain_template(pvp)

# transition to pman domain, once pman is invoked by pvp
polaris_pman_domtrans(polaris_pvp_t)

corecmd_exec_bin(polaris_pvp_t)
corecmd_exec_shell(polaris_pvp_t)
# can execute hostname in pvp domain
hostname_exec(polaris_pvp_t)
# can execute process in polaris domain
polaris_exec(polaris_pvp_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_pvp_t)

# allow to get getattr of /proc file system during find over it
kernel_getattr_proc(polaris_pvp_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_pvp_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_lk.so(polaris_pvp_t)

# all to read sysctl files in /proc directory
kernel_read_all_sysctls(polaris_pvp_t)

# work with /tmp files
  type polaris_pvp_tmp_t;
  files_tmp_file(polaris_pvp_tmp_t)
  manage_dirs_pattern(polaris_pvp_t, tmp_t, polaris_pvp_tmp_t)
manage_files_pattern(polaris_pvp_t, polaris_pvp_tmp_t, polaris_pvp_tmp_t)
manage_fifo_files_pattern(polaris_pvp_t, polaris_pvp_tmp_t, polaris_pvp_tmp_t)
files_tmp_filetrans(polaris_pvp_t, polaris_pvp_tmp_t, { file dir })
filetrans_pattern(domain, tmp_t, polaris_pvp_tmp_t, dir, "pvp")

# /tmp/silent_roll_select.log handling on Macallan
filetrans_pattern(domain, tmp_t, polaris_pvp_tmp_t, file, "silent_roll_select.log")

# work with /tmp/[rp|fp|cc]/pvp/process_state files
type polaris_process_state_t;
files_tmp_file(polaris_process_state_t)
manage_dirs_pattern(polaris_pvp_t, polaris_pvp_tmp_t, polaris_process_state_t)
manage_files_pattern(polaris_pvp_t, polaris_pvp_tmp_t, polaris_process_state_t)
filetrans_pattern(polaris_pvp_t, polaris_pvp_tmp_t, polaris_process_state_t, dir, "process_state")

# LOOK AT ME now all polaris process can change each other process
# state. Need to fix it with more process specific labels in case
# when polaris_domain_process becomes template.
gen_require(''
    attribute polaris_domain;
')
polaris_pvp_manage_process_state_files(polaris_domain)

allow polaris_pvp_t self:capability sys_resource;

# readlink access to /proc/<pid>/fd/0 triggers sys_ptrace capability need
allow polaris_pvp_t self:capability { sys_ptrace };

dmidecode_domtrans(polaris_pvp_t)

# on some ngwc pvp has to code-sign-verify silent roll packages
ifdef('ngwc_family','
polaris_code_verify_domtrans(polaris_pvp_t)
')

polaris_btrace_data_manage_all(polaris_pvp_t)
polaris_chasfs_manage(polaris_pvp_t)
polaris_cpld_read(polaris_pvp_t)
polaris_cpld_write(polaris_pvp_t)
polaris_proc_monbifo_read(polaris_pvp_t)
polaris_monbifo_tmp_read(polaris_pvp_t)
polaris_tlddb_list_dirs(polaris_pvp_t)
polaris_boot_tmp_read(polaris_pvp_t)
polaris_read_debug_conf(polaris_pvp_t)

# LOOK AT ME pvp.sh runs find over /proc. Needs access
# to state of all processes
domain_read_all_domains_state(polaris_pvp_t)
# pvp.sh can call logger command
logging_send_syslog_msg(polaris_pvp_t)

# should it not be moved to dmidecode module or better
# change script to call dmidecode with stdin redirected
# from /dev/null (i.e dmidecode < /dev/null)
gen_require(
    type dmidecode_t;
')
polaris_pvp_stdio_read(dmidecode_t)

# read pman tmp files
polaris_pman_read_tmp_files(polaris_pvp_t)

#allow polaris_pvp_t polaris_udev_tmp_files_t:dir { getattr search };
polaris_udev_tmp_list_dirs(polaris_pvp_t)

gen_require(
    type initrc_t;
    type init_t;
')
#init_script_tmp_filetrans(initrc_t, polaris_pvp_tmp_t, file, "iosd_memory_share")
files_tmp_filetrans({ initrc_t init_t }, polaris_pvp_tmp_t, file, "iosd_memory_share")
polaris_systemd_tmpfiles_tmp_filetrans(polaris_pvp_tmp_t, dir, "max_elastic_bays")

# direct access to serial TTY devices like /dev/ttyS1
term_write_unallocated_ttys(polaris_pvp_t)

# For Cabo, allow access to GNSS device
ifdef(`cabo_platform',`
polaris_cabo_gnss_dev_use(polaris_pvp_t)
')

# on ultra pvp calls hv_ttyprobe utility to figure out what terminal
# to use as console, and this one need read access to terminal. There is
# no separate macro for read only. But since we granting write to everyone
# let use 'use' which means read/write
ifdef(`vxe_family',`
term_use_unallocated_ttys(polaris_pvp_t)
')
ifdef(`wlc_family',`
term_use_unallocated_ttys(polaris_pvp_t)
')
# pvp's linux_iqosd_image_env.sh will check /dev/ttyUSB* ports with hv_ttyprobe too.
term_use_usb_ttys(polaris_pvp_t)
# allow access and modify files in /tftp directory, cannot use tftp_manage_rw_content
# since it does not cover link files
gen_require('  
    type tftpdir_rw_t;
')
manage_dirs_pattern(polaris_pvp_t, tftpdir_rw_t, tftpdir_rw_t)
manage_files_pattern(polaris_pvp_t, tftpdir_rw_t, tftpdir_rw_t)
manage_link_files_pattern(polaris_pvp_t, tftpdir_rw_t, tftpdir_rw_t)

# ASR1K modular platforms create /tftp/inv/inventory_$fru_$slot.bin
# /tftp/inv is not a softlink but a directory for asr1k Modular platforms.
# So it needs a file transition to polaris_chasfs_t for accessing it.
ifdef(`mcp_family',
    filetrans_pattern(domain, tftpdir_rw_t, polaris_chasfs_t, dir, "inv")
')
# on ultra platform hv_ttyprobe utility that runs under polaris_pvp_t label
# checks for existence of /boot/ttyS0_ignore file; and since /boot is symlink
# to /varied it need dir search permission over polaris_disk_varied_t
ifdef(`vxe_family',
    polaris_disk_varied_search(polaris_pvp_t)
')
ifdef(`wlc_family',
    polaris_disk_varied_search(polaris_pvp_t)
')

# pvp.sh calls cp utility with -a option that should preserve files
# attributes as result cp needs to perform set_process_security_ctx call
# which in turns calls setfscreatecon
allow polaris_pvp_t self:process setfscreate;

# pvp.sh calls pidof utility and it needs read access to sysfs_t
#
# When resetting a partner, pvp writes to the PCIe switch global
# reset register using the i2c driver, which is also sysfs_t
# LOOK AT ME should we create a new type for the PCIe switch reg
dev_rw_sysfs(polaris_pvp_t)

# wants to execute /bin/dmesg
dmesg_domtrans(polaris_pvp_t)

# wants to read from /tmp/rp/pvp/work/inot_fifo
gen_require('  
    type dmesg_t;
')
rw_fifo_files_pattern(dmesg_t, polaris_pvp_tmp_t, polaris_pvp_tmp_t)

# wants to write into /bootflash/prst_sync
polaris_persistent_manage(polaris_pvp_t)
# pvp tried to find all except hman polaris process with
# 'find /tmp/rp/process -name *.pid ! -name *hman* -printf %p' command
# should be able to read pman tmp files
polaris_pman_read_tmp_files(polaris_pvp_t)

# on way down pvp.sh call 'workon.sh rp 0 rotate force' so we
# need to transition and run it in btrace_rotate domain
polaris_btrace_rotate_domtrans(polaris_pvp_t)

# on way down pvp.sh checks for *.TEMP_IN_PROGRESS in /misc/scratch/core
# need to be able read /misc/scratch link
polaris_disk_bootflash_read_lnk(polaris_pvp_t)

# implode.sh things, should we run them in its own domain?

# removes /etc/exports, create a new empty one and runs 'exportfs -ua'
# this action also needs kernel_rwlock_sysctls to flush
files_manage_etc_files(polaris_pvp_t)
gen_require(
    "    type exports_t;
"
)allow polaris_pvp_t exports_t:file delete_file_perms;
rpc_write_exports(polaris_pvp_t)
rpc_manage_nfs_state_data(polaris_pvp_t)
kernel_rwlock_sysctls(polaris_pvp_t)

# calls 'systemctl reboot'
systemd_start_power_services(polaris_pvp_t)

# pvp on 1ng attempts to rm readonly fpd firmware file, not sure why
polaris_firmware_getattr(polaris_pvp_t)

# pvp reads /tmp/iosd_level
polaris_lm_tmp_read(polaris_pvp_t)
allow polaris_pvp_t self:capability dac_override;

# in some image pvp needs to monut /tmp/rp/tlddb, in other images
# it got mount by chasfs_boottime.sh systemd unit
polaris_tlddb_manage_dirs(polaris_pvp_t)
mount_domtrans(polaris_pvp_t)

# in some cases pvp script creates /tmp/xx/process directory
polaris_pman_tmp_filetrans(polaris_pvp_t, dir, "process")
polaris_pman_manage_tmp_files(polaris_pvp_t)

# on ngwc pvp creates /flash1/NVRAM directory
gen_require("
type polaris_nvram_file_t;
    type root_t;
    
    filetrans_pattern(polaris_pvp_t, root_t, polaris_nvram_file_t, dir, "flash1")
    manage_dirs_pattern(polaris_pvp_t, polaris_nvram_file_t, polaris_nvram_file_t)

    # obtain access to rommon vars which live in flashlib
    polaris_flashlib_read(polaris_pvp_t)
    polaris_flashlib_write(polaris_pvp_t)

    # on ngwc platforms pvp creates a /obfl_cc directory and soft links it
    # to the correct vbd device
    ifdef(`ngwc_family',`
    gen_require(`
        type polaris_obfl_data_t;
        type root_t;
    `)
    filetrans_pattern(polaris_pvp_t, root_t, polaris_obfl_data_t, dir, "obfl_cc")
    `)

    # on ngwc platforms pvp needs to be able to determine if the the vbd devices
    # exist. The types may be slightly different depending on whether the cc's
    # device node is managed by udev or not
    ifdef(`ngwc_family',`
    dev_getattr_generic_blk_files(polaris_pvp_t)
    storage_getattr_fixed_disk_dev(polaris_pvp_t)
    udev_read_db(polaris_pvp_t)
    `)

    # on ngwc platforms pvp soft links the /tmp/sw/cc_srdriver/<slot> directory
    # to the correct silent roll software package via vbd_sr_app_init()
    ifdef(`ngwc_family',`
    polaris_sw_data_manage(polaris_pvp_t)
    `)

    # on blackheart pvp creates /blackheart_config directory
    ifdef(`blackheart_platform',`
    gen_require(`
        type polaris_nvram_file_t;
        type root_t;
    `)
    filetrans_pattern(polaris_pvp_t, root_t, polaris_nvram_file_t, dir, "blackheart_config")
    manage_dirs_pattern(polaris_pvp_t, polaris_nvram_file_t, polaris_nvram_file_t)
    `)

    # on sparrow pvp creates /sparrow_config directory
    ifdef(`sparrow_platform',`
    gen_require(`
        type polaris_nvram_file_t;
type root_t;
')
filetrans_pattern(polaris_pvp_t, root_t, polaris_nvram_file_t, dir, "sparrow_config")
manage_dirs_pattern(polaris_pvp_t, polaris_nvram_file_t, polaris_nvram_file_t)
')

# on Aventus pvp creates /aventus_config directory
ifdef(`aventus_platform',`
  gen_require(`
    type polaris_nvram_file_t;
    type root_t;
  ')
  filetrans_pattern(polaris_pvp_t, root_t, polaris_nvram_file_t, dir, "aventus_config")
  manage_dirs_pattern(polaris_pvp_t, polaris_nvram_file_t, polaris_nvram_file_t)
  fs_manage_configfs_files(polaris_pvp_t)
')

# on utah for cc and on 1ng cyan_init.sh is executed by pvp
polaris_dyncfg_domtrans(polaris_pvp_t)
# should it not be moved to cyan module or better
# change script to call cyan_init.sh with stdin redirected
# from /dev/null (i.e cyan_init.sh < /dev/null)
ifdef(`crankshaft_family',`
  gen_require(`
    type polaris_dyncfg_t;
  ')
  polaris_pvp_stdin_read(polaris_dyncfg_t)
')

# mktmpfd checks /tmp file system attributes
fs_getattr_tmpfs(polaris_pvp_t)

optional_policy(`
# pvp on nyquist ls /tmp/ufs/crashinfo
polaris_ncd_tmp_read(polaris_pvp_t)
')

# transition to polaris_load_usbnet_t, once load_usbnet.sh is invoked by pvp
# crankshaft platforms need access to configfs
ifdef(`crankshaft_family',`
polaris_load_usbnet_domtrans(polaris_pvp_t)
  gen_require(`
    type configfs_t;
  ')
  allow polaris_pvp_t configfs_t:dir getattr;
')

# runs rsync -ptgoDLq /bootflash/installer/issu_crash/fru_crash rsync://rp0-0/bootflash/installer/...
rsync_entry_type(polaris_pvp_t)
ifdef('ngwc_family',
polaris_chvrf_domtrans(polaris_pvp_t)
gen_require(
    type rsync_t;
')
allow rsync_t polaris_pvp_t:process sigchld;

# pvp_tmp file descriptor leaks into mcp_chvrf.sh
gen_require(
    type polaris_chvrf_t;
    type polaris_pvp_tmp_t;
')
allow polaris_chvrf_t polaris_pvp_tmp_t:fifo_file { ioctl read };
')

# statfs64 over /tmp
fs_getattr_xattr_fs(polaris_pvp_t)
polaris_tdlresolve_read(polaris_pvp_t)
corenct tcp_connect_rsync_port(polaris_pvp_t)

# runs over /proc/<pid>/net/arp
kernel_read_network_state(polaris_pvp_t)

# runs over /proc/
kernel_read_network_state_symlinks(polaris_pvp_t)

# work with mounts
mount_domtrans(polaris_pvp_t)

optional_policy(
# pvp.sh may mark or clear bits in /proc/exiting_bays
polaris rw_exiting_bays(polaris_pvp_t)
')

optional_policy(
container_runtime_domtrans(polaris_pvp_t)
')

# LOOK AT ME /usr/binos/conf/dockerd_env.sh not only sets environment
# it also does quite a bit of action in context of pvp when it got
# sourced before dockerd start
optional_policy(
fs_getattr_all_fs(polaris_pvp_t)
files_getattr_all_dirs(polaris_pvp_t)
fs_read_nsfs_files(polaris_pvp_t)
container_manage_config_files(polaris_pvp_t)
polaris_caf_files_read(polaris_pvp_t)
# creates /var/log/docker/docker.log
logging_manage_generic_logs(polaris_pvp_t)
gen_require(
    type var_log_t;
')
allow polaris_pvp_t var_log_t:dir create;
')

# support uswap feature.
# pvp script create and deletes
# the /bootflash/uswap/... folder.
type polaris_uswap_files_t;
files_type(polaris_uswap_files_t)
polaris_pfile_type(polaris_uswap_files_t)
filetrans_pattern(polaris_pvp_t, polaris_disk_bootflash_t, polaris_uswap_files_t, dir, ".USWAP")
manage_dirs_pattern(polaris_pvp_t, polaris_uswap_files_t, polaris_uswap_files_t)
manage_files_pattern(polaris_pvp_t, polaris_uswap_files_t, polaris_uswap_files_t)
manage_link_files_pattern(polaris_pvp_t, polaris_uswap_files_t, polaris_uswap_files_t)

# support for pvp to create /harddisk/.CRFT directory
filetrans_pattern(polaris_pvp_t, polaris_disk_bootflash_t, polaris_crft_data_t, dir, ".CRFT")

# Support SAI
type polaris_pvp_sai_t;
files_tmp_file(polaris_pvp_sai_t)
filetrans_pattern(polaris_pvp_t, polaris_pvp_tmp_t, polaris_pvp_sai_t, dir, "sai_process")
manage_dirs_pattern(polaris_pvp_t, polaris_pvp_tmp_t, polaris_pvp_sai_t)
manage_files_pattern(polaris_pvp_t, polaris_pvp_tmp_t, polaris_pvp_sai_t)

# all processes controlled by pchort require access to sai files
gen_require(
    attribute polaris_domain;
')
polaris_pvp_read_sai_files(polaris_domain)

ifdef(`ngwc_family',`
# ngmod_vbd_handle_mount@.service started by pvp on macallan
systemd_config_generic_services(polaris_pvp_t)
')

type polaris_pvp_var_run_t;
files_pid_file(polaris_pvp_var_run_t)
gen_require(
    type var_run_t;
')
manage_files_pattern(polaris_pvp_t, var_run_t, polaris_pvp_var_run_t)
files_pid_filetrans(polaris_pvp_t, polaris_pvp_var_run_t, file, ".uswap_clr_rp")
files_pid_filetrans(polaris_pvp_t, polaris_pvp_var_run_t, file, ".uswap_clr_fp")
files_pid_filetrans(polaris_pvp_t, polaris_pvp_var_run_t, file, ".uswap_clr_cc")

# watch over /tmp/rp/pvp/control
allow polaris_pvp_t polaris_pvp_tmp_t:dir watch;

### permissions required during shutdown

# implode.sh 'systemctl reboot' uses dbus
dbus_system_bus_client(polaris_pvp_t)

# and checks reboot.target
systemd_status_power_services(polaris_pvp_t)

# writes sysctrl_i2c.lck file
gen_require(
  type polaris_cm_rp_tmp_t;
')
files_tmp_filetrans(polaris_pvp_t, polaris_cm_rp_tmp_t, file, "sysctrl_i2c.lck")
polaris_cm_rp_tmp_manage(polaris_pvp_t)

# journalctl and ifconfig are used when gathering logs during a punt-inject
# crash
journalctl_domtrans(polaris_pvp_t)
sysnet_domtrans_ifconfig(polaris_pvp_t)
# and allow it to write to our shutdownlog
gen_require(
  type ifconfig_t;
')
polaris_btrace_data_manage_all(ifconfig_t)

# implode.sh checks ip interfaces before ifconfig
polaris_socketat_nsfs_read(polaris_pvp_t)

# cedge uses logrotate
polaris_ripc_confd_ipc_connect(polaris_pvp_t)
# logrotate perms
polaris_confd_var_log_manage(polaris_pvp_t)
allow polaris_pvp_t self:capability { chown fowner };
# var_lib stuff
files_manage_urandom_seed(polaris_pvp_t)

# vconfd_script_admin_tech.sh is invoked by pvp.sh. This requires a domain
# transition from pvp to admin tech context.
polaris_admin_tech_domtrans(polaris_pvp_t)

### systemreport related permissions

# pd_info collection when triggering systemreport
Open Source Used In BGP TE Controller Version 4.3.0

# fdisk permissions
storage_raw_read_fixed_disk(polaris_pvp_t);
fstools_manage_entry_files(polaris_pvp_t);
fstools_exec(polaris_pvp_t);
polaris_common_device_read(polaris_pvp_t)

# dmesg writes to pd_info path
write_files_pattern(dmesg_t, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
gen_require(
    type admin_home_t;
')

# top creates/writes dir ~/.config
allow polaris_pvp_t admin_home_t:dir { add_name create write };

# drop-caches
kernel_rw_vm_sysctls(polaris_pvp_t);

# systemreport collection reads all sorts of files
# but also deletes those files afterwards...
logging_manage_audit_log(polaris_pvp_t)

# report collects maroon data
polaris_maroon_data_manage_all(polaris_pvp_t);
polaris_tdlresolve_manage(polaris_pvp_t);

# collect udev log
polaris_udev_tmp_manage(polaris_pvp_t)

init_status(polaris_pvp_t);

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispvp.te
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dnl

dnl April 2018, Victor Kamensky
dnl
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dnl
define(`ripc_stem', `translit(patsubst($1, `-ripc$', `'), `-', `_'))
define(`ripc_label', `format(`polaris_%s_ripc_port_t', ripc_stem($1)))

dnl Ripc Type Map: track that type declations unique
define(`ripc_type_map', `defn(format(```ripc_type_map[%s]'', `$1'))')
define(`ripc_type_map_set', `define(format(```ripc_type_map[%s]'', `$1'), `$2'))

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_ripc.m4
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#
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#
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#

policy_module(polarisquack, 1.0);

###############################################################################
# Quack Driver policy
###############################################################################

type polaris_quack_device_t;
dev_node(polaris_quack_device_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisquack.te
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#
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#
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#

# Polaris lua files
/lu((.*)?\)lua --gen_context(system_u:object_r:polaris_lua_file_t,s0)
/usr/bin/os/conf/\(.*\)lua--gen_context(system_u:object_r:polaris_lua_file_t,s0)
/lu((.*)?\)so --gen_context(system_u:object_r:lib_t,s0)
/lu((.*)?\) --dgen_context(system_u:object_r:usr_t,s0)
/lu --dgen_context(system_u:object_r:usr_t,s0)

# Polaris nginx lua files
/var/scripts/lu((.*)?) --d gen_context(system_u:object_r:polaris_lua_file_t,s0)
/var/scripts/lu((.*)?) -- gen_context(system_u:object_r:polaris_lua_file_t,s0)

# why did we put .so libraries in /var directory?
/var/LibLua/LuaXML\lib.so --gen_context(system_u:object_r:lib_t,s0)
/var/LibLua/cjson.so --gen_context(system_u:object_r:lib_t,s0)
/var/LibLua/\lua --gen_context(system_u:object_r:polaris_lua_file_t,s0)

#lu -- gen_context(system_u:object_r:polaris_lua_file_t,s0)
/lu((.*)?) -- gen_context(system_u:object_r:polaris_lua_file_t,s0)
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislua.fc
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#  
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#  
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#  
/tmp/sw/cfg(/.*)? gen_context(system_u:object_r:polaris_cfg_data_t,s0)  
/usr/binos/conf/cfg_sync.sh -- gen_context(system_u:object_r:polaris_cfg_sync_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscfg.fc
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#  
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#  
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#  
/var/log/dmi(/.*)? gen_context(system_u:object_r:polaris_dmi_var_log_t,s0)  
/tmp/stream-parsers(/.*)? gen_context(system_u:object_r:polaris_dmi_parser_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmiopdatamgrd.fc
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#  
# June 2017, Victor Kamensky  
#  
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#  
## <summary>Polaris container Policy Rules.</summary>

########################################
##
##<summary>
##	Creates types and rules for a basic
##	polaris container process domain.
##</summary>
## <param name="stem"
##<summary>
##Stem for the domain. Name is constructed as polaris_stem_container_t
##</summary>
##</param>
##template('polaris_container_domain_template',
  gen_require(''
    type svirt_sandbox_file_t;
    type virt_lxc_var_run_t;
    attribute sandbox_net_domain;
    attribute svirt_sandbox_domain;
    bool virt_sandbox_use_sys_admin;
    bool virt_sandbox_use_mknod;
    bool virt_sandbox_use_all_caps;
    bool virt_sandbox_use_netlink;
  ')

type polaris_${1}_container_t, svirt_sandbox_domain;
domain_type(polaris_${1}_container_t)
domain_user_exemption_target(polaris_${1}_container_t)
mls_rangetrans_target(polaris_${1}_container_t)
mcs_constrained(polaris_${1}_container_t)
role system_r types polaris_${1}_container_t;
logging_send_syslog_msg(polaris_${1}_container_t)

kernel_read_system_state(polaris_${1}_container_t)
kernell_read_all_proc(polaris_${1}_container_t)

  virt_default_capabilities(polaris_${1}_container_t)
typeattribute polaris_${1}_container_t sandbox_net_domain;
dontaudit polaris_${1}_container_t self:capability fsetid;
dontaudit polaris_${1}_container_t self:capability2 block_suspend;
allow polaris_${1}_container_t self:process { execstack execmem };
manage_chr_files_pattern(polaris_${1}_container_t, svirt_sandbox_file_t, svirt_sandbox_file_t)
kernell_load_module(polaris_${1}_container_t)

tunable_policy('virt_sandbox_use_sys_admin',
  allow polaris_${1}_container_t self:capability sys_admin;
')

tunable_policy('virt_sandbox_use_mknod',
  allow polaris_${1}_container_t self:capability mknod;
')

tunable_policy('virt_sandbox_use_all_caps',
  allow polaris_${1}_container_t self:capability all_capability_perms;
  allow polaris_${1}_container_t self:capability2 all_capability2_perms;
tunable_policy(`virt_sandbox_use_netlink',`
  allow polaris_$1_container_t self:netlink_socket create_socket_perms;
  allow polaris_$1_container_t self:netlink_tcpdiag_socket create_socket_perms;
  allow polaris_$1_container_t self:netlink_kobject_uevent_socket create_socket_perms;
  `
, `logging_dontaudit_send_audit_msgs(polaris_$1_container_t)
')

allow polaris_$1_container_t virt_lxc_var_run_t:dir list_dir_perms;
allow polaris_$1_container_t virt_lxc_var_run_t:file read_file_perms;

kernel_read_irq_sysctls(polaris_$1_container_t)
kernel_read_messages(polaris_$1_container_t)

dev_read_sysfs(polaris_$1_container_t)
dev_read_mtrr(polaris_$1_container_t)
dev_read_rand(polaris_$1_container_t)
dev_read_urand(polaris_$1_container_t)

files_read_kernel_modules(polaris_$1_container_t)

# Do we actually need these?
fs_mount_cgroup(polaris_$1_container_t)
fs_manage_cgroup_dirs(polaris_$1_container_t)
fs_manage_cgroup_files(polaris_$1_container_t)
# Needed for docker
fsUnmount_xattr_fs(polaris_$1_container_t)

auth_use_nsswitch(polaris_$1_container_t)

optional_policy(`
rpm_read_db(polaris_$1_container_t)
')

logging_send_syslog_msg(polaris_$1_container_t)

tunable_policy(`virt_sandbox_use_audit',`
  logging_send_audit_msgs(polaris_$1_container_t)
')

userdom_use_user_ptys(polaris_$1_container_t)

optional_policy(`
  # allow vman to kill lxc container process
  # on shutdown where vman destroys container-related
  # stuff after a timeout period
open source used in bgp te controller version 4.3.0 6069

```c
polaris_vman_kill_process(polaris_$1_container_t)
```

```c
# copied from polariscommon.if. If the label is added in
# in permissive map, the below interface will make permissive
ifelse(permissive_domain(polaris_$1_container_t), polaris_$1_container_t,
`polaris_permissive_domain_setup(polaris_$1_container_t)',
confined_domain(polaris_$1_container_t), polaris_$1_container_t, ",",
`polaris_domain_maybe_unconfined(polaris_$1_container_t)'
```

```c
'
```

```
#<summary>
##<summary>
##	Creates types and rules for a basic
##	polaris KVM container process domain.
##</summary>
##<param name="stem">
##<summary>
##	Stem for the domain. Name is constructed as polaris_stem_container_t
##</summary>
##</param>
#
# template(`polaris_kvm_domain_template',`
gen_require(`
attribute virt_domain;
type svirt_image_t;
```
```
# for now, things are same as polaris_container_domain_template
polaris_container_domain_template($1)

type attribute polaris_$1_container_t virt_domain;
# allow {map} of svirt_image_t needed by VWAAS similar to svirt
allow polaris_$1_container_t svirt_image_t:{ file blk_file } map;
```
```
```
```c
###<summary>
###<summary>
## Read Sandbox Files
## <summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
#
# interface(`polaris_sandbox_file_read',`
gen_require(`
```
type svirt_sandbox_file_t;

read_files_pattern($1, svirt_sandbox_file_t, svirt_sandbox_file_t)
read_link_files_pattern($1, svirt_sandbox_file_t, svirt_sandbox_file_t)
list_dirs_pattern($1, svirt_sandbox_file_t, svirt_sandbox_file_t)

#######################################
## <summary>
##      Read Sandbox Files
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_sandbox_file_dir_list',
  gen_require(
    type polaris_disk_bootflash_t;
    type polaris_disk_harddisk_t;
    type svirt_sandbox_file_t;
  )
  list_dirs_pattern($1, { svirt_sandbox_file_t polaris_disk_bootflash_t polaris_disk_harddisk_t },
  svirt_sandbox_file_t)
  optional_policy(
    gen_require(
      type polaris_iox_alt_hdd_files_t;
    )
    list_dirs_pattern($1, polaris_iox_alt_hdd_files_t, svirt_sandbox_file_t)
  )
)

#######################################
## <summary>
##      Getattr of Sandbox Files
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_sandbox_file_getattr',
  gen_require(
    type polaris_disk_bootflash_t;
    type polaris_disk_harddisk_t;
type svirt_sandbox_file_t;

getattr_files_pattern($1, [ svirt_sandbox_file_t polaris_disk_bootflash_t polaris_disk_harddisk_t ],
svirt_sandbox_file_t)
optiona_policy(
    gen_require(
        type polaris_iox_alt_hdd_files_t;
    )
    getattr_files_pattern($1, polaris_iox_alt_hdd_files_t, svirt_sandbox_file_t)
)

#pragma

<summary>
Normal restricted permission to execute utd (snort) container
</summary>
<param name="domain">
<summary>
Domain allowed access.
</summary>
</param>

interface('polaris_utd_container',
    allow $1 self:netlink_generic_socket client_stream_socket_perms;
)

#pragma

<summary>
Allow domain transition
</summary>
<param name="domain">
<summary>
Domain allowed access.
</summary>
</param>

interface('polaris_iox_container_domtrans',
    gen_require(
        type polaris_iox_container_t;
        type container_file_t;
    )
    domain_transition_pattern($1, container_file_t, polaris_iox_container_t)
)

#pragma
## Allow watch on container files

### <summary>
Domain allowed access.
### </summary>

```c
interface("polaris_iox_container_watch",
    gen_require(
        type tmpfs_t;
        type container_file_t;
    )
    allow $1 container_file_t: { dir file lnk_file} watch;
    allow $1 tmpfs_t: { dir file lnk_file} watch;
)
```

## Send messages to utdl container unix datagram sockets.

### <summary>
Domain allowed access.
### </summary>

```c
interface("polaris_utdl_container_dgram_send",
    gen_require(
        type polaris_utdl_container_t;
    )
    allow $1 polaris_utdl_container_t: unix_dgram_socket sendto;
)
```

## Allow unix stream socket connect

### <summary>
Domain allowed access.
### </summary>

```c
interface("polaris_waas_stream_connect",
    gen_require(
        type polaris_waas_container_t;
    )
)```
allow $1 polaris_waas_container_t:unix_stream_socket connectto;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscontainer.if
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#
# March 2017, Victor Kamensky
#
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#
/tmp/.flashlock -- gen_context(system_u:object_r:polaris_flashlib_lock_t,s0)
/tmp/flashdev.log -- gen_context(system_u:object_r:polaris_flashlib_log_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisflashlib.fc
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#
# Oct 2020, Xin Xiang
#
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#
# dma map devices
/dev/dmammap -c gen_context(system_u:object_r:polaris_dmammap_device_t,s0)

# /dev/dma_nw is introduced by Nightwatch switch module on ESG routing platform
/dev/dma_nw -c gen_context(system_u:object_r:polaris_dmammap_device_t,s0)

# dplr interrupt devices
/dev/dplr_intrpt -c gen_context(system_u:object_r:polaris_dplr_device_t,s0)

# /dev/dplr_nw is introduced by Nightwatch switch module on ESG routing platform
/dev/dplr_nw -c gen_context(system_u:object_r:polaris_dplr_device_t,s0)

# e.g., /dev/mi/Slo8/Doppler0/Group0
/dev/mi/Slo[0-9]*/Doppler[0-9]* -c gen_context(system_u:object_r:polaris_dplr_device_t,s0)
/dev/mi/Slo[0-9]*/Doppler[0-9]*(/.*)? -c gen_context(system_u:object_r:polaris_dplr_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdoppler.fc
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#
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#

## <summary>Polaris ncd Policy Rules.</summary>

########################################
## <summary>
##      Make the specified domain able to manage tmp file created by
## ncd.sh like /tmp/etc/ncd_work_dir
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_ncd_tmp_manage',
    gen_require(
        type polaris_ncd_tmp_t;
    ')
    manage_dirs_pattern($1, polaris_ncd_tmp_t, polaris_ncd_tmp_t)
    manage_files_pattern($1, polaris_ncd_tmp_t, polaris_ncd_tmp_t)
    manage_lnk_files_pattern($1, polaris_ncd_tmp_t, polaris_ncd_tmp_t)
')

########################################
## <summary>
##      Make the specified domain able to read tmp file created by
## ncd.sh like /tmp/ufs/crashinfo
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_ncd_tmp_read',
    gen_require(
        type polaris_ncd_tmp_t;
    ')
    list_dirs_pattern($1, polaris_ncd_tmp_t, polaris_ncd_tmp_t)
    read_files_pattern($1, polaris_ncd_tmp_t, polaris_ncd_tmp_t)
read_link_files_pattern($1, polaris_ncd_tmp_t, polaris_ncd_tmp_t)
')

########################################################################
## <summary>
## Make the specified domain able to read etc file created by
## ncd.sh like /etc/conf/unifiedfs/mount_data
## </summary>
## <param name="type">
## Domain allowed access.
## </param>
#
# interface('polaris_ncd_etc_read',
 #
#  gen_require(
#      type polaris_ncd_etc_t;
#  )
#  read_files_pattern($1, polaris_ncd_etc_t, polaris_ncd_etc_t)
#
########################################################################
## <summary>
## Execute a domain transition to run ncd.
## </summary>
## <param name="domain">
## Domain allowed to transition.
## </param>
#
# interface('polaris_ncd_domtrans',
 #
#  gen_require(
#     type polaris_ncd_t, polaris_ncd_exec_t;
#  )
#  domtrans_pattern($1, polaris_ncd_exec_t, polaris_ncd_t)
#
########################################################################
## <summary>
## Execute a domain transition to run unifiedfs_helper.sh.
## </summary>
## <param name="domain">
## Domain allowed to transition.
## </param>
interface('polaris_ufs_helper_domtrans',``
gen_require(`
    type polaris_ufs_helper_t, polaris_ufs_helper_exec_t;
``)

domtrans_pattern($1, polaris_ufs_helper_exec_t, polaris_ufs_helper_t)
``)

# <summary>
## Run rpcinfo in a domain, grant proper network permissions.
#</summary>
## <param name="domain">
## Domain allowed to transition.
##</param>
# 
interface('polaris_ncd_rpcinfo_net',``
corenethpbindgenericnode($1)
corenetcbindallrpcports($1)
corenetcconnectallrpcports($1)
corenetcconnectunreservedports($1)
allow $1 self:tcp_socket { bind connect create getattr getopt setopt };

corenethpbindgenericnode($1)
corenethpbindallrpcports($1)
allow $1 self:udp_socket { bind create getattr getopt setopt };

corenetcconnectportmapport($1)
#endif('passport_platform',``
  # invoked rpcinfo which connects to port 2049 (nfs server)
  # port is incorrectly labelled due to falling in range of TDL define
  # of IOSd gold ripc service
  polaris_ripc_iosd_gold_connect($1)
``)
#endif('starfleet_platform',``
  # invoked rpcinfo which connects to port 2049 (nfs server)
  # port is incorrectly labelled due to falling in range of TDL define
  # of IOSd gold ripc service
  polaris_ripc_iosd_gold_connect($1)
``)
#endif('bigbang_platform',``
# nfs server port 2049 is labelled as ripc-emd_ui_port_t based on TDL define
polaris_ripc_emd_ui_connect($1)

')

')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisncd.if
No license file was found, but licenses were detected in source scan.

#
# July 2017, Victor Kamensky
#
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# All rights reserved
#

policy_module(polariscppcdm, 1.0);

    gen_require(" 
        type polaris_cpp_cdm_t;
    ")

polaris_btrace_data_manage(polaris_cpp_cdm_t)  
polaris crft_data manage(polaris_cpp_cdm_t)  
polaris chasfs manage(polaris_cpp_cdm_t)  
polaris_tdlresolve_read(polaris_cpp_cdm_t)  
polaris_tlddb_list_dirs(polaris_cpp_cdm_t)  
polaris_cpld_read(polaris_cpp_cdm_t)  
polaris_flashlib_read(polaris_cpp_cdm_t)  

polaris_cpp_tmp_files_use(polaris_cpp_cdm_t)  
# works with /dev/cpp_dev_info and /dev/cpp_kipc  
polaris_cpp_dev_use(polaris_cpp_cdm_t)  
polaris_cpp_tmpfs_ifdev_rw(polaris_cpp_cdm_t)  

polaris_icc_broken_relocations(polaris_cpp_cdm_t)  

    allow polaris_cpp_cdm_t self:capability net_admin;

    # get attributes of /dev/shm from glibc where_is_shmfs function  
fsh_getattr_tmpfs(polaris_cpp_cdm_t)  

polaris_cpp_cavium_sdk_ipc_use(polaris_cpp_cdm_t)  

    # LOOK AT ME: raw memory access in cavium vendor SDK  
    # related to octeon driver (BUG CSCVh58515)  
    ifdef(`crankshaft_family',`
polaris_dev_mem_use(polaris_cpp_cdm_t)
')

# overlord/neptune access /sys/bus/pci/devices/0000:01:00.0/resource0
# when initializing the CPP DMAP library.
optional_policy(')
polaris_cpp_cavium_dma_map(polaris_cpp_cdm_t)
')

optional_policy(')
polaris_cbdma_dev_use(polaris_cpp_cdm_t)
')
polaris_cpld_dev_use(polaris_cpp_cdm_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppcdm.te
No license file was found, but licenses were detected in source scan.

#
# August 2017, Victor Kamensky
#
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# All rights reserved
#
## <summary>Polaris bsm Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbsm.if
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

/obfl -l gen_context(system_u:object_r:polaris_obfl_data_t,s0)
/obfl0 -l gen_context(system_u:object_r:polaris_obfl_data_t,s0)
/tmp/obfl(/.*)? gen_context(system_u:object_r:polaris_obfl_data_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisobfl.fc
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

/dev/cpld -c gen_context(system_u:object_r:polaris_cpld_device_t,s0)
/dev/cpld-ha -c gen_context(system_u:object_r:polaris_cpld_device_t,s0)
/dev/cpld-misc-int -c gen_context(system_u:object_r:polaris_cpld_device_t,s0)
/dev/cpld-virtual-fp -c gen_context(system_u:object_r:polaris_cpld_device_t,s0)
/dev/cpld-virtual-cc -c gen_context(system_u:object_r:polaris_cpld_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscpld.fc
No license file was found, but licenses were detected in source scan.

dnl
dnl January 2021, Vaibhav Lade
dnl
dnl Copyright (c) 2021 by Cisco Systems, Inc.
dnl All rights reserved
dnl
dnl VPCGW Platform Max Bay Limits
dmax_bay_map_set(`rp', `per_bay', 0)
dmax_bay_map_set(`cc', `per_bay', 0)
dmax_bay_map_set(`fp', `per_bay', 0)

dnl in elastic scope each process has its own value
dmax_elastic_map_set(`rp', `elastic', BPROC_UEMGR, 7)
dmax_elastic_map_set(`cc', `elastic', BPROC_UEMGR, 7)
dmax_elastic_map_set(`fp', `elastic', BPROC_UEMGR, 7)

dmax_elastic_ripc_map_set(`rp', `elastic', BPROC_UEMGR, 7)
dmax_elastic_ripc_map_set(`cc', `elastic', BPROC_UEMGR, 7)
dmax_elastic_ripc_map_set(`fp', `elastic', BPROC_UEMGR, 7)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/vpcgwmaps.m4
No license file was found, but licenses were detected in source scan.

#
# July 2017, Victor Kamensky
#
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# All rights reserved
#

## <summary>Polaris gsd_rp Policy Rules.</summary>

Open Source Used In BGP TE Controller Version 4.3.0  6079
# January 2018, Manohar Hungund
#
# Copyright (c) 2018-2019 by Cisco Systems, Inc.
# All rights reserved
#

policy_module(polarisocdplogrp, 1.0);

gen_require('
  type polaris_oct_dp_log_rp_t;
')

polaris_btrace_data_manage(polaris_oct_dp_log_rp_t)
polaris_chasfs_manage(polaris_oct_dp_log_rp_t)
polaris_tdlresolve_read(polaris_oct_dp_log_rp_t)
polaris_tddb_list_dirs(polaris_oct_dp_log_rp_t)
polaris_cpld_read(polaris_oct_dp_log_rp_t)
polaris_flashlib_read(polaris_oct_dp_log_rp_t)
polaris_ripc_sman_ui_serv_connect(polaris_oct_dp_log_rp_t)

# direct access to serial TTY devices
# (octeon_dp_logger needs to acces /dev/ttyDASH7)
term_open_unallocated_ttys(polaris_oct_dp_log_rp_t)

# June 2020, Manu Roy
#
# Copyright (c) 2020 by Cisco Systems, Inc.
# All rights reserved
#
## <summary>Polaris iotswitch Policy Rules.</summary>
#
### <summary>Work (read, write, ioctl) with /dev/petra-fpga device
interface(`polaris_iots_fpga_dev_use',``
                    gen_require(`
                        type device_t;
                        type polaris_iots_fpga_device_t;
                    `)
                    write_chr_files_pattern($1, device_t, polaris_iots_fpga_device_t)
                    read_chr_files_pattern($1, device_t, polaris_iots_fpga_device_t)
                    allow $1 polaris_iots_fpga_device_t:chr_file map;
                    `)

                        ################################################################
                        ## Work (read, write, ioctl) with /dev/tm
                        ##
                        ## <param name="domain">
                        ##      <summary>
                        ##      Domain allowed access.
                        ##      </summary>
                        ##
                        ## </param>
                        #
                        interface(`polaris_iots_tm_dev_use',``
                                gen_require(`
                                    type device_t;
                                    type polaris_iots_tm_device_t;
                                `)
                                write_chr_files_pattern($1, device_t, polaris_iots_tm_device_t)
                                read_chr_files_pattern($1, device_t, polaris_iots_tm_device_t)
                                allow $1 polaris_iots_tm_device_t:chr_file map;
                                `)

                        ################################################################
                        ## Allow access to semaphore with type polaris_cm_rp_t
                        ##
                        ## <param name="domain">
                        ##      <summary>
                        ##      Domain allowed access.
                        ##      </summary>
                        ##
                        ## </param>
                        #
                        interface(`polaris_cm_rp_sem_use',``
gen_require(
    type polaris_cm_rp_t;
)
allow $1 polaris_cm_rp_t:sem rw_sem_perms;
)

########################################
## <summary>
##     Allow access to semaphore with type polaris_iots_mvDmaDrv_device_t
## </summary>
## <param name="domain">
##     <summary>
##     Domain allowed access.
##     </summary>
## </param>
#
interface('polaris_mvDmaDrv_dev_use',
    gen_require(
        type device_t;
        type polaris_iots_mvDmaDrv_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_iots_mvDmaDrv_device_t)
    read_chr_files_pattern($1, device_t, polaris_iots_mvDmaDrv_device_t)
    allow $1 polaris_iots_mvDmaDrv_device_t:chr_file map;
)

########################################
## <summary>
##     Allow access to semaphore with type polaris_iots_mvIntDrv_device_t
## </summary>
## <param name="domain">
##     <summary>
##     Domain allowed access.
##     </summary>
## </param>
#
interface('polaris_mvIntDrv_dev_use',
    gen_require(
        type device_t;
        type polaris_iots_mvIntDrv_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_iots_mvIntDrv_device_t)
    read_chr_files_pattern($1, device_t, polaris_iots_mvIntDrv_device_t)
)

########################################
## <summary>
##     Manage iots swipdrive files
## </summary>
## <param name="domain">
##     <summary>
##     Domain allowed access.
##     </summary>
## </param>
#
interface('polaris_swipdrive_dev_use',
    gen_require(
        type device_t;
        type polaris_iots_swipdrive_device_t;
    )
    write_chr_files_pattern($1, device_t, polaris_iots_swipdrive_device_t)
    read_chr_files_pattern($1, device_t, polaris_iots_swipdrive_device_t)
)
interface('polaris_swipdrive_file_manage',`
    gen_require(`
        type polaris_iots_swipdrive_file_t;
    `)
    manage_files_pattern($1, polaris_iots_swipdrive_file_t, polaris_iots_swipdrive_file_t)
    manage_link_files_pattern($1, polaris_iots_swipdrive_file_t, polaris_iots_swipdrive_file_t)
    manage_dirs_pattern($1, polaris_iots_swipdrive_file_t, polaris_iots_swipdrive_file_t)
`)

########################################

interface('polaris_getattr_swipdrive',`
    gen_require(`
        type polaris_iots_swipdrive_file_t;
    `)
    allow $1 polaris_iots_swipdrive_file_t:filesystem getattr;
`)

########################################

interface('polaris_led_dev_use',`
    gen_require(`
        type device_t;
    `)
`
type polaris_iots_led_device_t;

write_chr_files_pattern($1, device_t, polaris_iots_led_device_t)
read_chr_files_pattern($1, device_t, polaris_iots_led_device_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisiotswitch.if
No license file was found, but licenses were detected in source scan.

# # December 2019, Victor Kamensky
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#

## <summary>Polaris fnf_agg Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfnfagg.if
No license file was found, but licenses were detected in source scan.

# # March 2017, Victor Kamensky
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#

## <summary>Polaris TDLResolve Policy Rules.</summary>

# TDLresolve policy

# Open tdlresolve files
## <summary>
## Domain allowed access.
## </summary>
##
# interface('polaris_tdlresolve_read',

gen_require('

type polaris_tdlresolve_t;
')
    read_files_pattern($1, polaris_tdlresolve_t, polaris_tdlresolve_t)
    read_lnk_files_pattern($1, polaris_tdlresolve_t, polaris_tdlresolve_t)
    list_dirs_pattern($1, polaris_tdlresolve_t, polaris_tdlresolve_t)
    allow $1 polaris_tdlresolve_t:file map;

gen_require('

type polaris_global_service_t;
')
    read_files_pattern($1, polaris_global_service_t, polaris_global_service_t)
    allow $1 polaris_global_service_t:file map;

#######################################
## <summary>
##      Manage tdlresolve files
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_tdlresolve_manage',`
    gen_require(''
        type polaris_tdlresolve_t;
')
    manage_files_pattern($1, polaris_tdlresolve_t, polaris_tdlresolve_t)
    manage_lnk_files_pattern($1, polaris_tdlresolve_t, polaris_tdlresolve_t)
    manage_dirs_pattern($1, polaris_tdlresolve_t, polaris_tdlresolve_t)
    allow $1 polaris_tdlresolve_t:file map;

gen_require(''
    type polaris_global_service_t;
')
    manage_files_pattern($1, polaris_global_service_t, polaris_global_service_t)
    allow $1 polaris_global_service_t:file map;

#######################################
## <summary>
##      Watch tdlresolve directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## <param>
## <rolebase/>
#
interface(polaris_tdlresolve_watch,)
    gen_require(
        type polaris_tdlresolve_t;
    )
    allow $1 polaris_tdlresolve_t:dir watch;
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristdlresolve.if
No license file was found, but licenses were detected in source scan.

#
# September 2018, Anubha Balani
#
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#
/tmp/maroon_stats -dgen_context(system_u:object_r:polaris_maroon_base_t,s0)
# zram devices
/dev/zram[0-9]*  -b gen_context(system_u:object_r:polaris_zram_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismemory.fc
No license file was found, but licenses were detected in source scan.

#
# July 2020, Victor Kamensky
#
# Copyright (c) 2020 by Cisco Systems, Inc.
# All rights reserved
#
policy_module(polarishtx, 1.0);

gen_require(')
    type polaris_htx_t;
')
polaris_chasfs_read(polaris_htx_t)
polaris_cpld_read(polaris_htx_t)
polaris_tdlresolve_read(polaris_htx_t)
polaris_ripc_sman_ui_serv_connect(polaris_htx_t)
logging_send_syslog_msg(polaris_htx_t)
# LOOK AT ME uses shell and mkdir just to create /tmp/HTX-IOX directory
# should be single mkdir system call, in fact even this may not
# be needed since it is created by system-tempfiles
corecmd_exec_shell(polaris_htx_t)
corecmd_exec_bin(polaris_htx_t)
auth_use_nsswitch(polaris_htx_t)

# call posix_sysconf that opens /sys/devices/system/cpu/online
dev_read_sysfs(polaris_htx_t)

# create threads
allow polaris_htx_t self:process setsched;
allow polaris_htx_t self:capability sys_nice;

optional_policy(
    polaris_qfp_dgram_send(polaris_htx_t)
')

# vconfd_load_shared_schemas
polaris_confd_shared_schema_read(polaris_htx_t)

type polaris_htx_iox_tmp_t;
files_tmp_file(polaris_htx_iox_tmp_t)
polaris_htx_iox_tmp_manage(polaris_htx_t)

# htx logs files like /tmp/nwaas_log_sslproxy.log

type polaris_htx_tmp_t;
files_tmp_file(polaris_htx_tmp_t)
files_tmp_filetrans(polaris_htx_t, polaris_htx_tmp_t, file)
manage_files_pattern(polaris_htx_t, polaris_htx_tmp_t, polaris_htx_tmp_t)

# handle /dev/shm/tcpproxy_debug_shm

type polaris_htx_tmpfs_t;
files_tmpfs_file(polaris_htx_tmpfs_t)
fs_tmpfs_filetrans(polaris_htx_t, polaris_htx_tmpfs_t, file)
fs_getattr_tmpfs(polaris_htx_t)
gen_require(''
    type tmpfs_t;
')
manage_files_pattern(polaris_htx_t, tmpfs_t, polaris_htx_tmpfs_t)
allow polaris_htx_t polaris_htx_tmpfs_t:file map;

# work with /tmp/memif

optional_policy(
    polaris_qfp_memif_manage(polaris_htx_t)
')
# sppi_memif
type polaris_sppi_memif_device_t;
dev_node(polaris_sppi_memif_device_t)
polaris_sppi_memif_dev_use(polaris_htx_t)

# packet_socket uinet_if_spipi_channel_init
allow polaris_htx_t self:packet_socket { create_socket_perms recv_msg send_msg};
allow polaris_htx_t self:capability net_raw;

# read and write /bootflash/cacert-ssl.pem
polaris_bootflash_manage(polaris_htx_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarishtx.te
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

## <summary>Polaris nginx Policy Rules.</summary>

########################################
## <summary>
##      Allow domain to be started by nginx with
##      transition into specific service domain.
## </summary>
## <param name="domain">
##      <summary>
##      Type to be used to run utility.
##      </summary>
## </param>
## <param name="entry_point">
##      <summary>
##      Type of the program to be used as an entry point to this domain.
##      </summary>
## </param>

interface(`polaris_nginx_exec_domain',
genRequire(`
type polaris_nginx_t;
')

domtrans_pattern(polaris_nginx_t, $2, $1)
')
### Execute `mcp_trace_filter` script in its own domain.

#### Domain allowed to transition.

```c
interface('polaris_trace_filter_domtrans',
    type polaris_trace_filter_t, polaris_trace_filter_exec_t;
)
```

### Execute file transfer client in its own domain.

#### Domain allowed to transition.

```c
interface('polaris_file_transfer_client_domtrans',
    gen_require('type polaris_file_transfer_client_t, polaris_file_transfer_client_exec_t;
    )
```

### Allow others to perform pipe operations on nginx files

#### Domain allowed to perform the operation

```c
interface('polaris_nginx_manage_fifo_files',`
gen_require(
    type polaris_nginx_t;
    type $1;
)

manage_fifo_files_pattern($1, polaris_nginx_t, polaris_nginx_t)
)

#################################################################
## <summary>
##  Allow the specified domain to manage polaris_nginx_tmp_t files
## </summary>
## <param name="domain">
##  Domain allowed access.
## </param>
#
interface(`polaris_nginx_tmp_manage',
    gen_require(
        type polaris_nginx_tmp_t;
    )
)

manage_files_pattern($1, polaris_nginx_tmp_t, polaris_nginx_tmp_t)
files_tmp_filetrans($1, polaris_nginx_tmp_t, file, "ca.cert")
)

#################################################################
## <summary>
##  Manage polaris_fts_client_tmp_t in /tmp/fts_client.
## </summary>
## <param name="domain">
##  Domain allowed access.
## </param>
#
interface(`polaris_fts_client_tmp_manage',
    gen_require(
        type polaris_fts_client_tmp_t;
    )
)

manage_files_pattern($1, polaris_fts_client_tmp_t, polaris_fts_client_tmp_t)
manage_dirs_pattern($1, polaris_fts_client_tmp_t, polaris_fts_client_tmp_t)
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnginx.if
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# February 2020, Victor Kamensky
#
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#

### <summary>Polaris cedgetanman Policy Rules.</summary>

### <summary>
## Read cedge tanman files and fifo_file. I.e
## /tmp/tan/tan_evt_fifo
## </summary>
### <param name="domain">
## Domain allowed access.
## </summary>
### </param>
#
interface('polaris_cedge_tanman_tmp_manage',
    gen_require(
        type polaris_cedge_tanman_tmp_t;
    )
    read_files_pattern($1, polaris_cedge_tanman_tmp_t, polaris_cedge_tanman_tmp_t)
    read_fifo_files_pattern($1, polaris_cedge_tanman_tmp_t, polaris_cedge_tanman_tmp_t)
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscedgetanman.if

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# November 2017, Victor Kamensky
#
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#

# polarisgnmib file contexts place holder
flash1/gNOI_iosxe_*  gen_context(system_u:object_r:polaris_gnmib_gnoi_images_t,s0)
/bootFlash/gNOI_iosxe_* gen_context(system_u:object_r:polaris_gnmib_gnoi_images_t,s0)
/mnt/sd3/user/gNOI_iosxe_* gen_context(system_u:object_r:polaris_gnmib_gnoi_images_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisgnmib.fc
No license file was found, but licenses were detected in source scan.

#
# November 2020, Christine Hwang
#
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#
#
### <summary>Polaris bbu Policy Rules.</summary>

########################################################################
### <summary>
###     Work (read, write, ioctl) with /dev/ttyS2
### </summary>
### <param name="domain">
###     Domain allowed access.
### </param>
#
interface(`polaris_bbu_dev_use',`
  gen_require(`
    type device_t;
    type polaris_bbu_device_t;
  `)
  write_chr_files_pattern($1, device_t, polaris_bbu_device_t)
  read_chr_files_pattern($1, device_t, polaris_bbu_device_t)
  allow $1 polaris_bbu_device_t:chr_file map;
`)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbbu.if

No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
#
### <summary>Polaris polarisrollbacktimer Policy Rules.</summary>

########################################################################
### <summary>
###     Manage rbtimer file on bootflash (i.e /bootflash/.rollback_timer)
### </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_rbtimer_bootflash_manage',
#    gen_require(''
#      type polaris_disk_bootflash_t;
#      type polaris_rbtimer_bootflash_t;
#    ')
#    manage_dirs_pattern($1, polaris_disk_bootflash_t, polaris_rbtimer_bootflash_t)
#    manage_files_pattern($1, polaris_rbtimer_bootflash_t, polaris_rbtimer_bootflash_t)
#    filetrans_pattern($1, polaris_disk_bootflash_t, polaris_rbtimer_bootflash_t, dir, ".rollback_timer")
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrollbacktimer.if
No license file was found, but licenses were detected in source scan.
#
# March 2017, Victor Kamensky
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#

## <summary>Polaris keyman Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariskeyman.if
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#

## <summary>Polaris polarisoom Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisoom.if
No license file was found, but licenses were detected in source scan.
#
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#
/usr/bin/os/conf/install_engine.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/install_assist.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/install_helper.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/sw_load_svc.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/provision.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/issu_helper.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/issu/issu_check.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/packtool.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/install_boottime.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/vconfd_script_upgrade.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/issu_client_comp.py -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/install_selinux.sh -- gen_context(system_u:object_r:polaris_install_selinux_exec_t,s0)
/usr/bin/os/conf/install_show.sh -- gen_context(system_u:object_r:polaris_install_show_exec_t,s0)
/usr/bin/os/conf/install_issu_show.py -- gen_context(system_u:object_r:polaris_install_show_exec_t,s0)
/usr/bin/vconfd_script_show_installerfs.sh -- gen_context(system_u:object_r:polaris_install_show_exec_t,s0)
/usr/bin/os/conf/calcsha.sh -- gen_context(system_u:object_r:polaris_install_engine_exec_t,s0)
/usr/bin/os/conf/C9800-Wireless_startup_script.sh -- gen_context(system_u:object_r:polaris_install_wireless_exec_t,s0)
/usr/bin/os/conf/C9800-Wireless_stop_script.sh -- gen_context(system_u:object_r:polaris_install_wireless_exec_t,s0)

/bootflash/.issu_loc_lock -- gen_context(system_u:object_r:polaris_issu_files_t,s0)
/tmp/issu(/.*)? -- gen_context(system_u:object_r:polaris_issu_tmp_files_t,s0)

/bootflash/installer(/.*)? -- gen_context(system_u:object_r:polaris_disk_install_t,s0)
/bootflash/images(/.*)? -- gen_context(system_u:object_r:polaris_install_images_t,s0)
/tmp/installer_tmplog(/.*)? -- gen_context(system_u:object_r:polaris_install_tmp_log_t,s0)
/tmp/installer(/.*)? -- gen_context(system_u:object_r:polaris_install_tmp_t,s0)
/bootflash/sdwaninstaller(/.*)? -- gen_context(system_u:object_r:polaris_disk_install_t,s0)
/flash1/sdwaninstaller(/.*)? -- gen_context(system_u:object_r:polaris_disk_install_t,s0)

/tmp/install_all_trans_log -- gen_context(system_u:object_r:polaris_install_tmp_t,s0)
/tmp/show_install_output.txt -- gen_context(system_u:object_r:polaris_install_show_tmp_t,s0)

/tmp/sw/rp(/.*)? -- gen_context(system_u:object_r:polaris_sw_data_t,s0)
/tmp/sw/fp(/.*)? -- gen_context(system_u:object_r:polaris_sw_data_t,s0)
/tmp/sw/cc(/.*)? -- gen_context(system_u:object_r:polaris_sw_data_t,s0)
# The following labels are specific to hot patch a SMUs shared objects
# using .so files). For cold patch files, the patch is subset of a package
# (it has the same structure) and therefore regular labeling rules will
# be in effect.
#
# The SMU hot patch directory hierarchy should look as follows:
#
#/RP.<ARCH>/<process>/patch(s)
#/FP.<ARCH>/<process>/patch(s)
#/CC.<ARCH>/<process>/patch(s)
#
/RF\.[^/\-]*([^/\-]*(/.*)?)?  gen_context(system_u:object_r:lib_t,s0)
/FP\.[^/\-]*([^/\-]*(/.*)?)?  gen_context(system_u:object_r:lib_t,s0)
/CP\.[^/\-]*([^/\-]*(/.*)?)?  gen_context(system_u:object_r:lib_t,s0)
#
# bundle image/subpkg labeling
/packages.conf                  -- gen_context(system_u:object_r:polaris_packages_conf_t,s0)
/.pkginfo                      -- gen_context(system_u:object_r:polaris_sw_data_t,s0)
/\(^.*\).pkg                      -- gen_context(system_u:object_r:polaris_sw_data_t,s0)
#
/tmp/pkg_cs_debug(/.*)? gen_context(system_u:object_r:polaris_pkg_cs_debug_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisinstall.fc
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#
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#
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#

policy_module(polarisepcwsliaison, 1.0);

gen_require(' type polaris_epc_ws_liaison_t;
')
polaris_btrace_data_manage(polaris_epc_ws_liaison_t)
polaris_crft_data_manage(polaris_epc_ws_liaison_t)
polaris_chasfs_manage(polaris_epc_ws_liaison_t)
polaris_tdlresolve_read(polaris_epc_ws_liaison_t)
polaris_tdlldb_list_dirs(polaris_epc_ws_liaison_t)
polaris_cpld_read(polaris_epc_ws_liaison_t)
polaris_flashlib_read(polaris_epc_ws_liaison_t)
polaris_ripc_sman_ui_serv_connect(polaris_epc_ws_liaison_t)

allow polaris_epc_ws_liaison_t self:capability { dac_override };

# tshark invoked by epc_ws_liaison needs to map /etc/passwd file.
auth_map_passwd(polaris_epc_ws_liaison_t)

# access to execute /sbin/tshark
corecmd_exec_bin(polaris_epc_ws_liaison_t)

# dumpcap needs access to net dir in sysfs
dev_read_sysfs(polaris_epc_ws_liaison_t)

# comm="dumpcap" kmod="net-pf-16-proto-12"
kernel_dontaudit_request_load_module(polaris_epc_ws_liaison_t)

# write pcap files to /bootflash
polaris_bootflash_manage(polaris_epc_ws_liaison_t)

# epc_ws_liaison and ngwc-fed pipe interaction
polaris_fed_shm_file_read(polaris_epc_ws_liaison_t)

# for pluggable FS, allow epc liaison to access files on them.
polaris_removable_manage(polaris_epc_ws_liaison_t)

# tshark and dumpcap runtime requirements
allow polaris_epc_ws_liaison_t self:capability { net_raw setgid setuid }; 
allow polaris_epc_ws_liaison_t self:netlink_netfilter_socket create;
allow polaris_epc_ws_liaison_t self:netlink_route_socket { bind create getattr nlmsg_read };
allow polaris_epc_ws_liaison_t self:packet_socket { bind create getopt ioctl map setopt };
allow polaris_epc_ws_liaison_t self:process setcap;
allow polaris_epc_ws_liaison_t self:unix_dgram_socket { create ioctl };
allow polaris_epc_ws_liaison_t self:udp_socket { create ioctl };

# /tmp/lsn.log and /tmp/epc_ws (WS_TMP_FOLDER)
type polaris_epc_ws_liaison_tmp_t;
files_tmp_file(polaris_epc_ws_liaison_tmp_t)
files_tmp_filetrans(polaris_epc_ws_liaison_t, polaris_epc_ws_liaison_tmp_t, { file dir })
manage_dirs_pattern(polaris_epc_ws_liaison_t, polaris_epc_ws_liaison_tmp_t)
manage_files_pattern(polaris_epc_ws_liaison_t, polaris_epc_ws_liaison_tmp_t)
manage_fifo_files_pattern(polaris_epc_ws_liaison_t, polaris_epc_ws_liaison_tmp_t)
polaris_epi_ws_liaison_tmp_t

# CLI: show platform software wireshark show
polaris_utility_domain_template(wireshark_show)
polaris_bexecute_domain(polaris_wireshark_show_t, polaris_wireshark_show_exec_t)

polaris_chasfs_manage(polaris_wireshark_show_t)
corecmd_exec_bin(polaris_wireshark_show_t)

# map /etc/passwd
auth_map_passwd(polaris_wireshark_show_t)

# open, read, getattrib pcap files
polaris_bootflash_read(polaris_wireshark_show_t)

# write into pipe that smand created for us with popen
polaris_smand_use_fifo(polaris_wireshark_show_t)
corecmd_exec_shell(polaris_wireshark_show_t)

# sys file /sys/devices/system/cpu/online
dev_read_sysfs(polaris_wireshark_show_t)

# tshark and dumpcap runtime requirements
allow polaris_wireshark_show_t self:capability { setgid setuid net_admin };
allow polaris_wireshark_show_t self:netlink_netfilter_socket create;
allow polaris_wireshark_show_t self:netlink_route_socket { bind create getattrib nlmsg_read };
allow polaris_wireshark_show_t self:process setcap;
allow polaris_wireshark_show_t self:udp_socket { create ioctl };
allow polaris_wireshark_show_t self:unix_dgram_socket { create ioctl };

#dumpcap needs access "/tmp/epc_ws/wif_to_ts_pipe" fifo file
polaris_eipc_ws_liaison_fifo_read(polaris_wireshark_show_t)

# comm="dumpcap" kmod="net-pf-16-proto-12"
kernel_request_load_module(polaris_wireshark_show_t)

# /tmp/*.pcapng
type polaris_wireshark_show_tmp_t;
files_tmp_file(polaris_wireshark_show_tmp_t)
files_tmp_filetrans(polaris_wireshark_show_t, polaris_wireshark_show_tmp_t, file)
polaris_wireshark_show_tmp_manage(polaris_wireshark_show_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisepcwsliaison.te
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# June 2020, Manu Roy
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policy_module(polarisiotswitch, 1.0);

# petra fpga device (/dev/petra-fpga) type polaris_iots_fpga_device_t; dev_node(polaris_iots_fpga_device_t)

# petra DMA ASIC driver (/dev/mvDmaDrv) type polaris_iots_mvDmaDrv_device_t; dev_node(polaris_iots_mvDmaDrv_device_t)

# petra Interrupt Asic driver (/dev/mvIntDrv) type polaris_iots_mvIntDrv_device_t; dev_node(polaris_iots_mvIntDrv_device_t)

# petra tm device (/dev/tm) type polaris_iots_tm_device_t; dev_node(polaris_iots_tm_device_t)

# petra tm device (/dev/mmcblk1p1) type polaris_iots_swipedrive_device_t; dev_node(polaris_iots_swipedrive_device_t)

type polaris_iots_swipedrive_file_t; files_type(polaris_iots_swipedrive_file_t) dev_associate(polaris_iots_swipedrive_file_t)

# LED device (/dev/spidev0.0) type polaris_iots_led_device_t; dev_node(polaris_iots_led_device_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisiotswitch.te
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### <summary>Polaris psd Policy Rules.</summary>

### </summary>
### Read polaris_restconf_t files, effectively files under /tmp/restconf
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
#
interface('polaris_restconf_read',
    gen_require(
        type polaris_restconf_t;
    )
    read_files_pattern($1, polaris_restconf_t, polaris_restconf_t)
    read_lnk_files_pattern($1, polaris_restconf_t, polaris_restconf_t)
    list_dirs_pattern($1, polaris_restconf_t, polaris_restconf_t)
)

### </summary>
### Manage polaris_restconf_t files, effectively files under /tmp/restconf
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
#
interface('polaris_restconf_manage',
    gen_require(
        type polaris_restconf_t;
    )
    manage_files_pattern($1, polaris_restconf_t, polaris_restconf_t)
    manage_lnk_files_pattern($1, polaris_restconf_t, polaris_restconf_t)
    manage_dirs_pattern($1, polaris_restconf_t, polaris_restconf_t)
)

### </summary>
### Manage polaris_ncsshd_keys_t files, effectively files
## under /tmp/.ncsshd_authorized_keys
## </summary>
## <param name="domain">
##   Domain allowed access.
## </summary>
## </param>

# interface('polaris_ncsshd_keys_manage',
    gen_require(''
        type polaris_ncsshd_keys_t;
    ')
    manage_files_pattern($1, polaris_ncsshd_keys_t, polaris_ncsshd_keys_t)
    manage_lnk_files_pattern($1, polaris_ncsshd_keys_t, polaris_ncsshd_keys_t)
    manage_dirs_pattern($1, polaris_ncsshd_keys_t, polaris_ncsshd_keys_t)
    ')

####################################################################
## <summary>
##      Read polaris_psd_tmp_t files, effectively access
## /tmp/dmi.ds_config created by psd and read by confd startup
## script
## </summary>
## <param name="domain">
##   Domain allowed access.
## </summary>
## </param>

# interface('polaris_psd_tmp_read',
    gen_require(''
        type polaris_psd_tmp_t;
    ')
    read_files_pattern($1, polaris_psd_tmp_t, polaris_psd_tmp_t)
    ')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispsd.if
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# #

## <summary>Polaris smd Policy Rules.</summary>
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissmd.if
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dnl

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dnl
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dnl
define(`polaris_process_aux_full',``
polaris_process_domain_template($1)
``)

define(`polaris_process_aux',``
ifelse(process_type_map($1), `', `polaris_process_aux_full($1)')
process_type_map_set($1, 1)
``)

define(`polaris_process',``
polaris_process_aux(process_stem($1))
``)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_process_te.m4
No license file was found, but licenses were detected in source scan.

#
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#
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#

policy_module(polarisdmincsshdmgmt, 1.0);

gen_require(`
    type polaris_dmi_ncsshd_mgmt_t;
``)

polaris_btrace_data_manage(polaris_dmi_ncsshd_mgmt_t)
polaris_chasfs_manage(polaris_dmi_ncsshd_mgmt_t)
polaris_tdlresolve_read(polaris_dmi_ncsshd_mgmt_t)
polaris_tdlldb_list_dirs(polaris_dmi_ncsshd_mgmt_t)
polaris_flashlib_read(polaris_dmi_ncsshd_mgmt_t)
allow polaris_dmi_ncsshd_mgmt_t self:tcp_socket { getattr getopt setopt bind create listen accept connect read write 
};
allow polaris_dmi_ncsshd_mgmt_t self:udp_socket { getattr create connect read write 
};
allow polaris_dmi_ncsshd_mgmt_t self:cap_users { sys_admin net_bind_service 
};
type polaris_dmi_ncsshd_mgmt_var_run_t;
files_pid_file(polaris_dmi_ncsshd_mgmt_var_run_t)
manage_dirs_pattern(polaris_dmi_ncsshd_mgmt_t, polaris_dmi_ncsshd_mgmt_var_run_t, polaris_dmi_ncsshd_mgmt_var_run_t)
manage_files_pattern(polaris_dmi_ncsshd_mgmt_t, polaris_dmi_ncsshd_mgmt_var_run_t, polaris_dmi_ncsshd_mgmt_var_run_t)
files_pid_filetrans(polaris_dmi_ncsshd_mgmt_t, polaris_dmi_ncsshd_mgmt_var_run_t, { file dir })

# access /var/log/lastlog, /var/log/btmp
type polaris_dmi_ncsshd_mgmt_var_log_t;
logging_log_file(polaris_dmi_ncsshd_mgmt_var_log_t)
manage_files_pattern(polaris_dmi_ncsshd_mgmt_t, polaris_dmi_ncsshd_mgmt_var_log_t, polaris_dmi_ncsshd_mgmt_var_log_t)
logging_log_filetrans(polaris_dmi_ncsshd_mgmt_t, polaris_dmi_ncsshd_mgmt_var_log_t, file, "lastlog")
logging_log_filetrans(polaris_dmi_ncsshd_mgmt_t, polaris_dmi_ncsshd_mgmt_var_log_t, file, "btmp")
polaris_dmi_ncsshd_fwd_dgram_send(polaris_dmi_ncsshd_mgmt_t)
corenet_tcp_bind_polaris_dmi_ncsshd_mgmt_port(polaris_dmi_ncsshd_mgmt_t)
# ncsshd allows user-defined port with: netconf-yang ssh port <port_no>
corenet_tcp_bind_all_ports(polaris_dmi_ncsshd_mgmt_t)

auth_use_nsswitch(polaris_dmi_ncsshd_mgmt_t)
# assign following capabilities needed by sshd
allow polaris_dmi_ncsshd_mgmt_t self:capability {net_admin setgid sys_resource setuid sys_chroot kill};
allow polaris_dmi_ncsshd_mgmt_t self:process setrlimit;

# ncsshd requests pseudo terminal when netconf session is set up without
# explicitly specifying the subsystem name, such as netconf.
allow polaris_dmi_ncsshd_mgmt_t self:capability { chown fowner fsetid }; 
term_setattr_generic_ptys(polaris_dmi_ncsshd_mgmt_t)
term_getattr_ptys(polaris_dmi_ncsshd_mgmt_t)
term_use_generic_ptys(polaris_dmi_ncsshd_mgmt_t)
term_use_ptmx(polaris_dmi_ncsshd_mgmt_t)

# enable to read cpld file "/sys/devices/platform/cpld/board_vtype"
polaris_cpld_read(polaris_dmi_ncsshd_mgmt_t)
# for sshd needs access network interface resource
allow polaris_dmi_ncsshd_mgmt_t self:netlink_route_socket r_netlink_socket_perms;

# calls socketat server_listen at mgmt/dmi/ncsshd/src/sshd.c
polaris_socketat_nsfs_read(polaris_dmi_ncsshd_mgmt_t)
polaris_lfts_dev_use(polaris_dmi_ncsshd_mgmt_t)

corecmd_exec_bin(polaris_dmi_ncsshd_mgmt_t)

logging_send_syslog_msg(polaris_dmi_ncsshd_mgmt_t)
# TODO : revisit below statement when addressing initrc_exec_t denial
polaris_rmonbifo_tmp_read(polaris_dmi_ncsshd_mgmt_t)

# allow access to /tmp/sw/cfg and /tmp/sw/boot
polaris_boot_tmp_read(polaris_dmi_ncsshd_mgmt_t)
polaris_cfg_data_manage(polaris_dmi_ncsshd_mgmt_t)
polaris_dmi_dmiauthd_dgram_send(polaris_dmi_ncsshd_mgmt_t)

corenet_tcp_connect_polaris_netconf_interceptor_port(polaris_dmi_ncsshd_mgmt_t);
# This fixes runin.sh related denials. Refer to auth.c file which invokes bshell.
polaris_bexecute_domtrans(polaris_dmi_ncsshd_mgmt_t);

# This fixes authorized keys access related denials.
polaris_ncsshd_authorized_keys_read(polaris_dmi_ncsshd_mgmt_t);

# This fixes denials related to interceptor files.
polaris_interceptor_manage(polaris_dmi_ncsshd_mgmt_t);

# This fixes denials related to netconf_callhome executable
gen_require(
    type polaris_confd_t;
')
allow polaris_dmi_ncsshd_mgmt_t polaris_confd_t:tcp_socket { getattr getopt setopt };

# This fixes denials related to route, scp, chvrf command executables
# { read open getattr } operations are allowed on route command
# { search open } operations are allowed on scp command
# { read open execute execute_no_trans } operations are allowed on chvrf command
kernel_read_network_state(polaris_dmi_ncsshd_mgmt_t)

optional_policy(
    # allows access to /tmp/xml/Intf dir and files
polaris_cedge_tmp_manage(polaris_dmi_ncsshd_mgmt_t)
polaris_cedge_xml_tmp_manage(polaris_dmi_ncsshd_mgmt_t)
')

# This fixes denials related to ifconfig executable
# { execute read open execute_no_trans map getattr } operations are allowed
sysnet_domtrans_ifconfig(polaris_dmi_ncsshd_mgmt_t)

# This fixes access denials related to confd checking ncsshd_mgmt proc info
#/proc/<ncsshd pid>/
read_files_pattern(polaris_confd_t, polaris_dmi_ncsshd_mgmt_t, polaris_dmi_ncsshd_mgmt_t)
read_lnk_files_pattern(polaris_confld_t, polaris_dmi_ncsshd_mgmt_t, polaris_dmi_ncsshd_mgmt_t)

# allows access for admin-tech generation from vManage
polaris_admin_tech_data_manage(polaris_dmi_ncsshd_mgmt_t)
polaris_bootflash_manage(polaris_dmi_ncsshd_mgmt_t)

# allow access to polaris_cfg_data_t
polaris_cfg_data_manage(polaris_dmi_ncsshd_mgmt_t)

# allow access to polaris_boot_tmp_t
polaris_boot_tmp_read(polaris_dmi_ncsshd_mgmt_t)

# allow to watch /var/run/netns and list dir
polaris_watch_netns(polaris_dmi_ncsshd_mgmt_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmincsshdmgmt.te
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
#
## <summary>Polaris polarispman Policy Rules.</summary>

###################################################################
## <summary>
## Make the specified program domain accessible
## from the pman.
## </summary>
## <param name="domain">
## The type of the process to transition to.
## </param>
## <param name="entrypoint">
## The type of the file used as an entrypoint to this domain.
## </param>
#
interface(`polaris_pman_entry`,
gen_require(`
type polaris_pman_t;
type polaris_gdb_t;`
interface('polaris_pman_manage_tmp_files',
    gen_require(
        type polaris_pman_tmp_t;
    )
)
manage_files_pattern($1, polaris_pman_tmp_t, polaris_pman_tmp_t)
manage_dirs_pattern($1, polaris_pman_tmp_t, polaris_pman_tmp_t)
')

interface('polaris_pman_tmp_filetrans',
    gen_require(
        type polaris_pman_tmp_t;
    )
)
files_tmp_filetrans($1, polaris_pman_tmp_t, $2, $3)
')

### Check existence (getattr) of pman btrace file (i.e polaris_pman_bt_t)
## <summary>
## <param name="domain">
##   <summary>
##   Domain allowed access.
##   </summary>
## </param>
#
interface(`polaris_pman_bt_getattr',
    gen_require(`
        type polaris_pman_bt_t;
        type polaris_btrace_base_t;
    ')
    getattr_files_pattern($1, polaris_btrace_base_t, polaris_pman_bt_t)
')

########################################
## <summary>
##   Read and write to pmanlite fifo file, used as
##   stdout/stderr.
## </summary>
## <param name="domain">
##   <summary>
##   Domain allowed access.
##   </summary>
## </param>
#
interface(`polaris_use_pman_fifo',
    gen_require(`
        type polaris_pman_t;
    ')
    allow $1 polaris_pman_t:fifo_file { rw_fifo_file_perms };
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispman.if
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#
# August 2017, Shawn Lu
#
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#
policy_module(polariswncmgrd, 1.0);

gen_require(`
type polaris_wncmgrd_t;

polaris_btrace_data_manage(polaris_wncmgrd_t)
polaris_chasfs_manage(polaris_wncmgrd_t)
polaris_tdlresolve_read(polaris_wncmgrd_t)
polaris_tdlldb_list_dirs(polaris_wncmgrd_t)
polaris_cpld_read(polaris_wncmgrd_t)
polaris_lua_read(polaris_wncmgrd_t)
polaris_flashlib_read(polaris_wncmgrd_t)
polaris_ripc_sman_ui_serv_connect(polaris_wncmgrd_t)
polaris_db_tdlldb_dir_use(polaris_wncmgrd_t)

#allow setrlimit
allow polaris_wncmgrd_t self:process setrlimit;
allow polaris_wncmgrd_t self:capability sys_resource;
allow polaris_wncmgrd_t self:capability dac_override;

allow polaris_wncmgrd_t self:tcp_socket { shutdown };

#allow wncmgrd UDP socket operations
allow polaris_wncmgrd_t self:udp_socket { bind getattr setopt };
corenert_udp_bind_generic_node(polaris_wncmgrd_t)

#allow wncmgrd module to do ioctl,open,read,write operations on char file
polaris_lfts_dev_use(polaris_wncmgrd_t)

# it use tcp port 9090 and9091(polaris_wnc mgrd_port)
corenert_tcp_bind_polaris_wnc_mgrd_port(polaris_wncmgrd_t)

# For ewlc, wncd and wncmgrd needs access to files under /mnt/images/...these
# are related to AccessPoint images

# wncmgrd calls ewlc_get_ap_sw_version() to open/read
# /tmp/sw/rp/0/0/rp_wlc/mount/mnt/images/ap.pri/version.info
# call-chain: main -> ewlc_app_context_init -> wncd_evlib_app_init_cb ->
#         capwapac_init_default_config -> ewlc_get_ap_sw_version
polaris_wlc_ap_images_read(polaris_wncmgrd_t)
polaris_odm_clnt2svr_mqipc_create(polaris_wncmgrd_t)
polaris_tdlldb_persist_setup(polaris_wncmgrd_t)
polaris_tmp_tdlldb_persist_setup(polaris_wncmgrd_t)
logging_send_syslog_msg(polaris_wncmgrd_t)
# bind CAPWAP control and data
corenet_udp_bind_polaris_capwap_ctr_port(polaris_wncmgrd_t)
corenet_udp_bind_polaris_capwap_data_port(polaris_wncmgrd_t)

# wncmgrd accessing NA certificate to push to AP
type polaris_icap_cert_t;
polaris_pfile_type(polaris_icap_cert_t)

# wncmgrd receives the certificate file from IOSd via IPC
# and writes to /bootflash for ICap feature
# and hence requires access.
gen_require(`
type polaris_icap_cert_t;
`)
filetrans_pattern(polaris_wncmgrd_t, polaris_disk_bootflash_t, polaris_icap_cert_t, file, "NACert.pem")
allow polaris_wncmgrd_t polaris_icap_cert_t:file { write create open getattr unlink };  

# allow tcp connection from http port for awips file download
# from DNAC
corenets_tcp_connect_http_port(polaris_wncmgrd_t)

# allow read/write/mmap access to awips file
gen_require(`
type polaris_awips_signature_file_t;
`)
filetrans_pattern(polaris_wncmgrd_t, polaris_disk_bootflash_t, polaris_awips_signature_file_t, file, "awips.json")
allow polaris_wncmgrd_t polaris_awips_signature_file_t:file { map write create read open getattr unlink };  

# allow read access to resolv.conf
sysnet_read_config(polaris_wncmgrd_t)

# ewlc_capwap_dgram_srvr_create_raw_send_socket () creates a socket
# creates sll.sll_family = AF_PACKET;
# sll.sll_ifindex = dgram_io_desc->lfts_ifindex;
# sll.sll_protocol = htons(ETH_P_ALL);

allow polaris_wncmgrd_t self:packet_socket { create_socket_perms setopt };
allow polaris_wncmgrd_t self:rawip_socket { create_socket_perms setopt ioctl };

allow polaris_wncmgrd_t self:capability net_raw;
corenets_raw_bind_generic_node(polaris_wncmgrd_t)

gen_require(`
type port_t;
`)
allow polaris_wncmgrd_t port_t:rawip_socket name_bind;
# allow tmp symlinks
fs_read_tmpfs_symlinks(polaris_wncmgrd_t)
# allow tmp file read
polaris_install_tmp_read(polaris_wncmgrd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.10/selinux-selinux/polariswncmgrd.te

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#
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#

### <summary>Polaris NVRAM Policy Rules.</summary>

# NVRAM policy

### <summary>

**Manage nvram files (location varies by platform)**

### </summary>

### <param name="domain">

**Domain allowed access.**

### </param>

### </rolebase/>

```
interface('polaris_nvram_manage',
  gen_require(''
    type polaris_nvram_file_t;
    type device_t;
  ')

  manage_blk_files_pattern($1, device_t, polaris_nvram_file_t)
  manage_files_pattern($1, polaris_nvram_file_t, polaris_nvram_file_t)
  manage_link_files_pattern($1, polaris_nvram_file_t, polaris_nvram_file_t)
  ')
```

**Read nvram files (location varies by platform)**
## <summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
## <rolebase/>
#
interface('polaris_nvram_read',
gen_require('
type polaris_nvram_file_t;
type device_t;
')
read_blk_files_pattern($1, device_t, polaris_nvram_file_t)
read_files_pattern($1, polaris_nvram_file_t, polaris_nvram_file_t)
read_lnk_files_pattern($1, polaris_nvram_file_t, polaris_nvram_file_t)
')

#######################################
## <summary>
## getattr for nvram files (location varies by platform)
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
## <rolebase/>
#
interface('polaris_nvram_getattr',
gen_require('
type polaris_nvram_file_t;
type device_t;
')
getattr_blk_files_pattern($1, device_t, polaris_nvram_file_t)
ggetattr_files_pattern($1, polaris_nvram_file_t, polaris_nvram_file_t)
ggetattr_lnk_files_pattern($1, polaris_nvram_file_t, polaris_nvram_file_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnvram.if
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#
# July 2017, Victor Kamensky
#
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#

/usr/cpp/bin/cpp_stats_svr -- gen_context(system_u:object_r:polaris_cpp_stats_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppstats.fc
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#
# March 2017, Victor Kamensky
#
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#

policy_module(polarisoom, 1.0);

polaris_process_domain_template(oom)

corecmd_exec_bin(polaris_oom_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_oom_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_oom_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_oom_t)

allow polaris_oom_t self:capability sys_resource;
allow polaris_oom_t self:process setpgid;

polaris_btrace_data_manage(polaris_oom_t)
polaris_chasfs_manage(polaris_oom_t)
polaris_cpld_read(polaris_oom_t)
polaris_boot_tmp_read(polaris_oom_t)
polaris_read_debug_conf(polaris_oom_t)
polaris_disk_crashinfo_getattr(polaris_oom_t)
polaris_rmonbifo_tmp_read(polaris_oom_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisoom.te
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# March 2017, Victor Kamensky
#
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#

# /mnt/sd1 edison and nyquist
/mnt/sd1(/.*)?    gen_context(system_u:object_r:polaris_disk_crashinfo_t,s0)
/mnt/sd1/tracelogs(/.*)? gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/mnt/sd1/system-report_.*\tar\tgz    gen_context(system_u:object_r:polaris_system_report_t,s0)

# /mnt/sd3 edison and nyquist
/mnt/sd3(/.*)?    gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
/mnt/sd3/user/core(/.*)? gen_context(system_u:object_r:polaris_core_file_t,s0)
/mnt/sd3/user/tracelogs(/.*)? gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/mnt/sd3/user/tan(/.*)? gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/mnt/sd3/user/.ssh(/.*)? gen_context(system_u:object_r:ssh_home_t,s0)
/mnt/sd3/user/.ssh/ssh_host.*_key\pub gen_context(system_u:object_r:sshd_key_t,s0)
/mnt/sd3/user/.ssh/ssh_host.*_key gen_context(system_u:object_r:sshd_key_t,s0)
/mnt/sd3/user/nvram_config -- gen_context(system_u:object_r:polaris_nvram_file_t,s0)
/mnt/sd3/user/debug.conf -- gen_context(system_u:object_r:polaris_debug_conf_t,s0)
/mnt/sd3/user/packages.conf gen_context(system_u:object_r:polaris_packages_conf_t,s0)
/mnt/sd3/user/.dbpersist(/.*)? gen_context(system_u:object_r:polaris_disk_dbm_t,s0)
/mnt/sd3/user/.installer(/.*)? gen_context(system_u:object_r:polaris_disk_install_t,s0)
/mnt/sd3/user/rollback_timer(/.*)? gen_context(system_u:object_r:polaris_rbtimer_bootflash_t,s0)
/mnt/sd3/user/kernel/core(/.*)? gen_context(system_u:object_r:polaris_core_file_t,s0)
/mnt/sd3/user/sys_report(/.*)? gen_context(system_u:object_r:polaris_chasync_files_t,s0)

# /mnt/sd4 nyquist
/mnt/sd4(/.*)?    gen_context(system_u:object_r:polaris_disk_license_t,s0)

# /mnt/sd5 edison and nyquist
/mnt/sd5(/.*)?    gen_context(system_u:object_r:polaris_disk_license_t,s0)

ifdef(`edison_platform',`

# /mnt/sd6
/mnt/sd6(/.*)?    gen_context(system_u:object_r:polaris_disk_license_t,s0)

# /mnt/sd7
/mnt/sd7(/.*)?    gen_context(system_u:object_r:polaris_obfl_data_t,s0)

# /mnt/sd8
/mnt/sd8(/.*)?    gen_context(system_u:object_r:polaris_disk_ucode_t,s0)

# /mnt/sd9
/mnt/sd9(/.*)?    gen_context(system_u:object_r:polaris_disk_recovery_t,s0)
')
ifdef(`nyquist_platform',`
    # /mnt/sd6
    /mnt/sd6(/.*)?                  gen_context(system_u:object_r:polaris_obfl_data_t,s0)

    # /mnt/sd7
    /mnt/sd7(/.*)?                  gen_context(system_u:object_r:polaris_disk_ucode_t,s0)
    # unmount script used by Nyquist platform
    /bin/cat9k_ssd_unmount.sh       gen_context(system_u:object_r:polaris_ssd_unmount_exec_t,s0)
')

ifdef(`quake_platform',`
    # /mnt/sd6
    /mnt/sd6(/.*)?                  gen_context(system_u:object_r:polaris_obfl_data_t,s0)

    # /mnt/sd7
    /mnt/sd7(/.*)?                  gen_context(system_u:object_r:polaris_disk_ucode_t,s0)
')

# /crashinfo is symbolic link to /mnt/sd1 created by systemd-tmpfiles
/crashinfo                        gen_context(system_u:object_r:polaris_disk_crashinfo_t,s0)
# /flash is symbolic link to /mnt/sd3/user
/flash                            gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
# /lic0 is symbolic link to /mnt/sd4
/lic0                            gen_context(system_u:object_r:polaris_disk_license_t,s0)
# /lic1 is symbolic link to /mnt/sd5
/lic1                            gen_context(system_u:object_r:polaris_disk_license_t,s0)
# /ngwc_config/nvram is symbolic link to /mnt/sd3/user
/ngwc_config/nvram                gen_context(system_u:object_r:polaris_nvram_file_t,s0)

# /flash1 mccallan
/flash1(/.*)?                     gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
/flash1/user/core(/.*)?           gen_context(system_u:object_r:polaris_core_file_t,s0)
/flash1/user/tracelogs(/.*)?      gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/flash1/user/.ssh(/.*)?           gen_context(system_u:object_r:polaris_core_file_t,s0)
/flash1/user/nvram_config --      gen_context(system_u:object_r:polaris_nvram_file_t,s0)
/flash1/user/debug.conf --        gen_context(system_u:object_r:polaris_debug_conf_t,s0)
/flash1/user/packages.conf        gen_context(system_u:object_r:polaris_packages_conf_t,s0)
/flash1/user/kernel/core(/.*)?    gen_context(system_u:object_r:polaris_rbtimer_bootflash_t,s0)
/flash1/user/installer(/.*)?      gen_context(system_u:object_r:polaris_disk_install_t,s0)
/flash1/user/dbpersist(/.*)?      gen_context(system_u:object_r:polaris_disk_dbm_t,s0)
/flash1/user/tan(/.*)?            gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/flash1/user/sys_report(/.*)?     gen_context(system_u:object_r:polaris_chasync_files_t,s0)
/flash1/TEMPLATE(/.*)?            gen_context(system_u:object_r:polaris_chasync_files_t,s0)

# /flash2 mccallan 9500h
# /flash3 macallan
# /flash4 macallan
# /flash5 macallan
# /flash6 macallan, used for silent roll in macallan
# /flash7 macallan, silent roll
# macallan silent roll link

# types that might be packages label by other policy
ifdef(`nyquist_platform',
/usr/binos/bin/flash_check.sh -- gen_context(system_u:object_r:polaris_flashcheck_exec_t,s0)
/usr/binos/bin/cman_fp -- gen_context(system_u:object_r:polaris_cm_fp_exec_t,s0)
/usr/binos/bin/cmcc -- gen_context(system_u:object_r:polaris_cm_cc_exec_t,s0)
')
ifdef(`passport_platform',
/usr/binos/bin/platform_mgr -- gen_context(system_u:object_r:polaris_ngwc_plfm_mgr_exec_t,s0)
/usr/binos/bin/xcvr_test -- gen_context(system_u:object_r:polaris_xcvr_test_exec_t,s0)
/usr/binos/bin/sif_mgr -- gen_context(system_u:object_r:polaris_sif_mgr_exec_t,s0)
/usr/binos/bin/cmm -- gen_context(system_u:object_r:polaris_cmm_exec_t,s0)
/usr/binos/bin/bt_logger -- gen_context(system_u:object_r:polaris_bt_logger_exec_t,s0)
/usr/binos/bin/torchd -- gen_context(system_u:object_r:polaris_torch_exec_t,s0)

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# PLEASE LOOK AT ME: why this file in /etc/init.d?
/etc/rc.d/init.d/cat9k_fpgahelper_funcs.sh -- gen_context(system_u:object_r:bin_t,s0)
/etc/rc.d/init.d/cat9k_kr_helper.sh -- gen_context(system_u:object_r:bin_t,s0)

# symbolic links in /platform-specific directory
/platform-specific/gryphon -l gen_context(system_u:object_r:root_t,s0)
/platform-specific/gryphon_lite -l gen_context(system_u:object_r:root_t,s0)
/platform-specific/prometheus -l gen_context(system_u:object_r:root_t,s0)
/platform-specific/skyfox -l gen_context(system_u:object_r:root_t,s0)
/platform-specific/vulcan -l gen_context(system_u:object_r:root_t,s0)
/platform-specific/intrepid -l gen_context(system_u:object_r:root_t,s0)
/platform-specific/martion -l gen_context(system_u:object_r:root_t,s0)
/platform-specific/farscape -l gen_context(system_u:object_r:root_t,s0)
/platform-specific/borg -l gen_context(system_u:object_r:root_t,s0)
/platform-specific/scorpion -l gen_context(system_u:object_r:root_t,s0)

# /dev/cisco/dplriomem device, Generic Memory map driver for mapping doppler IO memory to userspace
/dev/cisco/dplriomem -c gen_context(system_u:object_r:polaris_dplr_iomem_mmapdrv_device_t,s0)

/vol/disk0(/.*)? gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
# /appstore_hd is symbolic link to /vol/disk0
/appstore_hd -l gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
# /appstore_flash is symbolic link to /flash1
/appstore_flash -l gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
# /rp_srdrv is symbolic link to /flash6/DPU
/rp_srdrv -l gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
# /init is symbolic link to /lib/systemd/systemd
/init -l gen_context(system_u:object_r:init_exec_t,s0)
# /install is symbolic link to /flash1/INSTALL
/install -l gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
# /disk0 is symbolic link to /vol/disk0
/disk0 -l gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

# provide relabeling rules for /platform-specific/personality file
# otherwise, they cause conflicting specifications error during relabeling
/platform-specific/bigbang/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
/platform-specific/nyquist/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
/platform-specific/passport/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
/platform-specific/starfleet/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
/platform-specific/intrepid/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
/platform-specific/martion/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
/platform-specific/farscape/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
/platform-specific/borg/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
/platform-specific/scorpion/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
/platform-specific/imperial/lib/modules(/.*)? gen_context(system_u:object_r:modules_object_t,s0)
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/platform-specific/scorpion/bin(/.*)? gen_context(system_u:object_r:bin_t,s0)
/platform-specific/imperial/bin(/.*)? gen_context(system_u:object_r:bin_t,s0)
/platform-specific/jura/bin(/.*)? gen_context(system_u:object_r:bin_t,s0)
/platform-specific/bigbang/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/nyquist/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/passport/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/starfleet/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/intrepid/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/martian/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/farscape/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/borg/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/scorpion/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/imperial/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/jura/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/quake1/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/quake2/etc/selinux(/.*)? gen_context(system_u:object_r:selinux_config_t,s0)
/platform-specific/bigbang/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/nyquist/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/passport/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/starfleet/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/intrepid/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/martian/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/farscape/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/borg/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/scorpion/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/imperial/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/jura/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/bigbang/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/nyquist/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/passport/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/starfleet/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/intrepid/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/bliss/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/farscape/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/borg/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/scorpion/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/imperial/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/platform-specific/jura/etc/hosts[^/]* -- gen_context(system_u:object_r:net_conf_t,s0)
/verify_packages.sh        -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/bigbang/verify_packages.sh -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/nyquist/verify_packages.sh  -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/passport/verify_packages.sh -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/starfleet/verify_packages.sh -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/intrepid/verify_packages.sh  -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/martian/verify_packages.sh   -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/farscape/verify_packages.sh  -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/borg/verify_packages.sh      -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/scorpion/verify_packages.sh  -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/imperial/verify_packages.sh  -- gen_context(system_u:object_r:bin_t,s0)
/platform-specific/jura/verify_packages.sh      -- gen_context(system_u:object_r:bin_t,s0)

/platform-specific/bigbang/etc/udev/rules.d(/.*)?    gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/nyquist/etc/udev/rules.d(/.*)?     gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/passport/etc/udev/rules.d(/.*)?    gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/starfleet/etc/udev/rules.d(/.*)?   gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/intrepid/etc/udev/rules.d(/.*)?    gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/martian/etc/udev/rules.d(/.*)?     gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/farscape/etc/udev/rules.d(/.*)?    gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/borg/etc/udev/rules.d(/.*)?        gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/scorpion/etc/udev/rules.d(/.*)?    gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/imperial/etc/udev/rules.d(/.*)?    gen_context(system_u:object_r:udev_rules_t,s0)
/platform-specific/jura/etc/udev/rules.d(/.*)?         gen_context(system_u:object_r:udev_rules_t,s0)

/dev/shm/sem.i2c_sem000  gen_context(system_u:object_r:polaris_quake_i2c_t,s0)
/dev/shm/sem.i2c_sem001  gen_context(system_u:object_r:polaris_quake_i2c_t,s0)
/dev/shm/sem.i2c_sem002  gen_context(system_u:object_r:polaris_quake_i2c_t,s0)
/dev/shm/sem.i2c_sem003  gen_context(system_u:object_r:polaris_quake_i2c_t,s0)
/dev/shm/sem.i2c_sem004  gen_context(system_u:object_r:polaris_quake_i2c_t,s0)
/dev/shm/sem.i2c_sem005  gen_context(system_u:object_r:polaris_quake_i2c_t,s0)
/dev/shm/sem.i2c_sem006  gen_context(system_u:object_r:polaris_quake_i2c_t,s0)
/dev/shm/sem.i2c_sem007  gen_context(system_u:object_r:polaris_quake_i2c_t,s0)
/dev/shm/io_expander_semaphore gen_context(system_u:object_r:polaris_quake_i2c_t,s0)

# on pangea/bigbang platforms /dev/NVRAM block device is accessed
# by flashlib in iosd. It stores rommon vars
ifdef(`bigbang_platform',``
/dev/NVRAM    -b     gen_context(system_u:object_r:polaris_flashlib_device_t)
# /mnt/sd6
/mnt/sd6(/.*)?   gen_context(system_u:object_r:polaris_obfl_data_t,s0)
')

/vol/usb1(/.*)?       gen_context(system_u:object_r:polaris_disk_harddisk_t,s0)

/mnt/vbd[a-j]2(/.*)?  gen_context(system_u:object_r:polaris_obfl_data_t,s0)
#/ucode0 9300 silent roll
#./ucode0(/.*)? gen_context(system_u:object_r:polaris_disk_ucode0_t,s0)

#/dev/cisco/fpgaiomem device, Generic Memory map driver for mapping FPGA IO memory to userspace
#/dev/cisco/fpgaiomem -c gen_context(system_u:object_r:polaris_fpga_iomem_mmapfpga_device_t,s0)

# nplusm-power file is located in /bootflash and needs to be accessed by cman-rp/IOSd
#/flash1/user/nplusm-power gen_context(system_u:object_r:polaris_nplusm_power_file_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwc.fc
No license file was found, but licenses were detected in source scan.

#
# June 2020, Cuiyan Ma
#
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#

/usr/binos/conf/issu_comp_check.sh -- gen_context(system_u:object_r:polaris_issu_comp_check_exec_t,s0)
/tmp/boottime_comp_check_tree_other_rp -d gen_context(system_u:object_r:polaris_issu_comp_check_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisisucompcheck.fc
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#
# March 2017, Victor Kamensky
#
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#

### <summary>Polaris repm Policy Rules.</summary>

####################################################################
### <summary>
### Manage /tmp/replications files.
### </summary>
### <param name="domain">### <summary>
### Domain allowed access.
### </summary>
### </param>

#
interface('polaris_repm_tmp_manage',
    gen_require(
        type polaris_repm_tmp_t;
    ')
    manage_files_pattern($1, polaris_repm_tmp_t, polaris_repm_tmp_t)
    manage_dirs_pattern($1, polaris_repm_tmp_t, polaris_repm_tmp_t)
  ')

#############################################################################
## <summary>
##      Manage /dev/shm/mq.-repm_peer_mq/ files.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_repm_peer_mqipc_manage',
    gen_require(
        type polaris_repm_peer_mqipc_t;
    ')
    manage_files_pattern($1, polaris_repm_peer_mqipc_t, polaris_repm_peer_mqipc_t)
    allow $1 polaris_repm_peer_mqipc_t:file map;
    polaris_mqipc_create_name_dir($1, polaris_repm_peer_mqipc_t, repm_peer_mq)
  ')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrepm.if
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dnl
dnl April 2018, Victor Kamensky
dnl
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dnl All rights reserved
dnl
define('mqipc_interface_map', `defn(format(``mqipc_interface_map[%s]`, `$1`))')
define('mqipc_interface_map_set', `define(format(``mqipc_interface_map[%s]`, `$1`, `$2`))')

define('polaris_mqipc_service_server_many',
  `ifelse($3, ``,
    polaris_mqipc_create_name($1, $2),
    polaris_mqipc_create_name($1, $2-$3)
  `ifelse($3, 0, `polaris_mqipc_create_name($1, $2`), `polaris_mqipc_service_server_many($1, $2, eval($3 - 1))`))``)
define('polaris_mqipc_service_server', `dnl

polaris_mqipc_service_server_aux(mqipc_stem($1), mqipc_label($1),
polaris_mqipc_service_server_many(mqipc_label($1), $5, max_scope_map($3, $4, $2)))`)

define('polaris_mqipc_service_server_aux_full', `dnl

##################################################
## <summary>
##	Create $2 mqipc channel.
## </summary>
## <param name="domain">
##	<summary>
##	Domain allowed access.
##
## </param>
## <infoflow type="none"/>
#
interface(`polaris_mqipc_$1_create_name'',
    gen_require(
        type $2;
        '
        $3
    ')
)

##################################################
## <summary>
##	Use $2 mqipc channel.
## </summary>
## <param name="domain">
##	<summary>
##	Domain allowed access.
##
## </param>
## <infoflow type="none"/>
#
interface(`polaris_mqipc_$1_use'',
    gen_require(
        type $2;
        '
        polaris_mqipc_use(dollarsone, $2)
    ')
)
define('polaris_mqipc_service_server_aux',
    ifelse(mqipc_interface_map($1), '',
        polaris_mqipc_service_server_aux_full($1, $2, $3))
    )
mqipc_interface_map_set($1, 1)

`)
define('polaris_mqipc_service_client',"")

define('polaris_mqipc_service_server_elastic_client',"dnl
polaris_mqipc_service_server_aux(mqipc_stem($1), mqipc_label($1),
    polaris_mqipc_service_server_many(mqipc_label($1), $5, max_scope_map($4, elastic, $3)))")

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_mqipc_if.m4
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
/dev/lsmpi -c gen_context(system_u:object_r:polaris_lsmpi_device_t,s0)
/dev/lsmpi_app0 -c gen_context(system_u:object_r:polaris_lsmpi_device_t,s0)
/dev/lsmpi_app1 -c gen_context(system_u:object_r:polaris_lsmpi_device_t,s0)
/dev/lsmpi_app2 -c gen_context(system_u:object_r:polaris_lsmpi_device_t,s0)
/tmp/pi(/.*)? gen_context(system_u:object_r:polaris_pi_uds_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislsmpi.fc
No license file was found, but licenses were detected in source scan.

#
# November 2020, Christine Hwang
#
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#
policy_module(polarisbbu, 1.0);

gen_require(
    type polaris_bbu_t;
')
polaris_btrace_data_manage(polaris_bbu_t)
polaris_chasfs_manage(polaris_bbu_t)
polaris_tdlresolve_read(polaris_bbu_t)
polaris_cpld_read(polaris_bbu_t)
polaris_ripc_sman_ui_serv_connect(polaris_bbu_t)
# Allow I2C Usage
polaris_i2c_use(polaris_bbu_t)
polaris_i2c_sem_manage(polaris_bbu_t)

# Allow sysfs read for platform ID
dev_list_sysfs(polaris_bbu_t)

# Allow bbu to access NVRAM for /flash0/bbu
fs_getattr_tmpfs(polaris_bbu_t)
polaris_nvram_manage(polaris_bbu_t)

# Allow logger which is used for syslog messages
allow polaris_bbu_t self:unix_dgram_socket { connect create };
logging_send_syslog_msg(polaris_bbu_t)

# tty BBU device
type polaris_bbu_device_t;
dev_node(polaris_bbu_device_t)

polaris_bbu_dev_use(polaris_bbu_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbbu.te
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#
# February 2020, Victor Kamensky
#
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#

## <summary>Polaris dmi_ports_fetch Policy Rules.</summary>

###############################################
## <summary>
##      Execute a domain transition to run dmi_ports_fetch.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed to transition.
##      </summary>
## </param>
#
interface('polaris_dmi_ports_fetch_domtrans',
    gen_require(
      type polaris_dmi_ports_fetch_t, polaris_dmi_ports_fetch_exec_t;
    )
)
domtrans_pattern($1, polaris_dmi_ports_fetch_exec_t, polaris_dmi_ports_fetch_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmiportsfetch.if
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#
# March 2017, Victor Kamensky
#
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#

policy_module(polariscliagent, 1.0);

gen_require('  
    type polaris_cli_agent_t;
')

polaris_btrace_data_manage(polaris_cli_agent_t)
polaris_crft_data_manage(polaris_cli_agent_t)
polaris_chasfs_manage(polaris_cli_agent_t)
polaris_tdlresolve_read(polaris_cli_agent_t)
polaris_tdlldb_list_dirs(polaris_cli_agent_t)
polaris_cpld_read(polaris_cli_agent_t)
polaris_flashlib_read(polaris_cli_agent_t)
polaris_ripc_sman_ui_serv_connect(polaris_cli_agent_t)
polaris_db_tdlldb_dir_use(polaris_cli_agent_t)
polaris_libeiutil_build_config_directory(polaris_cli_agent_t)

# cli_agent /var/run pid file
  type polaris_cli_agent_var_run_t;
  files_pid_file(polaris_cli_agent_var_run_t)
  manage_dirs_pattern(polaris_cli_agent_t, polaris_cli_agent_var_run_t, polaris_cli_agent_var_run_t)
  manage_dirs_pattern(polaris_cli_agent_t, polaris_cli_agent_var_run_t, polaris_cli_agent_var_run_t)
  files_pid_filetrans(polaris_cli_agent_t, polaris_cli_agent_var_run_t, { file dir })

polaris_cfg_data_manage(polaris_cli_agent_t)

# Provide sys_resource capability as well for sys_pipe calls
allow polaris_cli_agent_t self:capability { dac_override sys_resource };

logging_send_syslog_msg(polaris_cli_agent_t)
#DB persistence
polaris_tdldb_persist_setup(polaris_cli_agent_t)
polaris_tmp_tdldb_persist_setup(polaris_cli_agent_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscliagent.te

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# March 2017, Victor Kamensky
#
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#

policy_module(polarisflashlib, 1.0);

#########################################################################
# Flashlib policy (infra/flashlib)                                     
#########################################################################
type polaris_flashlib_lock_t;
files_type(polaris_flashlib_lock_t)

gen_require('attribute polaris_extended_domain;
')

# /tmp/.flashlock file is used as flashlib lock
gen_require('type init_t;
')
files_tmp_filetrans({ init_t polaris_extended_domain }, polaris_flashlib_lock_t, file, "".flashlock"")

type polaris_flashlib_log_t;
files_type(polaris_flashlib_log_t)

gen_require('attribute polaris_extended_domain;
')

# /tmp/flashdev.log file is used as flashlib to log
files_tmp_filetrans(polaris_extended_domain, polaris_flashlib_log_t, file, "flashdev.log")

# /dev/shm/flash_shm shared memory
type polaris_flash_shm_t;
files_type(polaris_flash_shm_t)
gen_require("
    attribute polaris_domain;
    type tmpfs_t;
  ")
filetrans_pattern(polaris_domain, tmpfs_t, polaris_flash_shm_t, file, "flash_shm")

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisflashlib.te
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#
# July 2017, Victor Kamensky
#
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#

### <summary>Polaris CPLD Policy Rules.</summary>

# Quack Driver policy

### <summary>
### Work (read, write, ioctl) with /dev/quack
### </summary>
### <param name="domain">
### Domain allowed access.
### </summary>
### </param>
#
interface(‘polaris_quack_dev_use’,
gen_require(‘
    type device_t;
    type polaris_quack_device_t;
  ‘)
    write_chr_files_pattern($1, device_t, polaris_quack_device_t)
    read_chr_files_pattern($1, device_t, polaris_quack_device_t)
  ‘)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisquack.if
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#
# October 2017, Victor Kamensky
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswstatsd.if
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#
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#

## <summary>Polaris wstatsd Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/petramaps.m4
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#
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#

policy_module(polariswstatsd, 1.0);

gen_require(`
    type polaris_wstatsd_t;
`)

polaris_btrace_data_manage(polaris_wstatsd_t)
polaris_crft_data_manage(polaris_wstatsd_t)
polaris_chasfs_manage(polaris_wstatsd_t)
polaris_tdlresolve_read(polaris_wstatsd_t)
polaris_tdlldb_list_dirs(polaris_wstatsd_t)
polaris_cpld_read(polaris_wstatsd_t)
polaris_lua_read(polaris_wstatsd_t)
polaris_flashlib_read(polaris_wstatsd_t)
polaris_ripc_sman_ui_serv_connect(polaris_wstatsd_t)

polaris_db_tdldb_dir_use(polaris_wstatsd_t)

allow polaris_wstatsd_t self:capability dac_override;
allow polaris_wstatsd_t self:udp_socket { bind setopt getattr }
corenet_udp_bind_generic_node(polaris_wstatsd_t)
corenet_udp_bind_polaris_capwap_data_port(polaris_wstatsd_t)
polaris_socketat_nsfs_read(polaris_wstatsd_t)
polaris_lfts_dev_use(polaris_wstatsd_t)

polaris_tdldbpersist_setup(polaris_wstatsd_t)

polaris_tmp_tdldb_persist_setup(polaris_wstatsd_t)

logging_send_syslog_msg(polaris_wstatsd_t)

#allow to read /etc/passwd
auth_use_nsswitch(polaris_wstatsd_t)

#this is being given for process to execute tar
corecmd_exec_bin(polaris_wstatsd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswstatsd.te

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#
# December 2019, Victor Kamensky
#
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#

policy_module(polarisfnfagg, 1.0);

gen_require(''
    type polaris_fnf_agg_t;
')

polaris_btrace_data_manage(polaris_fnf_agg_t)
polaris_crft_data_manage(polaris_fnf_agg_t)
polaris_chasfs_read(polaris_fnf_agg_t)
polaris_tdlresolve_read(polaris_fnf_agg_t)
polaris_lua_read(polaris_fnf_agg_t)
polaris_flashlib_read(polaris_fnf_agg_t)
polaris_cpld_read(polaris_fnf_agg_t)
polaris_ripc_sman_ui_serv_connect(polaris_fnf_agg_t)

polaris_db_tdlldb_dir_use(polaris_fnf_agg_t)

allow polaris_fnf_agg_t self:capability [ dac_override dac_read_search ];

type polaris_fnf_agg_tmp_t;
files_tmp_file(polaris_fnf_agg_tmp_t)
files_tmp_filetrans(polaris_fnf_agg_tmp_t, polaris_fnf_agg_tmp_t, dir, "fnf_agg")
manage_files_pattern(polaris_fnf_agg_tmp_t, polaris_fnf_agg_tmp_t, polaris_fnf_agg_tmp_t)
manage_dirs_pattern(polaris_fnf_agg_tmp_t, polaris_fnf_agg_tmp_t, polaris_fnf_agg_tmp_t)

# allow sending files over HTTP
corenent_tcp_connect_http_port(polaris_fnf_agg_t)
sysnet_read_config(polaris_fnf_agg_t)

# allow UDP connection for punting fnf records
allow polaris_fnf_agg_t self:udp_socket { create_socket_perms recv_msg };
corenent_udp_bind_generic_node(polaris_fnf_agg_t)

# allow punting on routers/ewlc where lfts is being used
polaris_lfts_dev_use(polaris_fnf_agg_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfnfagg.te
No license file was found, but licenses were detected in source scan.

# # March 2017, Victor Kamensky
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# # All rights reserved
#
## <summary>Polaris VXE Platform Policy Rules.</summary>

interface(`polaris_objstore_sem_use',`
gen_require(`
    type polaris_objstore_sem_t;
``
allow $1 polaris_objstore_sem_t:sem rw_sem_perms;
mmap_files_pattern($1, polaris_objstore_sem_t, polaris_objstore_sem_t)
manage_files_pattern($1, polaris_objstore_sem_t, polaris_objstore_sem_t)
``
)

##########################################
## Work (read, write, ioctl) with /dev/vda1 device

Open Source Used In BGP TE Controller Version 4.3.0  6130
### <summary>
### Domain allowed access.
### </summary>

```
interface('polaris_grub_efi_use',
gen_require('type polaris_grub_efi_t;
')
write_chr_files_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
read_chr_files_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
')
```

### <summary>
### Search /dev/vda1 device the efi partition
### </summary>

```
interface('polaris_grub_efi_search',
gen_require('type polaris_grub_efi_t;
')
search_dirs_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
')
```

### <summary>
### Read VXE install info files
### </summary>

```
interface('polaris_vxeinstall_info_read',
gen_require('type polaris_vxeinstall_info_t;
')
read_files_pattern($1, polaris_vxeinstall_info_t, polaris_vxeinstall_info_t)
list_dirs_pattern($1, polaris_vxeinstall_info_t, polaris_vxeinstall_info_t)
```
')

'******************************
## <summary>
## Read /dev/vda1 device the efi partition
## </summary>
## <param name="domain">
##      <summary>
##              Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_grub_info_read',
    gen_require(
        type polaris_grubver_t;
        type polaris_grub_bios_t;
        type polaris_grub_efi_t;
    )
read_files_pattern($1, polaris_grubver_t, polaris_grubver_t)
read_files_pattern($1, polaris_grub_bios_t, polaris_grub_bios_t)
read_files_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
list_dirs_pattern($1, polaris_grubver_t, polaris_grubver_t)
list_dirs_pattern($1, polaris_grub_bios_t, polaris_grub_bios_t)
list_dirs_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
')

'******************************
## <summary>
## Manage /dev/vda1 device the efi partition
## </summary>
## <param name="domain">
##      <summary>
##              Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_grubcfg_manage',
    gen_require(
        type polaris_grub_bios_t;
        type polaris_grub_efi_t;
    )
manage_files_pattern($1, polaris_grub_bios_t, polaris_grub_bios_t)
manage_files_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
manage_dirs_pattern($1, polaris_grub_bios_t, polaris_grub_bios_t)
manage_dirs_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
')

'******************************
## <summary>
## Manage regular files/directories under /varied/grub
## CSR manages files in legacy grub disk location
## also allow run readlink -f /dev/bootflash
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
# interface(`polaris_legacy_grub_manage',`
gen_require(`
type boot_t;
type fixed_disk_device_t;
')
manage_files_pattern($1, boot_t, boot_t)
manage_dirs_pattern($1, boot_t, boot_t)
storage_getattr_fixed_disk_dev($1)
')

######################################
## <summary>
## Work (read, write, ioctl) with /dev/hanet
## hanet driver used by vpcgw platform of VXE family
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
ifdef(`vpcgw_platform',`
interface(`polaris_hanet_dev_use',`
gen_require(`
type device_t;
type polaris_hanet_device_t;
')
write_chr_files_pattern($1, device_t, polaris_hanet_device_t)
read_chr_files_pattern($1, device_t, polaris_hanet_device_t)
')
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisvxe.if
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
/usr/bin/os/conf/pman.sh -- gen_context(system_u:object_r:polaris_pman_exec_t,s0)
/usr/bin/pman -- gen_context(system_u:object_r:polaris_pman_exec_t,s0)
/bin/gdbserver -- gen_context(system_u:object_r:polaris_gdb_exec_t,s0)
/usr/bin/gdbserver -- gen_context(system_u:object_r:polaris_gdb_exec_t,s0)
/tmp/pman_ports(/.*)? gen_context(system_u:object_r:polaris_pman_tmp_t,s0)
/tmp/rp/process(/.*)? gen_context(system_u:object_r:polaris_pman_tmp_t,s0)
/tmp/vxe_ucode_image gen_context(system_u:object_r:polaris_pman_tmp_t,s0)
/tmp/wlc_ucode_image gen_context(system_u:object_r:polaris_pman_tmp_t,s0)
/tmp/utah_ucode_image gen_context(system_u:object_r:polaris_pman_tmp_t,s0)
/tmp/fugazi_ucode_image gen_context(system_u:object_r:polaris_pman_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispman.fc

No license file was found, but licenses were detected in source scan.

dnl
dnl April 2018, Victor Kamensky
dnl
dnl Copyright (c) 2018-2019 by Cisco Systems, Inc.
dnl All rights reserved
dnl
dnl Macallan Platform Max Bay Limits
max_bay_map_set(`rp', `per_bay', 0)
max_bay_map_set(`cc', `per_bay', 9)
max_bay_map_set(`fp', `per_bay', 9)

min_bay_ripc_map_set(`rp', `per_bay', 0)
min_bay_ripc_map_set(`cc', `per_bay', 1)
min_bay_ripc_map_set(`fp', `per_bay', 0)

max_bay_ripc_map_set(`rp', `per_bay', 2)
max_bay_ripc_map_set(`cc', `per_bay', 10)
max_bay_ripc_map_set(`fp', `per_bay', 1)

min_bay_ripc_map_set(`rp', `global', 0)
min_bay_ripc_map_set(`cc', `global', 1)
min_bay_ripc_map_set(`fp', `global', 0)

max_bay_ripc_map_set(`rp', `global', 2)
max_bay_ripc_map_set(`cc', `global', 10)
max_bay_ripc_map_set(`fp', `global', 1)

dnl in elastic scope each process has its own value
max_elastic_map_set(`rp', `elastic', BPROC_ODM, 0)
max_elastic_map_set(`cc', `elastic', BPROC_ODM, 0)
max_elastic_map_set(`fp', `elastic', BPROC_ODM, 0)

max_elastic_map_set(`rp', `elastic', BPROC_WNCD, 0)
max_elastic_map_set(`cc', `elastic', BPROC_WNCD, 0)
max_elastic_map_set(`fp', `elastic', BPROC_WNCD, 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/macallanmaps.m4
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

policy_module(polarisissustack, 1.0);

gen_require(
    type polaris_issu_stack_t;
')
corecmd_exec_bin(polaris_issu_stack_t)
corecmd_exec_shell(polaris_issu_stack_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_issu_stack_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_issu_stack_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_issu_stack_t)

# work with /tmp files (/tmp/issu stk)
type polaris_issu_stack_tmp_t;
files_tmp_file(polaris_issu_stack_tmp_t)
manage_dirs_pattern(polaris_issu_stack_t, tmp_t, polaris_issu_stack_tmp_t)
manage_files_pattern(polaris_issu_stack_t, polaris_issu_stack_tmp_t, polaris_issu_stack_tmp_t)
manage_fifo_files_pattern(polaris_issu_stack_t, polaris_issu_stack_tmp_t, polaris_issu_stack_tmp_t)
files_tmp_filetrans(polaris_issu_stack_t, polaris_issu_stack_tmp_t, file)
allow polaris_issu_stack_t self:capability sys_resource;

polaris_btrace_data_manage(polaris_issu_stack_t)
polaris_chasfs_manage(polaris_issu_stack_t)
polaris_cpld_read(polaris_issu_stack_t)
polaris_proc_rmonbifo_read(polaris_issu_stack_t)
polaris_rmonbifo_tmp_read(polaris_issu_stack_t)
polaris_boot_tmp_read(polaris_issu_stack_t)
polaris_tdlresolve_read(polaris_issu_stack_t)
polaris_disk_crashinfo_getattr(polaris_issu_stack_t)

allow polaris_issu_stack_t self:capability dac_override;

polaris_read_debug_conf(polaris_issu_stack_t)

polaris_flashlib_read(polaris_issu_stack_t)

allow polaris_issu_stack_t self:process setpgid;

# modify tdlresolve epoch
polaris_tdlresolve_manage(polaris_issu_stack_t)

# rsync_exec(polaris_issu_stack_t)
gen_require(
    type rsync_t;
')
rsync_entry_domtrans(polaris_issu_stack_t, rsync_t)
allow rsync_t polaris_issu_stack_t:process sigchld;

# execute rsync over over eobc: /usr/binos/conf/mcp_chvrf.sh eobc rsync
polaris_chvrf_domtrans(polaris_issu_stack_t)
# from chvrf.sh code executes rsync command
gen_require(
    type polaris_chvrf_t;
')
rsync_entry_domtrans(polaris_chvrf_t, rsync_t)
# LOOK AT ME: issu_stack.sh leaks fd of /tmp/issu_stk/chassis_state_evt_fifo
# for now grant access, since changing script may not be trivial
manage_fifo_files_pattern(polaris_chvrf_t, polaris_issu_stack_tmp_t, polaris_issu_stack_tmp_t)
write_files_pattern(polaris_chvrf_t, polaris_issu_stack_tmp_t, polaris_issu_stack_tmp_t)

polaris_install_engine_domtrans(polaris_issu_stack_t)
# LOOK AT ME: isse_stack.sh leak fd of /tmp/issu_stk/chassis_state_evt_fifo
# for now grant access, since changing script may not be trivial
gen_require(
    type polaris_install_engine_t;
read_fifo_files_pattern(polaris_install_engine_t, polaris_issu_stack_tmp_t, polaris_issu_stack_tmp_t)

polaris_install_tmp_read(polaris_issu_stack_t)

# access /bootflash/installer/install_issu_state
polaris_disk_install_read(polaris_issu_stack_t)

# rm from coreutils-8.30 wants to know filesystem type
fs_getattr_tmpfs(polaris_issu_stack_t)

# reads /tmp/remote_sw_verinfo.txt
gen_require('type rsync_tmp_t;
')
read_files_pattern(polaris_issu_stack_t, rsync_tmp_t, rsync_tmp_t)

# watch over /tmp/tdlresolve/work
polaris_tdlresolve_watch(polaris_issu_stack_t)

# issu_stack.sh access to  epoch_merge.lua,epoch_endpoint_update.lua
polaris_lua_read(polaris_issu_stack_t)

# issu_stack.sh access to /tmp/rsync_log_dir
polaris_manage_rsync_tmplog_dir(polaris_issu_stack_t)

# issu_stack.sh access to  epoch_merge.lua which merges epoch files, local.epoch and inyterchassis/.epcioh file
# luajit/usr/binos/conf/epoch_merge.lua--base-file/tmp/tdlresolve/epoch_dir/local.epoch
#--merge-file/tmp/tdlresolve/work/inter
allow polaris_issu_stack_t self:process execmem;

#access to /tmp/installer/
polaris_install_tmp_manage(polaris_issu_stack_t)

#access to /tmp/ufs/harddisk
polaris_ncd_tmp_read(polaris_issu_stack_t)

# use of errmsg.sh
polaris_script_errmsg_use(polaris_issu_stack_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisissustack.te
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
policy_module(polarislsmpi, 1.0);

type polaris_lsmpi_device_t;
dev_node(polaris_lsmpi_device_t)

# note polaris_sysfs_contdev_t is defined in kernel/devices.te, since genfscon statements
# could be only in base policy

# punt/inject working through unix domain sockets
type polaris_pi_uds_t;
files_tmp_file(polaris_pi_uds_t)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislsmpi.te
No license file was found, but licenses were detected in source scan.

#
# May 2017, Victor Kamensky
#
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#
#
## <summary>Polaris mdt_pubd Policy Rules.</summary>

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismdtpubd.if
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

policy_module(polarisemd, 1.0);

gen_require(
    type polaris_emd_t;
polaris_btrace_data_manage(polaris_emd_t)
polaris_crft_data_manage(polaris_emd_t)
polaris_chasfs_manage(polaris_emd_t)
polaris_tdlresolve_read(polaris_emd_t)
polaris_tdldb_list_dirs(polaris_emd_t)
polaris_cpld_read(polaris_emd_t)
polaris_flashlib_read(polaris_emd_t)
polaris_ripc_sman_ui_serv_connect(polaris_emd_t)
polaris_cpld_dev_use(polaris_emd_t)
dev_read_sysfs(polaris_emd_t)
polaris_obfl_data_manage(polaris_emd_t)
polaris_persistent_read(polaris_emd_t)

allow polaris_emd_t self:capability dac_override;

ifdef(`mcp_family',
polaris_scooby_dev_use(polaris_emd_t)
# read/write /sys/bus/i2c/drivers/pca9544/2-0077/reg_control and others
dev_getattr_sysfs_fs(polaris_emd_t)
dev_rw_sysfs(polaris_emd_t)
')

logging_send_syslog_msg(polaris_emd_t)

ifdef(`qwlc_platform',
# on qwlc read eeprom through i2c like /sys/devices/i2c-12/12-0050/eeprom
dev_rw_sysfs(polaris_emd_t)
dev_getattr_sysfs_fs(polaris_emd_t)
')

#sparrow needs access to /dev/i2c*
ifdef(`sparrow_platform',
gen_require(`
    type polaris_cm_cc_tmpfs_t;
')
polaris_i2c_use(polaris_emd_t)
polaris_i2c_sem_manage(polaris_emd_t)
mmap_files_pattern(polaris_emd_t, polaris_cm_cc_tmpfs_t, polaris_cm_cc_tmpfs_t)
')

ifdef(`katar_platform',
dev_rw_sysfs(polaris_emd_t)
dev_getattr_sysfs_fs(polaris_emd_t)
')
# emd creates udp socket
allow polaris_emd_t self:udp_socket create_socket_perms;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisemd.te
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#
# March 2017, Victor Kamensky
#
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#

## <summary>Polaris polarisdroputil Policy Rules.</summary>

###################################################
## <summary>
##      Manage droputils temporary files and directories in /tmp.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_droputil_manage_tmp_files`,
   gen_require(`
      type polaris_droputil_tmp_t;
   `)
   manage_files_pattern($1, polaris_droputil_tmp_t, polaris_droputil_tmp_t)
   read_lnk_files_pattern($1, polaris_droputil_tmp_t, polaris_droputil_tmp_t)
`)

###################################################
## <summary>
##      Watch droputil_tmp directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolebase/>
#
interface(`polaris_droputil_tmp_watch`,
   gen_require(`
      type polaris_droputil_tmp_t;
   `)
   manage_files_pattern($1, polaris_droputil_tmp_t, polaris_droputil_tmp_t)
   read_lnk_files_pattern($1, polaris_droputil_tmp_t, polaris_droputil_tmp_t)
`)

Open Source Used In BGP TE Controller Version 4.3.0 6140
gen_require(
    type polaris_droputil_tmp_t;
    
    allow $1 polaris_droputil_tmp_t:dir watch;
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdroputil.if
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

tmp/iosd_level  --  gen_context(system_u:object_r:polaris_lm_tmp_t,s0)
tmp/stack_apcount --  gen_context(system_u:object_r:polaris_lm_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislm.fc
No license file was found, but licenses were detected in source scan.

dnl
dnl April 2018, Victor Kamensky
dnl
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dnl All rights reserved
dnl
define(`polaris_ripc_service_server',`')
define(`polaris_ripc_service_client',`')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_ripc_if.m4
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_ripc_fc.m4
No license file was found, but licenses were detected in source scan.

dnl
dnl December 2018, Victor Kamensky
dnl
dnl Copyright (c) 2018-2020 by Cisco Systems, Inc.
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dnl
dnl Nyquist Platform Max Bay Limits
dnl max_bay_map_set(`rp', `per_bay', 0)
dnl max_bay_map_set(`cc', `per_bay', 0)
dnl max_bay_map_set(`fp', `per_bay', 0)
dnl in elastic scope each process has its own value
max_elastic_map_set(`rp', `elastic', BPROC_ODM, 0)
max_elastic_map_set(`cc', `elastic', BPROC_ODM, 0)
max_elastic_map_set(`fp', `elastic', BPROC_ODM, 0)

max_elastic_map_set(`rp', `elastic', BPROC_WNCD, 0)
max_elastic_map_set(`cc', `elastic', BPROC_WNCD, 0)
max_elastic_map_set(`fp', `elastic', BPROC_WNCD, 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/quake1maps.m4
No license file was found, but licenses were detected in source scan.

# Sep 2020, Sridhar C
#
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#

policy_module(polaristlscd, 1.0);

gen_require(
    type polaris_tlscd_t;
    type net_conf_t;
)

polaris_btrace_data_manage(polaris_tlscd_t)
polaris_chasfs_manage(polaris_tlscd_t)
polaris_tldresolve_read(polaris_tlscd_t)
polaris_tdldb_list_dirs(polaris_tlscd_t)
polaris_lua_read(polaris_tlscd_t)
polaris_flashlib_read(polaris_tlscd_t)
polaris_chasfs_read(polaris_tlscd_t)
polaris_cpld_read(polaris_tlscd_t)
polaris_db_tdldb_dir_use(polaris_tlscd_t)

# Related to vrf support of the socket
polaris_lfts_dev_use(polaris_tlscd_t)
polaris_socketat_nsfs_read(polaris_tlscd_t)
polaris_vrf_shm_manage(polaris_tlscd_t)

# TLSCd reads TCP/UDP ports open in VRF_GLOBAL for packet forwarding
# to IOSd or BinOS applications.
kernel_read_net_sysctls(polaris_tlscd_t)
kernel_read_network_state(polaris_tlscd_t)
kernel_search_network_sysctl(polaris_tlscd_t)
allow polaris_tlscd_t net_conf_t:dir search;
allow polaris_tlscd_t net_conf_t:file { getattr open read watch };

# UDS related sockets are:
# /tmp/tlscd/iosd_to_tlscd_0_socket
# /tmp/tlscd/tlscd_to_iosd_0_socket
# IOSd and TLSCd exchange packet over these UDS socket, allow create/bind
type polaris_tlscd_uds_t;
files_tmp_file(polaris_tlscd_uds_t)
polaris_tlscd_uds_manage(polaris_tlscd_t)
polaris_iosd_dgram_send(polaris_tlscd_t)
allow polaris_tlscd_t self:unix_dgram_socket { bind create };

# Tunnel and TLS TCP connection related
corenet_rw_tunnel_dev(polaris_tlscd_t)
allow polaris_tlscd_t self:tun_socket create;
corenet_tcp_connect_all_ports(polaris_tlscd_t)

# errmsg
logging_send_syslog_msg(polaris_tlscd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristlscd.te
No license file was found, but licenses were detected in source scan.

dnl
dnl April 2018, Victor Kamensky
dnl
dnl Copyright (c) 2018-2019 by Cisco Systems, Inc.
dnl All rights reserved
dnl
define('polaris_database_aux',`dnl
type $1;
polaris_tdldb_type($1)
`)

define('polaris_database',`dnl
polaris_database_aux(database_label($1))
`)

define('polaris_database_process_aux_full',`dnl
gen_require(`
  type $2;
`)
polaris_db_tdldb_$1_use($2)
`)

define('polaris_database_process_aux', `dnl
ifelse(database_use_map($1, $2), ",", `polaris_database_process_aux_full($1, $2)``)
database_use_map_set($1, $2, 1)
``)

define('polaris_database_process', `dnl
polaris_database_process_aux(database_stem($1), process_label($2))dnl
``)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_database_db_te.m4
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#
# January 2021, Gabriel Lee, Shawn Liu
#
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#

### <summary>Polaris ezmanage Policy Rules.</summary>

```

#Transition to ezmanage

##
##  Read files under polaris_ezmanage_file_t label
##  Domain allowed access.
##
##
# interface('polaris_ezmanage_domtrans',
gen_require(''
type polaris_ezmanage_t, polaris_ezmanage_exec_t;
')
domtrans_pattern($1, polaris_ezmanage_exec_t, polaris_ezmanage_t)
```

```
interface('polaris_manage_ezmanage_files',
    gen_require(
        type polaris_ezmanage_file_t;
    )
)
manage_files_pattern($1, polaris_ezmanage_file_t, polaris_ezmanage_file_t)
read_link_files_pattern($1, polaris_ezmanage_file_t, polaris_ezmanage_file_t)
manage_dirs_pattern($1, polaris_ezmanage_file_t, polaris_ezmanage_file_t)
')

manage_sock_files_pattern($1, polaris_ezmanage_var_run_t, polaris_ezmanage_var_run_t);
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisezmanage.if
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#
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#
policy_module(polariscedge, 1.0);

# /tmp/xml handling
type polaris_cedge_xml_tmp_t;
files_tmp_file(polaris_cedge_xml_tmp_t)
# PLEASE LOOK AT ME very strange choice of directory name
# /tmp/tmp/ handling
type polaris_cedge_tmp_t;
files_tmp_file(polaris_cedge_tmp_t)

# /etc/viptela handling
type polaris_cedge_etc_t;
files_config_file(polaris_cedge_etc_t)

# /dev/shm handling
type polaris_cedge_tmpfs_t;
files_tmpfs_file(polaris_cedge_tmpfs_t)

# /tmp/.econfd2sysmgr-ipc handling
type polaris_econfd2sysmgr_tmp_t;
files_tmp_file(polaris_econfd2sysmgr_tmp_t)

# vconfd_script_reboot.sh policy
polaris_vconfd_domain_template(vconfd_reboot)

# vconfd_script_if_reset.sh policy
polaris_vconfd_domain_template(vconfd_ifreset)

# vconfd_script_get_config.sh policy
polaris_vconfd_domain_template(vconfd_cfg)

# vconfd_script_*_stats policy
polaris_vconfd_domain_template(vconfd_history)
corecmd_exec_bin(polaris_vconfd_history_t)

# performs 'rm /tmp/xml/Pfr/Pfr-1600801323.xml.gz'....but, do not know where
polaris_cedge_tmp Manage(polaris_vconfd_history_t)

# performs 'ls -rt /tmp/xml/UtdUrlf-IOX' etc.
polaris_cedge_xml tmp Manage(polaris_vconfd_history_t)

# vconfd_script_manage_list_stats.sh performs operations on
# /tmp/vconfd/stats.XXXXXX
polaris_vconfd_tmp Manage(polaris_vconfd_history_t)

# software policy
polaris_vconfd_domain_template(vconfd_software)

# nms policy
polaris_vconfd_domain_template(vconfd_nms)

# device policy
polaris_vconfd_domain_template(vconfd_device)

# internal policy
polaris_vconfd_domain_template(vconfd_reset)

# cert policy
polaris_vconfd_domain_template(vconfd_cert)

# csr policy
polaris_vconfd_domain_template(vconfd_csr)

# vconfd_script_show_csr.sh invokes vlog
# /bin/sh vlog ....
# vlog is implemented in viptela/utils/vlog using logger; that needs
# - create/connect unix_dgram_socket
# - read from devtmpfs of type devlog_t
# - write to sock_file of type devlog_t
# - sendto path="/run/systemd/journal/dev-log" of type unix_dgram_socket
logging_send_syslog_msg(polaris_vconfd_csr_t)
corecmd_exec_bin(polaris_vconfd_csr_t)

# reads /usr/share/viptela/server.csr
polaris_bootflash_read(polaris_vconfd_csr_t)

# serial vsmart-upload vedge-upload policy
polaris_vconfd_domain_template(vconfd_serialnum)

# crash policy
polaris_vconfd_domain_template(vconfd_crash)

# aaa policy
polaris_vconfd_domain_template(vconfd_aaa)

# container policy
polaris_vconfd_domain_template(vconfd_contr)

# iox policy
polaris_vconfd_domain_template(vconfd_iox)

# utd policy
polaris_vconfd_domain_template(vconfd_utd)

# geo policy
polaris_vconfd_domain_template(vconfd_geo)

# vconfd_script_vnping.sh, vconfd_script_vping.sh, vconfd_script_vtraceroute.sh
# scripts policy
polaris_vconfd_domain_template(vconfd_net)

# runs ip command
sysnet_domtrans_ifconfig(polaris_vconfd_net_t)
# runs confd_cmd
corecmd_exec_bin(polaris_vconfd_net_t)

polaris_confd_connect(polaris_vconfd_net_t)

# /tmp/ polaris_vconfd_cert_t handling
type polaris_vconfd_cert_tmp_t;
files_tmp_file(polaris_vconfd_cert_tmp_t)
files_tmp_filetrans(polaris_vconfd_cert_t, polaris_vconfd_cert_tmp_t, { file dir })
polaris_vconfd_cert_tmp_manage(polaris_vconfd_cert_t)

# permit access to polaris_vconfd_cert_t
allow polaris_vconfd_cert_t self:capability { chown dac_override };

logging_send_syslog_msg(polaris_vconfd_cert_t)
corecmd_sbin_entry_type(polaris_vconfd_cert_t)
corecmd_shell_entry_type(polaris_vconfd_cert_t)

fs_read_nsfs_files(polaris_vconfd_cert_t)
logging_create_devlog_dev(polaris_vconfd_cert_t)

# to access the /bootflash: as the cert is stored in /bootflash:
# IOS cert related CLIs can create/store the certs in /bootflash with any
# file name(s), so allow generic access to bootflash.
polaris_bootflash_manage(polaris_vconfd_cert_t)

# manage /etc/viptela
polaris_cedge_etc_manage(polaris_vconfd_cert_t)
polaris_cedge_reset_ns(polaris_vconfd_cert_t)

# needed for accessing /tmp/chassis/local/rp/chasfs/midplane/chassis_model
polaris_chasfs_read(polaris_vconfd_cert_t)

#access to /etc/viptela
gen_require(`
  type polaris_nginx_t;
`)
polaris_cedge_etc_manage(polaris_nginx_t)

# For "confd_cmd", allow polaris_vconfd_cert_t, which is not a Binos process,
# to access polaris_confd_ipc_ripc_port_t.
polaris_ripc_confd_ipc_connect(polaris_vconfd_cert_t)
# permit to access /var/run/netns/default
sysnet_manage_ifconfig_run(polaris_vconfd_cert_t)

# vconfd_script_show_root_ca_cert.sh performs operations on
# /tmp/vconfd/root_cert.XXXXXX
polaris_vconfd_tmp_manage(polaris_vconfd_cert_t)
fs_getattr_tmpfs(polaris_vconfd_cert_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscedge.te
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#

## <summary>Polaris CPLD Policy Rules.</summary>

################################################################################
# CPLD Driver policy
################################################################################

#####################################
## <summary>
##      Read cpld files in /sys directory
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_cpld_read`,
    gen_require(`
        type polaris_sysfs_cpld_t;
        type sysfs_t;
    `)
    read_files_pattern($1, polaris_sysfs_cpld_t, polaris_sysfs_cpld_t)
    # genfscon statement specifically excludes symbolic links from
    # genfscon path specific entries. To workaround, let us allow
    # to follow sysfs_t symbolic links
    allow $1 sysfs_t:lnk_file { read getattr };
    list_dirs_pattern($1, polaris_sysfs_cpld_t, polaris_sysfs_cpld_t)
    `)
### <summary>
### Work (read, write, ioctl) with /dev/cpld
### <summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
# interface('polaris_cpld_dev_use',
# gen_require(''
# type device_t;
# type polaris_cpld_device_t;
#')
# write_chr_files_pattern($1, device_t, polaris_cpld_device_t)
# read_chr_files_pattern($1, device_t, polaris_cpld_device_t)
# allow $1 polaris_cpld_device_t:chr_file map;
#')

### <summary>
### Work (read, ioctl) with /dev/cpld
### <summary>
## <param name="domain">
##   <summary>
##   Domain allowed access.
##   </summary>
## </param>
#
interface('polaris_cpld_dev_read',
    gen_require(''
        type device_t;
        type polaris_cpld_device_t;
    ')
    read_chr_files_pattern($1, device_t, polaris_cpld_device_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscpld.if
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#
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#

policy_module(polariscrankshaft, 1.0);

# spa devices i.e sys_platform_module_1ng
type polaris_spa_device_t;
dev_node(polaris_spa_device_t)

# htdp device
type polaris_htdp_device_t;
dev_node(polaris_htdp_device_t)

# bde device (/dev/linux-user-bde)
type polaris_bde_device_t;
dev_node(polaris_bde_device_t)

# dash fpga device (/dev/dash_fpga)
type polaris_dash_device_t;
dev_node(polaris_dash_device_t)

# nios device (/dev/nios)
type polaris_nios_device_t;
dev_node(polaris_nios_device_t)

# qae device (/dev/qae_mem)
type polaris_qae_device_t;
dev_node(polaris_qae_device_t)

# moka fpga device (/dev/moka_fpga)
type polaris_moka_fpga_device_t;
dev_node(polaris_moka_fpga_device_t)

# sirius fpga device (/dev/sirius_fpga)
type polaris_sirius_fpga_device_t;
dev_node(polaris_sirius_fpga_device_t);

# moka nim device (/dev/nim_dm*)
type polaris_nim_dm_device_t;
dev_node(polaris_nim_dm_device_t)

# /dev/bp_async device on nanook platform
type polaris_bp_async_device_t;
dev_node(polaris_bp_async_device_t)

# /dev/sparrow_psu device on sparrow platform
type polaris_sparrow_psu_device_t;
dev_node(polaris_sparrow_psu_device_t)

# /dev/nutella_fpga device on nutella platform
type polaris_nutella_fpga_device_t;
dev_node(polaris_nutella_fpga_device_t)

# /dev/huron_fpga on Sumatra platform
type polaris_huron_device_t;
dev_node(polaris_huron_device_t)

# /dev/dplr_sumatra on Sumatra platform
type polaris_sumatra_doppler_device_t;
dev_node(polaris_sumatra_doppler_device_t)

# /tmp/sata_status for mSATA
type polaris_sata_status_tmp_t;
files_tmp_file(polaris_sata_status_tmp_t)

# TSN tsn_platform.tdl for IPCs and processes definition and it uses
# crankshaft_platform.tdl for databases definition. Unfortunately they are
# out of sync wrt BPROC_NGWC_FED - crankshaft_platform.tdl refers it but
# tsn_platform.tdl does not contain such definition.
ifdef(`tsn_platform',`
    type polaris_ngwc_fed_t;
')

# Supernova supernova_platform.tdl for IPCs and processes definition and it uses
# crankshaft_platform.tdl for databases definition. Unfortunately they are
# out of sync wrt BPROC_FM_RP - crankshaft_platform.tdl refers it but
# supernova_platform.tdl does not contain such definition.
ifdef(`supernova_platform',`
    type polaris_fman_rp_t;
')

# Nanook
# The Nanook platform does not support SDWAN and so the SDWAN processes are not
# defined in the nanook_platform.tdl. However, it uses the database_def's from
# the crankshaft_platform.tdl, which do have the SDWAN databases. So we need to
# add the processes to the SELinux policy
ifdef(`nanook_platform',`
    type polaris_cfgmgr_t;
    type polaris_cxp_t;
    type polaris_dbgdt;
    type polaris_fpm_t;
    type polaris_ftm_t;
    type polaris_omp_t;
    type polaris_sdavc_proxy_t;
    type polaris_ttm_t;
    type polaris_vdaemon_t;
    type polaris_hxt_t;
')

#########################################################################
# load_usbnet policies start
#########################################################################
# /usr/bin/os/conf/load_usbnet.sh is invoked to load usb network driver module
# kernel/drivers/net/usb/usbnet.ko for TSN.
#########################################################################

polaris_process_domain_template(load_usbnet)

# allow polaris_load_usbnet_t access to execute programs in system bin dirs, load
# usbnet.ko for USB network interface for TSN and allow read access
# to /sys/class/net and /proc/cmdline
# LOOK AT ME: /tmp/rp/pvp/work/inot_fifo inotifywait fd leak to child
corecmd_exec_bin(polaris_load_usbnet_t)
modutils_exec_insmod(polaris_load_usbnet_t)
modutils_list_module_config(polaris_load_usbnet_t)
modutils_read_module_config(polaris_load_usbnet_t)
sysnet_manage_config_dirs(polaris_load_usbnet_t)
polaris_pvp_stdin_read(polaris_load_usbnet_t)
files_read_kernel_modules(polaris_load_usbnet_t)
dev_rw_sysfs(polaris_load_usbnet_t)
kernell_read_system_state(polaris_load_usbnet_t)
# stdout inherited from unconfined_service that might call it
polaris_unconfined_service_fifo_file_manage(polaris_load_usbnet_t)

# handle /tmp/load_usbnet_intf
type polaris_load_usbnet_tmp_t;
files_tmp_file(polaris_load_usbnet_tmp_t)
files_tmp_filetrans(polaris_load_usbnet_t, polaris_load_usbnet_tmp_t, file)
manage_files_pattern(polaris_load_usbnet_t, polaris_load_usbnet_tmp_t, polaris_load_usbnet_tmp_t)

# allow read of /etc/passwd
# allow map permission
# passwd_file_t:file { getattr open read };
auth_map_passwd(polaris_load_usbnet_t)

# load_usbnet policies end

# CLI: show platform hardware msata <status/info>
ifdef('crankshaft_family',
gen_require(''
    type polaris_sysfs_ggpio_t;
    type polaris_msata_info_t;
'')
polaris_utility_domain_template(msata_info)
polaris_bexecute_domain(polaris_msata_info_t, polaris_msata_info_exec_t)
# need write for pipes like "pipe:[70623]"
corecmd_exec_bin(polaris_msata_info_t)
# need write/getattr for pipes like "pipe:[71322]"
polaris_cmrp_use_fifo(polaris_msata_info_t)
fstools_domtrans(polaris_msata_info_t)
# allow use of mSATA device
polaris_nvram_manage(polaris_msata_info_t)
# allow self
allow polaris_msata_info_t self:capability sys_rawio;
allow polaris_msata_info_t self:process setfscreate;
# allow /usr/sbin/smartctl to access /sys/devices/platform/cpn-110-master/
# cpn-110-master:config-space/f2540000.sata/ata2/host1/scsi_host/host1/proc_name and
# /sys/devices/platform/cpn-110-master/cpn-110-master:config-space/f2540000.sata/
# ata2/host1/target1:0:0
read_files_pattern(polaris_msata_info_t, polaris_sysfs_ggpio_t, polaris_sysfs_ggpio_t)
dev_list_sysfs(polaris_msata_info_t)
# allow smartctl to access to /dev/sda to determine its lifetime
storage_raw_read_fixed_disk(polaris_msata_info_t)
# CLI: show platform hardware slot p[x] fan eeprom
polaris_utility_domain_template(smart_fan)
polaris_bexecute_domain(polaris_smart_fan_t, polaris_smart_fan_exec_t)
# allow /ls command
corecmd_exec_bin(polaris_smart_fan_t)
# allow read of /etc/passwd
auth_map_passwd(polaris_smart_fan_t)
# allow read of /sys/devices/platform/nios/*
dev_read_sysfs(polaris_smart_fan_t)
# need write/getattr access for pipes like "pipe:[86004]"
polaris_cmrp_use_fifo(polaris_smart_fan_t)

# sumatra and sparrow platforms need map access for "show platform hardware msata status | lifetime"
auth_map_passwd(polaris_msata_info_t)

ifdef(`sumatra_platform`,
# During "show platform hardware msata status | lifetime" - msata_info.sh accesses /tmp/sata_status
files_tmp_filetrans(polaris_msata_info_t, polaris_sata_status_tmp_t, file)
manage_files_pattern(polaris_msata_info_t, polaris_sata_status_tmp_t, polaris_sata_status_tmp_t)

################################################################################
# show platform hardware msata end
################################################################################

#type for /dev/qcqiX
type qcqi_device_t;
dev_node(qcqi_device_t);

# sm_nim_adpt device (/dev/sm_nim_adpt_xxx )
type polaris_sm_nim_adpt_device_t;
dev_node(polaris_sm_nim_adpt_device_t)

# dio device
type polaris_dio_device_t;
dev_node(polaris_dio_device_t)

# tty NMEA device
type polaris_tty_NMEA_device_t;
dev_node(polaris_tty_NMEA_device_t)

# memory blocks and gpp on Nutella-XE platform
type polaris_nutella_memory_block_p7_t;
dev_node(polaris_nutella_memory_block_p7_t)

type polaris_nutella_memory_block_p1_t;
dev_node(polaris_nutella_memory_block_p1_t)

type polaris_nutella_memory_block_boit_t;
dev_node(polaris_nutella_memory_block_boot_t)

type polaris_nutella_gpp0_t;
dev_node(polaris_nutella_gpp0_t)

type polaris_nutella_gpp_t;
dev_node(polaris_nutella_gpp_t)

# nim device (/dev/nim_phy)
type polaris_nim_phy_device_t;
dev_node(polaris_nim_phy_device_t)

type polaris_cwan_svr_var_run_t;
files_pid_file(polaris_cwan_svr_var_run_t)

Found in path(s):
* /opt/cola/permissions/1103963160_1615183271.1/0/selinux-tar/selinux/polariscrankshaft.te

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#

### <summary>Polaris epc_ws_liaison Policy Rules.</summary>

interface(`polaris_epc_ws_liaison_tmp_read',`
    gen_require(`
        type polaris_epc_ws_liaison_tmp_t;
    ')`)
    read_files_pattern($1, polaris_epc_ws_liaison_tmp_t, polaris_epc_ws_liaison_tmp_t)
')

#########################################################################
### <summary>
### Allow to open, write, add_name and write /tmp/epc_ws/fed_to_wif_pipe file.
### Allow to create and write /tmp/epc_ws dir.
### </summary>
### <param name="domain">
### <summary>
### epc_ws_liaison and ngwc-fed fifo_file interaction.
### </summary>
### </param>
# interface('polaris_epi_ws_liaison_fifo_manage',
        gen_require(
            type polaris_epi_ws_liaison_tmp_t;
        )
        manage_dirs_pattern($1, polaris_epi_ws_liaison_tmp_t, polaris_epi_ws_liaison_tmp_t)
        manage_fifo_files_pattern($1, polaris_epi_ws_liaison_tmp_t, polaris_epi_ws_liaison_tmp_t)
    );

########################################
## <summary>
##      Allow to open, read "/tmp/epc_ws/wif_to_ts_pipe" fifo file.
## </summary>
## <param name="domain">
##      <summary>
##      epc_ws_liaison and dumpcap fifo_file interaction.
##      </summary>
## </param>
# interface('polaris_epi_ws_liaison_fifo_read',
        gen_require(
            type polaris_epi_ws_liaison_tmp_t;
        )
        read_fifo_files_pattern($1, polaris_epi_ws_liaison_tmp_t, polaris_epi_ws_liaison_tmp_t)
    );

########################################
## <summary>
##      Allow to write, create, unlink "/tmp/*.pcapng" temporary files.
## </summary>
## <param name="domain">
##      <summary>
##      polaris_wireshark_show fifo_file interaction.
##      </summary>
## </param>
# interface('polaris_wireshark_show_tmp_manage',
        gen_require(
            type polaris_wireshark_show_tmp_t;
        )
        manage_files_pattern($1, polaris_wireshark_show_tmp_t, polaris_wireshark_show_tmp_t)
    );

########################################
## <summary>
##	Create, read, and write temporary files.
## </summary>
## <param name="domain">
##	<summary>
##	Domain allowed access.
##	</summary>
## </param>
#

interface('polaris_epc_ws_liaison_tmp_file',
    gen_require(''
        type polaris_epc_ws_liaison_tmp_t;
    ')
    files_tmp_filetrans($1, polaris_epc_ws_liaison_tmp_t, dir, "epc_ws")
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisepcwsliaison.if
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#
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#
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#

policy_module(polariscxp, 1.0);

gen_require(''
    type polaris_cxp_t;
')
polaris_chasfs_read(polaris_cxp_t)
polaris_cpld_read(polaris_cxp_t)

logging_send_syslog_msg(polaris_cxp_t)

# vconfd_load_shared_schemas
polaris_confd_shared_schema_read(polaris_cxp_t)

corecmd_exec_bin(polaris_cxp_t)
corecmd_exec_shell(polaris_cxp_t)
auth_use_nsswitch(polaris_cxp_t)

# work with /tmp/xml
polaris_cedge_xml_tmp_manage(polaris_cxp_t)

# work with /tmp/tmp
polaris_cedge_tmp_manage(polaris_cxp_t)

# /var/run/cxp dir and pid
type polaris_cxp_var_run_t;
files_pid_file(polaris_cxp_var_run_t)
manage_files_pattern(polaris_cxp_t, polaris_cxp_var_run_t, polaris_cxp_var_run_t)
manage_dirs_pattern(polaris_cxp_t, polaris_cxp_var_run_t, polaris_cxp_var_run_t)
manage_sock_files_pattern(polaris_cxp_t, polaris_cxp_var_run_t, polaris_cxp_var_run_t)
files_pid_filetrans(polaris_cxp_t, polaris_cxp_var_run_t, { file dir sock_file })
polaris_ttm_var_sock_write(polaris_cxp_t)

# vip_execute_nowait uses setpgid
allow polaris_cxp_t self:process setpgid;

# exp may create vrf-based netns on demand
polaris_vrf_netns_manage(polaris_cxp_t)

# Allow /usr/expd manages /usr/binos/conf/global.service.conf and
# /tmp/dlresolve/
polaris_tdlresolve_manage(polaris_cxp_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscxp.te
No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#
/usr/binos/conf/viptela-start.sh -- gen_context(system_u:object_r:polaris_cedge_start_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscxedgestart.fc
No license file was found, but licenses were detected in source scan.

dnl
dnl April 2018, Victor Kamensky
dnl
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dnl
dnl divert(-1)

include(`polaris_process.m4')

include(`polaris_database_db.m4')
include(`polaris_database_db_te.m4')
include('polaris_max_scope.m4')

divert(0)dnl
#
# This is a generated file! Instead of modifying this file,
# modify proper platform TDL file.
#
policy_module(polarisplatformdbauto, 1.0);

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_database_te.m4
No license file was found, but licenses were detected in source scan.

#
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#

## <summary>Polaris vman Policy Rules.</summary>

### <summary>Read files of type polaris_vman_tmp_t (e.g., /tmp/cgroup.log)</summary>

interface('polaris_vman_tmp_read',
  gen_require('type polaris_vman_tmp_t;
  read_files_pattern($1, polaris_vman_tmp_t, polaris_vman_tmp_t)
')

### <summary>Write files of type polaris_vman_tmp_t (e.g., /tmp/cgroup.log)</summary>

interface('polaris_vman_tmp_write',
  gen_require('type polaris_vman_tmp_t;
  write_files_pattern($1, polaris_vman_tmp_t, polaris_vman_tmp_t)
')
### <summary>
### Manage dir/files of type polaris_vman_tmp_t (e.g., /tmp/cgroup.log)
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
interface('polaris_vman_tmp_manage',
gen_require('  
type polaris_vman_tmp_t;
')
   manage_files_pattern($1, polaris_vman_tmp_t, polaris_vman_tmp_t)
   manage_dirs_pattern($1, polaris_vman_tmp_t, polaris_vman_tmp_t)
')

### <summary>
### Read files of type polaris_disk_vman_t (e.g., /bootflash/virtual-instance/)
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
interface('polaris_disk_vman_read',
gen_require('  
type polaris_disk_vman_t;
')
   read_files_pattern($1, polaris_disk_vman_t, polaris_disk_vman_t)
   read_link_files_pattern($1, polaris_disk_vman_t, polaris_disk_vman_t)
   list_dirs_pattern($1, polaris_disk_vman_t, polaris_disk_vman_t)
')
## <summary>
## List files of type polaris_disk_vman_t (e.g., /bootflash/virtual-instance/)
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_disk_vman_dir_list',
gen_require(  type polaris_disk_vman_t;
  type polaris_disk_bootflash_t;
  type polaris_disk_harddisk_t;
)
list_dirs_pattern($1, { polaris_disk_vman_t polaris_disk_bootflash_t polaris_disk_harddisk_t }, polaris_disk_vman_t)
')

## <summary>
## Operate on @vman_domain_socket unix socket. Look at
## vman_clnt_msg_transport_init function in vman_clnt_msg_uds.c
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_vman_use_client_socket',
gen_require(  type polaris_vman_t;
)
allow $1 polaris_vman_t:unix_stream_socket connectto;
')

## <summary>
## Manage /tmp/xml/
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <rolebase/>
interface('polaris_vman_log_files_manage',
optional_policy(
    gen_require(
        type polaris_vman_log_t;
    )
)
manage_files_pattern($1, polaris_vman_log_t,polaris_vman_log_t)
manage_dirs_pattern($1, polaris_vman_log_t, polaris_vman_log_t)
')
')

#####################################################
## <summary>
##      Read files of type polaris_var_vman_t (e.g., /var/virtual-instance)
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_vman_var_read',
    gen_require(
        type polaris_var_vman_t;
    )
    list_dirs_pattern($1, polaris_var_vman_t, polaris_var_vman_t)
    read_files_pattern($1, polaris_var_vman_t, polaris_var_vman_t)
')

#####################################################
## <summary>
##      Write into fifo file created by vman, typical case when
##      vman starts script under popen in different domain.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolecap/>
#
interface('polaris_vman_use_fifo',
    gen_require(
        type polaris_vman_t;
    )
    read_fifo_files_pattern($1, polaris_vman_t, polaris_vman_t)
write_fifo_files_pattern($1, polaris_vman_t, polaris_vman_t)
')

########################################################
## <summary>
## Check existence (getattr) of vman btrace file (i.e polaris_vman_bt_t)
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
# interface('polaris_vman_bt_getattr',
    gen_require(
        type polaris_vman_bt_t;
        type polaris_btrace_base_t;
    ')
    setattr_files_pattern($1, polaris_btrace_base_t, polaris_vman_bt_t)
')

########################################################
## <summary>
## Allow domain to write to pipes connected to virtlogd_t.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
# interface('polaris_vman_virtlog_allow',
    gen_require(
        type virtlogd_t;
    ')
    #allow domain to write to pipes
    allow $1 virtlogd_t:fifo_file rw_inherited_fifo_file_perms;
    #allow virtlogd_t to search dirs /var/log/libvirt/qemu
    logging_search_logs(virtlogd_t)
')

########################################################
## <summary>
## Allow polaris_vman_t to kill process from domain.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_vman_kill_process',`
    gen_require(
        type polaris_vman_t;
    )
    allow polaris_vman_t $1:process sigkill;
    `)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisvman.if
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# 
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# 
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#
#
## <summary>Polaris tws Policy Rules.</summary>

************************************************************************
# <summary>
#     Allow the specified domain to manage KGV data files
# I.e /tmp/package_biv_sums.
# </summary>
#
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_kgv_data_manage',`
    gen_require(
        type polaris_kgv_data_t;
    )
    manage_files_pattern($1, polaris_kgv_data_t, polaris_kgv_data_t)
    allow $1 polaris_kgv_data_t:file map;
    `)

************************************************************************
# <summary>
## Execute a domain transition to run code_sign_verify

### <summary>
### <param name="domain">
### Domain allowed to transition.
### </summary>

```
interface('polaris_code_verify_domtrans',
gen_require(
    type polaris_code_verify_t, polaris_code_verify_exec_t;
  )
)
domtrans_pattern($1, polaris_code_verify_exec_t, polaris_code_verify_t)
')
```

## Execute a domain transition to the polaris_hw_upgrade

### <summary>
### <param name="domain">
### Domain allowed to transition.
### </summary>

```
interface('polaris_hw_upgrade_domtrans',
gen_require(
    type polaris_hw_upgrade_t, polaris_hw_upgrade_exec_t;
  )
)
corecmd_search_bin($1)
domtrans_pattern($1, polaris_hw_upgrade_exec_t, polaris_hw_upgrade_t)
')
```

## Work (read, write, ioctl) with /dev/aikido device

### <summary>
### <param name="domain">
### Domain allowed access.
### </summary>

```
interface('polaris_aikido_dev_use',
gen_require(
    type device_t;
  )
)
Open Source Used In BGP TE Controller Version 4.3.0

```c

// Open Source Used In BGP TE Controller Version 4.3.0

// Source code implementation

// Polaris AIKIDO Device Type

type polaris_aikido_device_t;

write_chr_files_pattern($1, device_t, polaris_aikido_device_t);
read_chr_files_pattern($1, device_t, polaris_aikido_device_t);

// Execute a domain transition to the polars_rom_upgrade

interface(`polaris_rom_upgrade_domtrans',
gen_require(`
type polaris_hw_upgrade_t, polaris_rom_upgrade_exec_t;
``);
corecmd_search_bin($1);
domtrans_pattern($1, polaris_rom_upgrade_exec_t, polaris_rom_upgrade_t);
``)

// Write into fifo file created during rommon_upgrade

interface(`polaris_rom_upgrade_use_fifo',
gen_require(`
type polaris_rom_upgrade_t;
``);
write_fifo_files_pattern($1, polaris_rom_upgrade_t, polaris_rom_upgrade_t);
``)

// Work (read, write, ioctl) with /dev/scansta device

```

Open Source Used In BGP TE Controller Version 4.3.0 6167
```
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>

interface('polaris_scansta_dev_use',
  gen_require(
      type device_t;
      type polaris_scansta_device_t;
  )
  write_chr_files_pattern($1, device_t, polaris_scansta_device_t)
  read_chr_files_pattern($1, device_t, polaris_scansta_device_t)
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristws.if
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
/tmp/.*/chasfs(/.*)?     gen_context(system_u:object_r:polaris_chasfs_t,s0)
/tmp/chassis/local/.*/chasfs(/.*)? gen_context(system_u:object_r:polaris_chasfs_t,s0)
/tmp/chassis         gen_context(system_u:object_r:polaris_chasfs_t,s0)
/tmp/chassis(/.*)?    gen_context(system_u:object_r:polaris_chasfs_t,s0)
/tmp/.*/chasasync(/.*)? gen_context(system_u:object_r:polaris_chasync_tmp_t,s0)
/vol/harddisk/sys_report(/.*)? gen_context(system_u:object_r:polaris_chasync_files_t,s0)
/vol/harddisk/fd_cc_crash(/.*)? gen_context(system_u:object_r:polaris_chasync_files_t,s0)
/var/log/chasync(/.*)? gen_context(system_u:object_r:polaris_chasync_log_t,s0)
/usr/binos/conf/chasync.sh -- gen_context(system_u:object_r:polaris_chasync_exec_t,s0)

# real path is /etc/init.d/chasfs_boottime.sh but we need to add rc.d because
# in file_contexts.subs_dist we have substitute rule for /etc/init.d/
/etc/rc.d/init.d/chasfs_boottime.sh -- gen_context(system_u:object_r:polaris_chasfs_boottime_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarischasfs.fc
No license file was found, but licenses were detected in source scan.

#
policy_module(polarissmand, 1.0);

gen_require('type polaris_smand_t;
            type polaris_smand_exec_t;
')

polaris_btrace_data_manage(polaris_smand_t)
polaris_crtf_data_manage(polaris_smand_t)
polaris_chasfs_manage(polaris_smand_t)
polaris_tdlresolve_read(polaris_smand_t)
polaris_tdldb_list_dirs(polaris_smand_t)
polaris_cpld_read(polaris_smand_t)
polaris_lua_read(polaris_smand_t)
polaris_flashlib_read(polaris_smand_t)
polaris_send_signal_to_bexecute(polaris_smand_t)
polaris_ripc_sman_ui_serv_connect(polaris_smand_t)
polaris_db_tldldb_dir_use(polaris_smand_t)

type polaris_crdu_pipe_tmp_t;
files_tmp_file(polaris_crdu_pipe_tmp_t)
files_tmp_filetrans(polaris_smand_t, polaris_crdu_pipe_tmp_t, fifo_file, ",.CRDU_COMMAND_PIPE")
files_tmp_filetrans(polaris_smand_t, polaris_crdu_pipe_tmp_t, fifo_file, ",.CRDU_RESPONSE_PIPE")
polaris_smand_crdu_pipe_manage(polaris_smand_t)

# work with /tmp/sman files
type polaris_smand_tmp_t;
files_tmp_file(polaris_smand_tmp_t)
manage_dirs_pattern(polaris_smand_t, polaris_smand_tmp_t, polaris_smand_tmp_t)
manage_files_pattern(polaris_smand_t, polaris_smand_tmp_t, polaris_smand_tmp_t)
files_tmp_filetrans(polaris_smand_t, polaris_smand_tmp_t, { file dir })

# allow read of /etc/group
auth_use_nsswitch(polaris_smand_t)

# allow to send message to /dev/log
logging_send_syslog_msg(polaris_smand_t)

# allow objstore access
polaris_disk_objstore_read(polaris_smand_t)

# on edison smand shares sysv semaphore with iosd, why sem got initrc_t label
# is not clear.
gen_require(`
type initrc_t;
`)
allow polaris_smand_t initrc_t:sem { read write unix_write associate };

# why smand needs all these capability?
allow polaris_smand_t self:capability { dac_override chown fsetid };
allow polaris_smand_t self:capability2 block_suspend;
allow polaris_smand_t self:capability sys_resource;

# on edison smand wants to read /proc/mtd which is proc_t
# type=AVC msg=audit(1478481219.216:6): avc: denied { read } for pid=5410 comm="smand" name="mtd"
device="proc" ino=402635811 scontext=system_u:system_r:polaris_smand_t:s0
tcontext=system_u:object_r:proc_t:s0 tclass=file
# try to drop it latter
kernel_read_system_state(polaris_smand_t)

# on edison silent roll package is still in iso format
# type=AVC msg=audit(1478497356.229:7): avc: denied { getattr } for pid=5816 comm="smand"
path="/tmp/sw/mount/cat3k_caa-srdriver.2016-11-06_21.10_kamensky.SSA.pkg/usr/binos/lib64"
device="loop7" ino=3456 scontext=system_u:object_r:iso9660_t:s0 tcontext=system_u:object_r:iso9660_t:s0 tclass=dir
gen_require(`
type iso9660_t;
`)
allow polaris_smand_t iso9660_t:dir { searchgetattr };
polaris_dyncfg_tmp_read(polaris_smand_t)

corecmd_exec_shell(polaris_smand_t)

# CLI "Show install issu history" invokes /usr/binos/conf/install_issu_show.py which
# needs /usr/bin/python3(bin file) execution
corecmd_exec_bin(polaris_smand_t)

# smand execute install_show.sh in its own domain need read results
polaris_install_show_tmp_read(polaris_smand_t)

# during boot issu_boottime.sh calls smand to obtain some information
gen_require(
    type unconfined_service_t;
    )
domtrans_pattern(unconfined_service_t, polaris_smand_exec_t, polaris_smand_t)

# system_stats_periodic function from sman/src/fru_stats.c does
# ioctl(fd, SIOCGIFADDR, &ifr); on "system" interface name, which normally
# does not exist in Polaris platforms
kernel_dontaudit_request_load_module(polaris_smand_t)

# system_stats_periodic function from sman/src/fru_stats.c does
# statfs64 for /flash directory
fs_getattr_xattr_fs(polaris_smand_t)
polaris_disk_bootflash_read_lnk(polaris_smand_t)
polaris_disk_bootflash_search(polaris_smand_t)

gen_require(
    type rsync_t;
    )
# upon exec rsync inherits smand's stdout/stderr fifo files
allow rsync_t polaris_smand_t:fifo_file write;

gen_require(
    type polaris_bshell_t;
    )
polaris_chasfs_read(polaris_bshell_t)
polaris_tdlresolve_read(polaris_bshell_t)

# bshell memory logs related
type polaris_memmon_tmp_files_t;
files_tmp_file(polaris_memmon_tmp_files_t)
files_tmp_filetrans(unconfined_service_t, polaris_memmon_tmp_files_t, dir, "memmon_logs")
## give bshell permissions
manage_files_pattern(polaris_bshell_t, polaris_memmon_tmp_files_t, polaris_memmon_tmp_files_t)

# sman needs to access gnmib gnoi images
optional_policy(
    polaris_gnmib_gnoi_images_read(polaris_smand_t)
)

# CLI "Show install issu history" access to "/bootflash/.installer/install_issu_history"
# and "/tmp/show_install_output.txt"
polaris_install_engine_domtrans(polaris_smand_t)
polaris_install_show_domtrans(polaris_smand_t)

# xcopy_script gets called for xcopy RPC data model
polaris_xcopy_script_domtrans(polaris_smand_t)

# xcopy_script gets called for xcopy RPC data model
polaris_xcopy_script_domtrans(polaris_smand_t)

# CLI "Show install issu history" access to "/bootflash/.installer/install_issu_history"
# and "/tmp/show_install_output.txt"
polaris_install_engine_domtrans(polaris_smand_t)
polaris_install_show_domtrans(polaris_smand_t)

# CLI "Show install issu history" access to "/bootflash/.installer/install_issu_history"
# and "/tmp/show_install_output.txt"
polaris_install_engine_domtrans(polaris_smand_t)
polaris_install_show_domtrans(polaris_smand_t)
# smand open and unlinks /tmp/trans_ports_tmp
polaris_trans_ports_tmp_manage(polaris_smand_t)
#
=================================================================================================
#
"show platform software kernel ... " CLI executes trans_stats_helper.sh. Need domain
# transition
#
polaris_utility_domain_template(trans_stats_helper)
# transit into the domain
domtrans_pattern(polaris_smand_t, polaris_trans_stats_helper_exec_t, polaris_trans_stats_helper_t)
#binary tracing fifo file as standard output
polaris_use_btrace_fifo(polaris_trans_stats_helper_t)
#execute lsof in helper script
corecmd_exec_bin(polaris_trans_stats_helper_t)
corecmd_exec_shell(polaris_trans_stats_helper_t)
auth_use_nsswitch(polaris_trans_stats_helper_t)
# lsof reads /proc/*/fd/* attributes
polaris_proc_fd_all_getattr(polaris_trans_stats_helper_t)
#
kernel_read_network_state(polaris_trans_stats_helper_t)
#
kernel_read_system_state(polaris_trans_stats_helper_t)
#
fs_read_nsfs_files(polaris_trans_stats_helper_t)
#
# ls access to /proc/3792/fd/6 triggers sys_ptrace capability
# and dac_read_search as well.
allow polaris_trans_stats_helper_t self:capability { sys_ptrace dac_read_search };

type polaris_trans_stats_tmp_t;
files_tmp_file(polaris_trans_stats_tmp_t)
# create /tmp/trans_tmp and /tmp/trans_tmp.1 to store lsof output
files_tmp_filetrans(polaris_trans_stats_helper_t, polaris_trans_stats_tmp_t, file, "trans_tmp")
files_tmp_filetrans(polaris_trans_stats_helper_t, polaris_trans_stats_tmp_t, file, "trans_tmp.1")
polaris_trans_stats_tmp_manage(polaris_trans_stats_helper_t)
# smand open and unlinks /tmp/trans_tmp
polaris_trans_stats_tmp_manage(polaris_smand_t)
#
# run mcp_chvrf.sh without transition
polaris_exec_chvrf(polaris_trans_stats_helper_t)
#
=================================================================================================

# CLI "request platform hardware filesystem harddisk: offline | online" which runs mcp_disk_oir.sh

polaris_utility_domain_template(disk_oir)
polaris_bexecute_domain(polaris_disk_oir_t, polaris_disk_oir_exec_t)

#execute lsof
corecmd_exec_bin(polaris_disk_oir_t)

# This is a CLI script that access types and /proc/pid/fd/*
polaris_proc_fd_all_getattr(polaris_disk_oir_t)

# access sysctl_rpc_t
kernel_read_rpc_sysctls(polaris_disk_oir_t)

# reads /proc/net/*
kernal_read_network_state(polaris_disk_oir_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_disk_oir_t)

# lsof readmnt
fs_read_nsfs_files(polaris_disk_oir_t)

# inherits stdin/stdout of pty opened by telnetd
telnet_use_ptys(polaris_disk_oir_t)

allow polaris_disk_oir_t self:capability [ dac_read_search sys_nice sys_rawio ];
allow polaris_disk_oir_t self:process { setfscreate setsched };

# execute lvm commands
lvm_domtrans(polaris_disk_oir_t)

# "lsof -nP'read /dev/sda1 (/csl_p_0) and other operations when disk is destroyed.
storage_manage_fixed_disk(polaris_disk_oir_t)

# access /tmp/chassis/cpld/chasfs
polaris_chasfs_read(polaris_disk_oir_t)

#cat /tmp/chassis/cpld/chasfs/platform_type'
polaris_cpld_read(polaris_disk_oir_t)

#'/bin/rm -rf /tmp/udev/etc/udev/harddisk'
fs_getattr_tmpfs(polaris_disk_oir_t)

# access /tmp/udev/etc/udev/harddisk'
polaris_udev_tmp_manage(polaris_disk_oir_t)

# /bin/mkdir -p /tmp/udev_cache/harddisk
files_tmp_filetrans(polaris_disk_oir_t, polaris_udev_tmp_files_t, dir, "udev_cache")

# systemctl start handle_mount@vol-harddisk.service, communicate with systemd
systemd_exec_systemctl(polaris_disk_oir_t)
# mount /dev/harddisk1 /vol/harddisk
mount_domtrans(polaris_disk_oir_t)

# read /proc/cmdline
kernel_read_all_proc(polaris_disk_oir_t)

# system service start/stop: /lib/systemd/system/handle_mount@.service
systemd_config_generic_services(polaris_disk_oir_t)

#/sbin/hdparm -S 0 /dev/sdb, execute hdparm in its own domain
fstools_domtrans(polaris_disk_oir_t)

ifdef('crankshaft_family',
    gen_require(
        type device_t;
        type udev_t;
    )
    filetrans_pattern( {udev_t polaris_disk_oir_t}, device_t, fixed_disk_device_t, lnk_file, "harddisk")
    filetrans_pattern( {udev_t polaris_disk_oir_t}, device_t, fixed_disk_device_t, lnk_file, "harddisk1")
    manage_lnk_files_pattern(polaris_disk_oir_t, fixed_disk_device_t, fixed_disk_device_t)
    # /dev/harddisk may be labeled with device_t. The "unlink" AVC denial will be fixed when it is labeled correctly

    # allow /bin/dd to access /dev/nvme in blk_file
dev_nvme_blk_files_manage(polaris_disk_oir_t)

    # allow /bin/cat to access /tmp/nim_xxd_present
    gen_require(
        type polaris_cmrp_nim_xxd_tmp_t;
    )
    read_files_pattern(polaris_disk_oir_t, polaris_cmrp_nim_xxd_tmp_t, polaris_cmrp_nim_xxd_tmp_t, polaris_cmrp_nim_xxd_tmp_t)
)

# watches of /tmp/[rp|fp|cc]/pvp/process_state directory
polaris_process_state_watch(polaris_smand_t)

ifdef('petra_platform',
    # allow access to polaris_cm_rp sem
    polaris_cm_rp_sem_use(polaris_smand_t)
    # allow access to /flash12/moncfg/cfg.dat
    polaris_swipedrive_file_manage(polaris_smand_t)
    # allow access to /flash6/moncfg/cfg.dat
    polaris_nvram_read(polaris_smand_t)
)
dmesg_domtrans(polaris_smand_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissmand.te
No license file was found, but licenses were detected in source scan.

#
# July 2017, Victor Kamensky
#
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#

# pci rescan shm file
/dev/shm/rescan_shm gen_context(system_u:object_r:polaris_cm_cc_tmpfs_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmcc.fc
No license file was found, but licenses were detected in source scan.

#
# August 2017, Shawn Lu
#
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#

## <summary>Polaris mobilityd Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismobilityd.if
No license file was found, but licenses were detected in source scan.

#
# September 2018, Anubha Balani
#
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#

policy_module(polarismemory, 1.0);

###############################################################################
# Polaris memory: libmaroon and such
###############################################################################

attribute polaris_maroon_data_domain;
type polaris_maroon_base_t;
files_type(polaris_maroon_base_t)

type attribute polaris_maroon_base_t polaris_maroon_data_domain;

gen_require(
    attribute polaris_extended_domain;
)

files_tmp_filetrans(polaris_extended_domain, polaris_maroon_base_t, dir, "maroon_stats")

type polaris_zram_device_t;
dev_node(polaris_zram_device_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismemory.te
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
#
# polarisemd file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisemd.fc
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
#
## <summary>Polaris nif_mgr Policy Rules.</summary>

####################################################
## <summary>
##      Use /tmp/sv directory and files. Currently this acts as a
##      chasfs root for information shared between the nif manager
##      and the fed.
## </summary>
## <param name="domain">
##
## Domain allowed access.

```c
interface('polaris_sv_tmp_use',
    gen_require('type polaris_sv_tmp_t;
        type tmp_t;
    ')
)
manage_dirs_pattern($1, tmp_t, polaris_sv_tmp_t)
manage_files_pattern($1, polaris_sv_tmp_t, polaris_sv_tmp_t)
allow $1 polaris_sv_tmp_t:dir watch;
')
```

### <summary>
This is to allow creation and write to doppler_sesa file under proc
### <param name="domain">
### </param>
```
interface('polaris_proc_sesa_create_write',
    gen_require('type polaris_proc_sesa_t;
    ')
)
setattr_files_pattern($1, polaris_proc_sesa_t, polaris_proc_sesa_t)
rw_files_pattern($1, polaris_proc_sesa_t, polaris_proc_sesa_t)
')
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnifmgr.if
No license file was found, but licenses were detected in source scan.

# March 2017, Victor Kamensky
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#

/usr/binos/conf/btdecode -- gen_context(system_u:object_r:polaris_btdecode_exec_t:s0)
Open Source Used In BGP TE Controller Version 4.3.0

- /usr/binos/conf/bttail -- gen_context(system_u:object_r:polaris_btdecode_exec_t,s0)
- /usr/binos/conf/mcp_trace_filter.sh -- gen_context(system_u:object_r:polaris_trace_filter_exec_t,s0)
- /usr/binos/conf/mcp_trace_request.sh -- gen_context(system_u:object_r:polaris_trace_request_exec_t,s0)
- /usr/binos/bin/create_luid_file_db -- gen_context(system_u:object_r:polaris_create_ldb_exec_t,s0)
- /tmp/btrace_luids_file.cdb.tmp -- gen_context(system_u:object_r:polaris_ldb_tmp_t,s0)
- /tmp/btrace_luids_file.cdb -- gen_context(system_u:object_r:polaris_ldb_tmp_t,s0)
- /tmp/cc/0/trace(/.*)? gen_context(system_u:object_r:polaris_btrace_base_t,s0)
- /tmp/cc/0/trace/fifo(/.*)? gen_context(system_u:object_r:polaris_fifo_stdout_base_t,s0)
- /tmp/fp/trace(/.*)? gen_context(system_u:object_r:polaris_btrace_base_t,s0)
- /tmp/fp/trace/fifo gen_context(system_u:object_r:polaris_fifo_stdout_base_t,s0)
- /tmp/fp/trace/fifo(/.*)? gen_context(system_u:object_r:polaris_fifo_stdout_t,s0)
- /tmp/rp/trace(/.*)? gen_context(system_u:object_r:polaris_btrace_base_t,s0)
- /tmp/rp/trace/fifo gen_context(system_u:object_r:polaris_fifo_stdout_base_t,s0)
- /tmp/rp/trace/fifo(/.*)? gen_context(system_u:object_r:polaris_fifo_stdout_t,s0)
- /dev/shm/sem.uid_sem gen_context(system_u:object_r:polaris_btrace_tmpfs_t,s0)
- /dev/shm/oper_uid_shm gen_context(system_u:object_r:polaris_btrace_tmpfs_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbtrace.fc
No license file was found, but licenses were detected in source scan.

#
# September 2017, Victor Kamensky
#
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#
#
# polarisunconfined file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisunconfined.fc
No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#
#
# polarisdbgd file contexts place holder

policy_module(polarisdbgd, 1.0);

gen_require(
  type polaris_dbgd_t;
}
polaris_chasfs_read(polaris_dbgd_t)
polaris_tdlresolve_read(polaris_dbgd_t)
polaris_cpld_read(polaris_dbgd_t)

logging_send_syslog_msg(polaris_dbgd_t)

# vconfd_load_shared_schemas
polaris_confd_shared_schema_read(polaris_dbgd_t)

# /var/run/dbgd socket and pid
type polaris_dbgd_var_run_t;
files_pid_file(polaris_dbgd_var_run_t)
manage_files_pattern(polaris_dbgd_t, polaris_dbgd_var_run_t, polaris_dbgd_var_run_t)
manage_sock_files_pattern(polaris_dbgd_t, polaris_dbgd_var_run_t, polaris_dbgd_var_run_t)
files_pid_filetrans(polaris_dbgd_t, polaris_dbgd_var_run_t, { file sock_file })

polaris_vdaemon_var_sock_write(polaris_dbgd_t)

# dbgd may create vrf-based netns on demand
polaris_vrf_netns_manage(polaris_dbgd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdbgd.te
No license file was found, but licenses were detected in source scan.

#
# March 2020, Victor Kamensky
#
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#
## <summary>Polaris JVM Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisjvm.if
No license file was found, but licenses were detected in source scan.

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Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisinstall.te
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristws.te
No license file was found, but licenses were detected in source scan.

#
# December 2018, Victor Kamensky
policy_module(polariszmanc, 1.0);

gen_require(
    type polaris_ezman_cc_t;
)

polaris_chasfs_read(polaris_ezman_cc_t)
polaris_cpld_read(polaris_ezman_cc_t)
polaris_tdlresolve_read(polaris_ezman_cc_t)
polaris_ripc_sman_ui_serv_connect(polaris_ezman_cc_t)

allow polaris_ezman_cc_t self:capability dac_override;

polaris_oob_evfc_dev_use(polaris_ezman_cc_t)

# LOOK AT ME by some reason relabeling of /dev/ezlkm
# device files does not work
dev_rw_generic_chr_files(polaris_ezman_cc_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariszmanc.te
No license file was found, but licenses were detected in source scan.

policy_module(polarisdoppler, 1.0);

# doppler interrupt device
type polaris_dplr_device_t;
dev_node(polaris_dplr_device_t)

# dma mmap device
type polaris_dmammap_device_t;
dev_node(polaris_dmammap_device_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdoppler.te
No license file was found, but licenses were detected in source scan.

#  
# Nov 2020, Swati Kumari  
#  
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#  
## <summary>Polaris PTPD Policy Rules.</summary>  

### <summary>Polaris PTPD Policy Rules.</summary>  
  
  #  
  # Work (read, write, ioctl) with /dev/blzi_fpga  
  #  
  ## <summary>  
  ## Domain allowed access.  
  #  
  ##  
  ## </summary>  
  #  
  # interface(`polaris_blzi_dev_use',`  
  # gen_require(`  
  # \@  
  # type device_t;  
  # type polaris_blzi_device_t;  
  # \')  
  # write_chr_files_pattern($1, device_t, polaris_blzi_device_t)  
  # read_chr_files_pattern($1, device_t, polaris_blzi_device_t)  
  # allow $1 polaris_blzi_device_t:chr_file map;  
  #')  

Found in path(s):  
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisptpdrp.if  
No license file was found, but licenses were detected in source scan.

#  
# March 2017, Victor Kamensky  
#  
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# All rights reserved  
#  
## <summary>Polaris cpp_cp Policy Rules.</summary>  

Found in path(s):  
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppcp.if  
No license file was found, but licenses were detected in source scan.
policy_module(polariscppdriver, 1.0);

gen_require('type polaris_cpp_driver_t;
')

polaris_btrace_data_manage(polaris_cpp_driver_t)
polaris_crft_data_manage(polaris_cpp_driver_t)
polaris_chasfs_manage(polaris_cpp_driver_t)
polaris_tdlresolve_read(polaris_cpp_driver_t)
polaris_tlddb_list_dirs(polaris_cpp_driver_t)
polaris_cpld_read(polaris_cpp_driver_t)
polaris_flashlib_read(polaris_cpp_driver_t)
polaris_ripc_sman_ui_serv_connect(polaris_cpp_driver_t)
polaris_cpp_process(polaris_cpp_driver_t)
polaris_cpp_dev_use(polaris_cpp_driver_t)

optional_policy('cpp_driver reads qfp executable to look at .stabs sections that contains qfp code fixups, then this fixup data is passed to kernel module to modify qfp code.
gen_require('type bin_t;
type polaris_qfp_exec_t;
')
read_files_pattern(polaris_cpp_driver_t, bin_t, polaris_qfp_exec_t)
')
polaris_icc_broken_relocations(polaris_cpp_driver_t)

# work with /dev/i2c devices
polaris_i2c_use(polaris_cpp_driver_t)
polaris_cpp_cavium_sdk_ipc_use(polaris_cpp_driver_t)

logging_send_syslog_msg(polaris_cpp_driver_t)

# LOOK AT ME: raw memory access in cavium vendor SDK
# related to octeon driver (BUG CSCvh58515)
ifdef(`crankshaft_family',`
polaris_dev_mem_use(polaris_cpp_driver_t)
')

# allow access to /tmp/octeon-remote-lock-pci***
# This is required as part of cpp_driver access of octeon chip.
# As part of the init, call is made to octeon_remote_lock()
# which requires access to the /tmp file.
ifdef(`crankshaft_family',`
polaris_cm_fp_tmp_filetrans(polaris_cpp_driver_t)
polaris_cm_fp_tmp_manage(polaris_cpp_driver_t)
')

# LOOK AT ME on overloard cpp_driver needs access to /dev/cavium_e
# and /dev/pcie0 devices, on 1ng cpp_driver needs access to
# /dev/yoda0_tree2, etc
dev_rw_generic_chr_files(polaris_cpp_driver_t)

# /dev/cpp_il on qwlc
optional_policy(`
polaris_cpp_il_dev_use(polaris_cpp_driver_t)
')

ifdef(`qwlc_platform',`
polaris_cpld_dev_use(polaris_cpp_driver_t)
')

ifdef(`katar_platform',`
polaris_cpld_dev_use(polaris_cpp_driver_t)
')

ifdef(`mcp_family',`
polaris_cpld_dev_use(polaris_cpp_driver_t)
')

optional_policy(`
polaris_cpp_htdp_dev_use(polaris_cpp_driver_t)
polaris_cbdma_dev_use(polaris_cpp_driver_t)
polaris_cpp_htdp_dev_use(polaris_cpp_driver_t)
')

Found in path(s):
# August 2017, Shawn Lu
#
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#

### <summary>Polaris odm_proxy Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppdriver.te
  No license file was found, but licenses were detected in source scan.

#
# August 2017, Shawn Lu
#
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#

policy_module(polarisbtrace, 1.0);

################################################################################
# Btrace policy
################################################################################
gen_require(`
    attribute domain;
    attribute polaris_extended_domain;
    attribute unconfined_domain_type;
`)

# persistent btrace files stored under btrace_data
type polaris_btrace_data_t;
files_type(polaris_btrace_data_t)

# allow btrace data file reside on persistent storage
polaris_pfile_type(polaris_btrace_data_t)

type polaris_fifo_stdout_t;
files_type(polaris_fifo_stdout_t)

type polaris_fifo_stdout_base_t;
files_type(polaris_fifo_stdout_base_t)

attribute polaris_btrace_data_domain;
type polaris_btrace_base_t;
files_type(polaris_btrace_base_t)

typeattribute polaris_btrace_base_t polaris_btrace_data_domain;
typeattribute polaris_btrace_data_t polaris_btrace_data_domain;

# is "trace" in tmp_t specific enough? Maybe we would need to change it in polaris
files_tmp_filetrans(polaris_extended_domain, polaris_btrace_base_t, dir, "trace")
# udev -> cat9k-ssd.mount -> unifiedfs_rsync_udev.sh -> btrace.sh might also create this dir
files_tmp_filetrans(udev_t, polaris_btrace_base_t, dir, "trace")

gen_require(
    attribute polaris_extended_domain;
    type polaris_pvp_tmp_t;
')
filetrans_pattern(polaris_extended_domain, polaris_pvp_tmp_t, polaris_btrace_base_t, dir, "trace")

# filetrans_pattern(polaris_extended_domain, polaris_btrace_base_t, polaris_fifo_stdout_base_t, dir, "fifo")
filetrans_pattern(domain, polaris_btrace_base_t, polaris_fifo_stdout_base_t, dir, "fifo")
manage_dirs_pattern(polaris_extended_domain, polaris_btrace_base_t, polaris_fifo_stdout_base_t)

polaris_utility_domain_template(btdecode)

# any polaris process except iosd can execve btdecode utility to decode its own traces
gen_require(
    attribute polaris_domain;
    type polaris_iosd_t;
')
domtrans_pattern(polaris_domain - polaris_iosd_t, polaris_btdecode_exec_t, polaris_btdecode_t)
corecmd_check_exec_shell(polaris_domain - polaris_iosd_t)

# btdecode not only reads btrace files, but also creates copy of the file
polaris_btrace_data_manage_all(polaris_btdecode_t)
polaris_btrace_persistent_data_manage(polaris_btdecode_t)
polaris_use_btrace_fifo(polaris_btdecode_t)
polaris_tdlresolve_read(polaris_btdecode_t)
polaris_boot_tmp_read(polaris_btdecode_t)
polaris_lua_read(polaris_btdecode_t)
polaris_chasfs_read(polaris_btdecode_t)
polaris_cpld_read(polaris_btdecode_t)
polaris_bootflash_manage(polaris_btdecode_t)

# lua files need to read executables to retrieve btrace meta informations
files_mmap_all_files(polaris_btdecode_t)
# could be called on trace files on persistent storage
polaris_persistent_read(polaris_btdecode_t)

# need to read executables to retrieve btrace meta informations
polaris_read_exec_domain(polaris_btdecode_t)

corecmd_exec_bin(polaris_btdecode_t)
corecmd_exec_shell(polaris_btdecode_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_btdecode_t)

# executes luajit
allow polaris_btdecode_t self:process execmem;

# tmp files created by /lua/btdecode.lua in /tmp
type polaris_btdecode_tmp_t;
files_tmp_file(polaris_btdecode_tmp_t)
files_tmp_filetrans(polaris_btdecode_t, polaris_btdecode_tmp_t, file)
manage_files_pattern(polaris_btdecode_t, polaris_btdecode_tmp_t, polaris_btdecode_tmp_t)

# /lua/btdecode.lua may call create_luid_file_db on demand
polaris_create_ldb_domtrans(polaris_btdecode_t)

# in some cases it runs with telnet /dev/ptyN as stdin/stdout
# example when executed on other node, or "monitor log profile"
# command
telnet_use_ptys(polaris_btdecode_t)

# Allow btdecode to read/write /dev/pts/*
term_use_generic_ptys(polaris_btdecode_t)

polaris_btrace_ldb_tmp_read(polaris_btdecode_t)

# Allow btdecode to watch over /bootflash/tracelogs, /vol/harddisk/tarcelogs and /flash2/CRASH/tracelogs
polaris_btrace_data_watch(polaris_btdecode_t)

# Allow btdecode to watch over /usr/binos/conf
files_watch_usr_dirs(polaris_btdecode_t)

# Allow btdecode to access UFS mounted directories for other members
optional_policy(`
polaris_ncd_tmp_read(polaris_btdecode_t)
``)

# btrace_rotate calls ftw function through create_luid_file_db utility
# that walks whole file tree in order to create btrace_luids_file.cdb
# let's have separate domain for this utility
polaris_utility_domain_template(create_ldb)

files_read_all_files(polaris_create_ldb_t)
files_getattr_all_dirs(polaris_create_ldb_t)
files_read_all_symlinks(polaris_create_ldb_t)
files_list_non_security(polaris_create_ldb_t)
files_dontaudit_list_security_dirs(polaris_create_ldb_t)
files_mmap_all_files(polaris_create_ldb_t)

# allow luid database scripts to read/write /dev/pts/*
term_use_generic_ptys(polaris_create_ldb_t)

# creates files like btrace_luids_file.cdb_20170907160108.tmp, btrace_luids_file.cdb
type polaris_ldb_tmp_t;
files_tmp_file(polaris_ldb_tmp_t)
files_tmp_filetrans(polaris_create_ldb_t, polaris_ldb_tmp_t, file)
files_tmp_filetrans(polaris_btdecode_t, polaris_ldb_tmp_t, file, "btrace_luids_file.cdb")
manage_files_pattern(polaris_create_ldb_t, polaris_ldb_tmp_t, polaris_ldb_tmp_t)
mmap_files_pattern(polaris_create_ldb_t, polaris_create_ldb_t, polaris_create_ldb_t)
polaris_use_btrace_fifo(polaris_create_ldb_t)

# in some cases it runs with telnet /dev/ptyN as stdin/stdout
# example when executed on other node, or "monitor log profile"
# command
telnet_use_ptys(polaris_create_ldb_t)

# Allowing permission to read/open/getattr/ on
# /tmp/sw/mount/*universalk9.*.SSA.pkg/usr/binos/sbin/in.telnetd
gen_require(
    type telnetd_exec_t;
')
allow polaris_btdecode_t telnetd_exec_t:file { getattr open read };

*******************************************************************************
# CLI: show platform software trace filter-binary wired
# invokes.../bin/sh /usr/binos/conf/mcp_trace_filter.sh --binary wired
*******************************************************************************

polaris_utility_domain_template(trace_filter)
polaris_bexecute_domtrans(polaris_trace_filter_t)
polaris_bexecute_domain(polaris_trace_filter_t, polaris_trace_filter_exec_t)
# mcp_trace_filter.sh runs with telnet /dev/ptyN as
# stdin/stdout if on standby
telnet_use_ptys(polaris_trace_filter_t)

# script starts rsync with mcp_chvrf.sh
polaris_chvrf_domtrans(polaris_trace_filter_t)

allow polaris_trace_filter_t self:capability { dac_override sys_resource }

# access /tmp/sw/boot/pkginfo
#  awk -v what=^.BuildPath:$pkginfo_file ~ what { print $2 } /tmp/sw/boot/pkginfo
polaris_boot_tmp_read(polaris_trace_filter_t)

polaris_chasfs_read(polaris_trace_filter_t)
polaris_disk_bootflash_read_lnk(polaris_trace_filter_t)
polaris_disk_crashinfo_getattr(polaris_trace_filter_t)
polaris_bootflash_manage(polaris_trace_filter_t)
polaris_use_btmman_fifo(polaris_trace_filter_t)
polaris_use_btrace_fifo(polaris_trace_filter_t)
polaris_smand_use_fifo(polaris_trace_filter_t)
polaris_cpld_read(polaris_trace_filter_t)
polaris_tdldb_list_dirs(polaris_trace_filter_t)
polaris_disk_harddisk_read_lnk(polaris_trace_filter_t)
kernell_read_system_state(polaris_trace_filter_t)

# read /proc/rmbonbifo files such as env_var.sh
polaris_rmonbifo_tmp_read(polaris_trace_filter_t)

# df on "/" needs fs_t:filesystem getattr
fs_getattr_xattr_fs(polaris_trace_filter_t)

#Allow mcp_trace_request.sh to access UFS mounted directories for other members
optional_policy('polaris_ncd_tmp_read(polaris_trace_filter_t)')

# allow creation/access of temporary files created by bash such as
# /tmp/sh-thd-1499428203 etc
type polaris_trace_filter_tmp_t;
files_tmp_file(polaris_trace_filter_tmp_t)
files_tmp_filetrans(polaris_trace_filter_t, polaris_trace_filter_tmp_t, file)
manage_files_pattern(polaris_trace_filter_t, polaris_trace_filter_tmp_t, polaris_trace_filter_tmp_t)

# mcp_trace_filter.sh invokes: "df /tmp/rp/tdldb" and "df /dev/shm"
fs_getattr_tmpfs(polaris_trace_filter_t)

# allow accesses to polaris lua files
polaris_lua_read(polaris_trace_filter_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_trace_filter_t)

corecmd_exec_bin(polaris_trace_filter_t)
# why does btrace show command needs to write into btrace state?
polaris_btrace_data_manage_all(polaris_trace_filter_t)
polaris_btrace_persistent_data_manage(polaris_trace_filter_t)

# Allow mcp_trace_request.sh to access NFS mounted directories for other members
# such as /tmp/ufs/harddisk/10.130.1.0
fs_getattr_nfs(polaris_trace_filter_t)

#########################################################################################################################################
# CLI: monitor log profile <iwan | wireless | wired ..>
# invokes /bin/sh /usr/binos/conf/mcp_trace_request.sh --operation monitor
#########################################################################################################################################

polaris_utility_domain_template(trace_request)

global_attr_domain_template(polaris_trace_request_t)
polaris_bexecute_domtrans(polaris_trace_request_t)
polaris_bexecute_domain(polaris_trace_request_t, polaris_trace_request_exec_t)

# Provide sys_resource capability for sys_pipe calls
allow polaris_trace_request_t self:capability sys_resource;

global_attr_domain_trace(polaris_trace_request_t)
polaris_cpld_read(polaris_trace_request_t)
polaris_disk_crashinfo_getattr(polaris_trace_request_t)
polaris_disk_bootflash_read_lnk(polaris_trace_request_t)
polaris_disk_harddisk_read_lnk(polaris_trace_request_t)
polaris_chasfs_manage(polaris_trace_request_t)

fs_getattr_xattr_fs(polaris_trace_request_t)

# can execute hostname
hostname_exec(polaris_trace_request_t)

# can execute dmesg
dmesg_domtrans(polaris_trace_request_t)

# creates archives under /crashinfo
polaris_disk_crashinfo_manage(polaris_trace_request_t)

# can tar logs to persistent all file systems (including removable file systems)
polaris_persistent_manage(polaris_trace_request_t)
polaris_removable_manage(polaris_trace_request_t)

# read and write all btrace fifo file as standard input/output.
polaris_use_btrace_fifo(polaris_trace_request_t)

# read /proc/rmonbifo files such as env_var.sh
polaris_rmonbifo_tmp_read(polaris_trace_request_t)
# copies /tmp/silent_roll_select.log into /crashinfo so that it can be tar'd into an
# archive
polaris_pvp_read_tmp_files(polaris_trace_request_t)

# read /tmp/sw/boot/base_pkg
polaris_boot_tmp_read(polaris_trace_request_t)

# in some cases mcp_trace_request.sh runs with telnet /dev/ptyN as
# stdin/stdout
telnet_use_ptys(polaris_trace_request_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_trace_request_t)

# read /proc/cmdline
kernel_read_system_state(polaris_trace_request_t)

corecmd_exec_bin(polaris_trace_request_t)

ifdef(`ngwc_family',`
optional_policy(`
polaris_ncd_tmp_read(polaris_trace_request_t)
`
')
'
')

# mcp_trace_request.sh can read all btrace files both in temp storage
# as well as in persistent storage
polaris_btrace_data_manage_all(polaris_trace_request_t)
polaris_btrace_persistent_data_manage(polaris_trace_request_t)

# Allow mcp_trace_request.sh to create and manage temporary files under /tmp
# such as /tmp/mtr_cntrl
type polaris_trace_request_tmp_t;
files_tmp_file(polaris_trace_request_tmp_t)
files_tmp_filetrans(polaris_trace_request_t, polaris_trace_request_tmp_t, file)
manage_files_pattern(polaris_trace_request_t, polaris_trace_request_tmp_t, polaris_trace_request_tmp_t)

# Allow mcp_trace_request.sh to access NFS mounted directories for other members
# such as /tmp/ufs/crashinfo/10.1.1.1
fs_getattr_nfs(polaris_trace_request_t)

# mcp_trace_request.sh invokes dmesg, which runs in dmesg_t domain needs access
# to btrace data store
gen_require(`
    type dmesg_t;
')
polaris_btrace_persistent_data_manage(dmesg_t)
# dmesg invocation in case of disk being full, # results in writing to area of disk that # requires the sys_resource capability. allow dmesg_t self:capability sys_resource;

# Set /tmp/udev_ng4k.vbd.log to be under polaris_udev_tmp_files_t label
gen_require(  
    type udev_t;  
    type polaris_udev_tmp_files_t;  
    type init_t;  
)  
files_tmp_filetrans(udev_t, polaris_udev_tmp_files_t, file, "udev_ng4k.vbd.log")  
fs_tmpfs_filetrans(udev_t, polaris_udev_tmp_files_t, file, "udev_ng4k.vbd.log")  
files_tmp_filetrans(init_t, polaris_udev_tmp_files_t, file, "udev_ng4k.vbd.log")  
fs_tmpfs_filetrans(init_t, polaris_udev_tmp_files_t, file, "udev_ng4k.vbd.log")

# Add permission for mcp_trace_request to access polaris_udev_tmp_files_t files polaris_udev_tmp_manage(polaris_trace_request_t)

# Allow ls /tmp/ufs/harddisk
optional_policy(  
    polaris_ncd_tmp_read(polaris_trace_request_t)  
)  

# Allow mcp_trace_request to get tmpfs attributes
fs_getattr_tmpfs(polaris_trace_request_t)

# allow mcp_trace_request to execute tar
allow polaris_trace_request_t self:capability { chown fowner fsetid };

**************************************************************************************************

type polaris_btrace_tmpfs_t;
files_tmpfs_file(polaris_btrace_tmpfs_t)

# btrace semaphore created by systemd-tmpfiles needs map permission
gen_require(  
    type systemd_tmpfiles_t;  
)  
mmap_files_pattern(systemd_tmpfiles_t, polaris_btrace_tmpfs_t, polaris_btrace_tmpfs_t)

# Allow polaris processes to manage level config files in tracelogs persistent  
# directory like /bootflash/tracelogs/level_config

type polaris_btrace_lvl_config_t;
files_type(polaris_btrace_lvl_config_t)

gen_require(  
    attribute polaris_domain;  
)
polaris_btrace_lvl_config_manage(polaris_domain)

optional_policy(
    polaris_cedge_tanman_tmp_manage(polaris_btdecode_t)
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbtrace.te
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
# Copyright (c) 2016-2019 by Cisco Systems, Inc.
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#

/usr/binos/conf/psvp.sh -- gen_context(system_u:object_r:polaris_psvp_exec_t,s0)
/tmp/rp/psvp -d gen_context(system_u:object_r:polaris_psvp_tmp_t,s0)
/tmp/rp/psvp/inot_fifo -p gen_context(system_u:object_r:polaris_psvp_tmp_t,s0)
/tmp/rp/psvp/pvp.pid -- gen_context(system_u:object_r:polaris_psvp_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispsvp.fc
No license file was found, but licenses were detected in source scan.

#
# July 2017, Victor Kamensky
#
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#

policy_module(polarisbexecute, 1.0);

polaris_utility_domain_template(bexecute)

polaris_utility_domain_template(chvrf)

polaris_bexecute_domtrans(polaris_chvrf_t)
polaris_chvrf_domtrans(polaris_bexecute_t)
polaris_ngio_module_session_domtrans(polaris_bexecute_t)
polaris_rom_upgrade_use_fifo(polaris_chvrf_t)

#########################################################################
# bexecute
corecmd_exec_bin(polaris_bexecute_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_bexecute_t)

dev_setattr_null_dev(polaris_bexecute_t)

polaris_btrace_data_manage(polaris_bexecute_t)
polaris_crft_data_manage(polaris_bexecute_t)
polaris_chasfs_manage(polaris_bexecute_t)
polaris_cpld_read(polaris_bexecute_t)
polaris_boot_tmp_read(polaris_bexecute_t)
polaris_rmonbifo_tmp_read(polaris_bexecute_t)
polaris_proc_rmonbifo_read(polaris_bexecute_t)
polaris_dyncfg_tmp_read(polaris_bexecute_t)
polaris_read_debug_conf(polaris_bexecute_t)
polaris_tlddb_list_dirs(polaris_bexecute_t)
polaris_disk_bootflash_read_lnk(polaris_bexecute_t)
polaris_disk_harddisk_read_lnk(polaris_bexecute_t)

# open/read /tmp/sw/rp/max_elastic_bays
polaris_pvp_read_tmp_files(polaris_bexecute_t)

# search/getattr of /tmp/udev/etc/udev
polaris_udev_tmp_list_dirs(polaris_bexecute_t)

# manage files in /tmp/pman_ports
polaris_pman_manage_tmp_files(polaris_bexecute_t)

# brelay.sh does rm -rf of "/tmp/pman_ports/gdbport/9910"
# This checks tmpfs file system attributes
#
# Denial is observed after "show platform software audit summary"
# which uses brelay to trigger corresponding audit_log.sh script
fs_getattr_tmpfs(polaris_bexecute_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_bexecute_t)

# follow /tftp/inv symlink to /tmp/chassis/local/rp/chasfs/inventory
gen_require(
    type tftpdir_rw_t;
)
read_lnk_files_pattern(polaris_bexecute_t, tftpdir_rw_t, tftpdir_rw_t)

# tries to do mkdir -p /tmp/rp/lipc, but it should exist already so
# getattr should be sufficient
polaris_lipc_getattr(polaris_bexecute_t)

# read /proc/cmdline
kernel_read_system_state(polaris_bexecute_t)

# binary tracing fifo_file as standard output
polaris_use_btrace_fifo(polaris_bexecute_t)

# write into pipe that smand created for us with popen
polaris_smand_use_fifo(polaris_bexecute_t)

allow polaris_bexecute_t self:capability { chown setgid setuid fowner net_admin };
allow polaris_bexecute_t self:process { setpgid setcap };

# temporary files created by bexecute like /tmp/get_status_type_pkg_list rp-1-0-0.20170707094059.out.log
type polaris_bexecute_tmp_t;
files_tmp_file(polaris_bexecute_tmp_t)
files_tmp_filetrans(polaris_bexecute_t, polaris_bexecute_tmp_t, file)
manage_files_pattern(polaris_bexecute_t, polaris_bexecute_tmp_t, polaris_bexecute_tmp_t, polaris_bexecute_tmp_t)

# smand calls many commands through bexec.sh
polaris_smand_domain(polaris_bexecute_t, polaris_bexecute_exec_t)

# hman invokes cpp_shm_mgr_info_show.sh which in turn invokes "mktemp -p /tmp/tmppub..."
polaris_btrace_tmppub_manage(polaris_bexecute_t)

ifdef(`nyquist_platform',`
term_use_unallocated_ttys(polaris_bexecute_t)
term_setattr_unallocated_ttys(polaris_bexecute_t)
')

ifdef(`radium_platform',`
polaris_load_usbnet_domtrans(polaris_bexecute_t)

# allow /usr/binos/conf/bexecute.sh for tcp_socket access
# due to "/bin/sh/usr/binos/conf/mcp_chvrf.sh eobc
#   /usr/binos/conf/bexecute.sh -c /usr/binos/conf/module_direct.py
#   0 bp0 PROMETHIUM-L"
gen_require(`
   type polaris_cm_rp_t;
')
allow polaris_chvrf_t polaris_cm_rp_t:tcp_socket ioctl;

# allow /usr/binos/conf/bexecute.sh for tcp_socket access
# due to "/bin/sh/usr/binos/conf/mcp_chvrf.sh eobc
#   /usr/binos/conf/bexecute.sh -c /bin/mcp_pkg_wrap rp_daemons
#   /usr/binos/conf/execute_co"
gen_require(`
```c
    type polaris_dmi_ncsshd_fwd_t;
    )
    allow polaris_chvrf_t polaris_dmi_ncsshd_fwd_t:tcp_socket ioctl;
    )

ifdef(`sumatra_platform',
polaris_load_usbnet_domtrans(polaris_bexecute_t)
')

ifdef(`nanook_platform',
polaris_load_usbnet_domtrans(polaris_bexecute_t)
')

ifdef(`supernova_platform',
polaris_load_usbnet_domtrans(polaris_bexecute_t)
')
polaris_issu_tmp_files_manage(polaris_bexecute_t)

# Unlike other platforms, quake platform has runin_exec_proc.sh script,
# which is started by xinetd in inetd_t domain,
# and needs to switch to bexecute domain.
# In turn, runin_exec_proc.sh then starts in.telnetd process which needs
# to run in telnetd_t domain, for the existing policies to do the rest.
ifdef(`quake_platform',
gen_require(
    type inetd_t;
    type telnetd_t;
    type telnetd_exec_t;
    )
polaris_bexecute_domtrans(inetd_t)
polaris_bexecute_domain(telnetd_t, telnetd_exec_t)
')

#########################################################################
# chvrf
#########################################################################
corecmd_exec_bin(polaris_chvrf_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_chvrf_t)

# read polaris vrf net namespace file(s) /var/run/netns/0
fs_read_nsfs_files(polaris_chvrf_t)

# write into pipe that various binos processes created for us with popen
polaris_smand_use_fifo(polaris_chvrf_t)
polaris_hman_use_fifo(polaris_chvrf_t)
```
polaris_dmiauthd_use_fifo(polaris_chvrf_t)
optional_policy(
polaris_cmrp_use_fifo(polaris_chvrf_t)
')
optional_policy(
polaris_dmi_ncsshd_fwd_use_fifo(polaris_chvrf_t)
')

# mcp_chvrf.sh may run into files created by bexecute
manage_files_pattern(polaris_chvrf_t, polaris_bexecute_tmp_t, polaris_bexecute_tmp_t)

# init may transition to polaris_chvrf_t - certain systemd units use
# mcp_chvrf.sh to start services
gen_require(
    type init_t;
')
polaris_chvrf_domtrans(init_t)

# mcp_chvrf.sh used to start xinetd services
gen_require(
    type inetd_t;
    type inetd_exec_t;
')
domtrans_pattern(polaris_chvrf_t, inetd_exec_t, inetd_t)

# in some cases mcp_chvrf needs to write into someone fifo stdout
# file, i.e when called from ncd.sh script
polaris_use_btrace_fifo(polaris_chvrf_t)

sysnetDomtrans_ifconfig(polaris_chvrf_t)

# during some execve calls chvrf needs list /tmp/etc
polaris_etc_list(polaris_chvrf_t)

ifdef(`ngwc_family',`
    # /tmp/rsync_log_dir/rsync_log_XXX is stdout when mcp_chvrf.sh with rsync is called
    # also /tmp/etc/installer/inot_fifo file descriptor is leaked from the script
    polaris_manage_rsync_tmplog_dir(polaris_chvrf_t)
polaris_autoupgrade_tmp_mgr_roll_man(polaris_chvrf_t)
polaris_autoupgrade_tmp_manager(polaris_bexecute_t)
')

ifdef(`mcp_family',`
    # /tmp/rsync_log_dir/rsync_log_XXX is stdout when mcp_chvrf.sh with rsync is called
    # also /tmp/etc/installer/inot_fifo file descriptor is leaked from the script
    polaris_manage_rsync_tmplog_dir(polaris_chvrf_t)
polaris_autoupgrade_tmp_mgr_roll_man(polaris_chvrf_t)
polaris_autoupgrade_tmp_manager(polaris_bexecute_t)
')
ifdef(`wlc_family',

# /tmp/rsync_log_dir/rsync_log_XXX is stdout when mcp_chvrf.sh with rsync is called
# also /tmp/etc/installer/inot_fifo file descriptor is leaked from the script
polaris_manage_rsync_tmplog_dir(polaris_chvrf_t)
polaris_autoupgrade_tmp_manage(polaris_chvrf_t)
polaris_autoupgrade_tmp_manage(polaris_bexecute_t)
')

# For "request platform software system shell" CLI, we have:
# /bin/sh /usr/binos/conf/mcp_chvrf.sh eobc /usr/binos/conf/bexecute.sh
# -c /usr/binos/conf/mcp_record_shell.sh
mcp_chvrf.sh needs read/write access to /dev/pts/1:
# allow polaris_chvrf_t telnetd_devpts_t:chr_file { read write };
telnet_use_ptys(polaris_chvrf_t)

ifdef(`nyquist_platform',

term_use_unallocated_ttys(polaris_chvrf_t)
')

# some times run with unix_stream_socket as stdin
init_ioctl_stream_sockets(polaris_chvrf_t)

#########################################################
# bexecute and mcp_chvrf.sh called from install_show.sh
#########################################################
polaris_install_show_tmp_write(polaris_bexecute_t)
polaris_install_show_tmp_write(polaris_chvrf_t)

#########################################################
# install_engine.sh uses brelay to re-launch install_engine in all FRUs.
# So, op_rp_switch_to_remote_loc_in_parallel() outputs to install tmp log file;
# check invocation-point for comms_run_on_remote_fru.
#########################################################
polaris_install_tmp_log_write(polaris_bexecute_t)
polaris_install_tmp_log_write(polaris_chvrf_t)

#########################################################
# CLI: show platform hardware cpp active infrastructure shared-memory all
# this results in hman invoking following chain of shell scrips.
# /bin/sh /usr/binos/conf/bexec.sh -c /usr/binos/conf/cpp_shm_mgr_info_show.sh
# /usr/binos/conf/bexecute.sh -c /usr/binos/conf/cpp_shm_mgr_info_show.sh
# /bin/sh /usr/binos/conf/cpp_shm_mgr_info_show.sh
# /bin/bash /usr/binos/conf/bshell.sh -S -c "show platform hardware qfp active \
# infrastructure shared-memory process cpp-control-process"
# All these are executed in polaris_bexecute_t domain and write access to following lipc
# is needed: /tmp/rp/lipc/shell_mgr_bshell_serv_socket

polaris_sman_bshell_serv_lipc_write(polaris_bexecute_t)
polaris_tdlresolve_read(polaris_bexecute_t)

# This block is policies for "sh pla so process memory r0 name iosd maps" CLI

polaris_utility_domain_template(process_maps)

polaris_bexecute_domain(polaris_process_maps_t, polaris_process_maps_exec_t)

# needs to read maps files.
domain_read_all_domains_state(polaris_process_maps_t)

# "ps" needs read access to /sys/devices/system/cpu/online
# "ps" needs read access to /proc/uptime
dev_read_sysfs(polaris_process_maps_t)
kernel_read_system_state(polaris_process_maps_t)

# need write/ioctl/getattr access for pipes like "pipe:[118396]"
polaris_hman_use_fifo(polaris_process_maps_t)

corecmd_exec_bin(polaris_process_maps_t)

# This block is policies for "request platform software system shell" CLI.
# Eventually, mcp_record_shell.sh is invoked. That needs its own domain.

polaris_utility_domain_template(platform_shell)

polaris_bexecute_domain(polaris_platform_shell_t, polaris_platform_shell_exec_t)
corecmd_exec_bin(polaris_platform_shell_t)
auth_use_nsswitch(polaris_platform_shell_t)
polaris_btrace_persistent_data_manage(polaris_platform_shell_t)
polaris_cpld_read(polaris_platform_shell_t)

# cyan libraries access /tmp/sw/boot/rmonbifo/boardsubtype
polaris_rmonbifo_tmp_read(polaris_platform_shell_t)

# pglobals.sh accesses /tmp/ufs//crashinfo on cat9k platforms
optional_policy(
    polaris_ncd_tmp_read(polaris_platform_shell_t)
)

# mcp_record_shell.sh needs read access to chasfs
polaris_chasfs_read(polaris_platform_shell_t)

# mcp_record_shell.sh needs read access to /dev/pts/0 (telnetd_devpts_t)
telnet_use_ptys(polaris_platform_shell_t)

# rsync /tmp/system_shell_access_logs/$system_shell_access_log_file
# rsync://rp0-0/chasfs/etc/system_shell_access_logs/.
gen_require(`
  type rsync_t;
  `)
rsync_entry_domtrans(polaris_platform_shell_t, rsync_t)
allow rsync_t polaris_platform_shell_t:process sigchld;
telnet_use_ptys(rsync_t)

logging_send_syslog_msg(polaris_platform_shell_t)
init_list_pid_dirs(polaris_platform_shell_t)

# when reload command is issued, needs "kill" capability
allow polaris_platform_shell_t self:capability kill;

# brelay started from telnetd as result it inherits stdin/stdout of pty opened
# by telnetd
telnet_use_ptys(polaris_bexecute_t)
gen_require(`
  type telnetd_devpts_t;
  `)
allow polaris_bexecute_t telnetd_devpts_t:chr_file setattr_chr_file_perms;
allow polaris_bexecute_t self:capability fsetid;

# mcp_record_shell.sh invokes:
# /usr/bin/script -q /harddisk/tracelogs/system_shell_R0*
# - needs access to /root/.bash_history
# - performs chmod on /dev/pts/2 (needs fsetid on self)
# - ioctl/open/read/write on /dev/ptmx
# - needs read/search access to /harddisk/tracelogs
type polaris_bash_tmp_t:
files_type(polaris_bash_tmp_t)
filetrans_pattern(domain, user_home_dir_t, polaris_bash_tmp_t, file, ".bash_history")
polaris_bash_tmp_manage(polaris_platform_shell_t)
allow polaris_platform_shell_t self:capability fsetid;
term_use_generic_ptys(polaris_platform_shell_t)
term_setattr_generic_ptys(polaris_platform_shell_t)
term_getattr_pty_fs(polaris_platform_shell_t)
term_use_ptmx(polaris_platform_shell_t)
polaris_disk_bootflash_read_lnk(polaris_platform_shell_t)
polaris_disk_harddisk_read_lnk(polaris_platform_shell_t)

# mcp_record_shell.sh invokes:
# mkdir /tmp/system_shell_access_logs
# create /tmp/system_shell_access_logs/$system_shell_access_log_file
# create /tmp/system_shell_access_logs/SHELL.Accessed_*
type polaris_platform_shell_tmp_t;
files_tmp_file(polaris_platform_shell_tmp_t)
files_tmp_filetrans(polaris_platform_shell_t, polaris_platform_shell_tmp_t, dir, "system_shell_access_logs")
files_tmp_filetrans(polaris_platform_shell_t, polaris_platform_shell_tmp_t, file)
manage_dirs_pattern(polaris_platform_shell_t, polaris_platform_shell_tmp_t, polaris_platform_shell_tmp_t)
manage_files_pattern(polaris_platform_shell_t, polaris_platform_shell_tmp_t, polaris_platform_shell_tmp_t)

# read /proc/cmdline
kernel_read_system_state(polaris_platform_shell_t)

# read /tmp/sw/boot/base_pkg
polaris_boot_tmp_read(polaris_platform_shell_t)

polaris_disk_crashinfo_getattr(polaris_platform_shell_t)

########################################################################

polaris_utility_domain_template(shell)

term_use_generic_ptys(polaris_shell_t)

domtrans_pattern(polaris_platform_shell_t, polaris_shell_exec_t, polaris_shell_t)

# reload command needs the following policies to send signal
polaris_send_signal_to_bexecute(polaris_platform_shell_t)
polaris_send_signal_to_shell(polaris_platform_shell_t)

### <desc>
### <p>
### Polaris "request platform system shell" drops into unconfined shell
### </p>
### </desc>
gen_tunable(polaris_dev_shell, true)

tunable_policy('polaris_dev_shell',
        polaris_unconfined_domain(polaris_shell_t)
    )
polaris_domain_storage_unconfined_type(polaris_shell_t)

# PLEASE LOOK AT ME do we have to many ports open
# btelnet runs under bexecute in case of guest shell console access
# command like app-hosting connect appid guestshell console
allow polaris_bexecute_t self:tcp_socket { connect create setopt }
corenet_tcp_connect_unreserved_ports(polaris_bexecute_t)
sysnet_read_config(polaris_bexecute_t)

# brelay.sh does ls /tmp/ufs//crashinfo on cat9k
allow polaris_bexecute_t self:capability dac_override;
polaris_disk_crashinfo_getattr(polaris_bexecute_t)
optional_policy('
polaris_ncd_tmp_read(polaris_bexecute_t)
'}

polaris_utility_domain_template(bconsole)

polaris_boot_tmp_read(polaris_bconsole_t)
polaris_btrace_data_manage(polaris_bconsole_t)
polaris_chasfs_read(polaris_bconsole_t)
polaris_cpld_read(polaris_bconsole_t)
polaris_proc_rmonbifo_read(polaris_bconsole_t)
polaris_rmonbifo_tmp_read(polaris_bconsole_t)
polaris_use_btrace_fifo(polaris_bconsole_t)
polaris_show_provision_temp_read(polaris_bconsole_t)

corecmd_exec_bin(polaris_bconsole_t)
polaris_bexecute_domtrans(polaris_bconsole_t)

allow polaris_bconsole_t self:process setrlimit;

# handling /var/run/agetty-iosd.pid
type polaris_bconsole_var_run_t;
files_pid_file(polaris_bconsole_var_run_t)
manage_files_pattern(polaris_bconsole_t, polaris_bconsole_var_run_t, polaris_bconsole_var_run_t)
files_pid_filetrans(polaris_bconsole_t, polaris_bconsole_var_run_t, file, "agetty-iosd.pid")

# access /dev/ttyS0
term_use_unallocated_ttys(polaris_bconsole_t)

auth_use_nsswitch(polaris_bconsole_t)

###########################################################
# This block is policies for
# "request platform software console attach switch standby RO" CLI.
# It invokes usr/binos/conf/mcp_console_attach.sh, eventually invoking
# ioucon binary, to telnet to standby.

polaris_utility_domain_template(mcp_console_attach)
polaris_bexecute_domain(polaris_mcp_console_attach_t, polaris_mcp_console_attach_exec_t)
corecmd_exec_bin(polaris_mcp_console_attach_t)
polaris_bexecute_domtrans(polaris_mcp_console_attach_t)
allow polaris_mcp_console_attach_t self:process setpgid;
polaris_chasfs_read(polaris_mcp_console_attach_t)
telnet_use_ptys(polaris_mcp_console_attach_t)

# working with ioucon binary, invoked by usr/binos/conf/mcp_console_attach.sh
polaris_utility_domain_template(ioucon)
polaris_bexecute_domain(polaris_ioucon_t, polaris_ioucon_exec_t)
allow polaris_ioucon_t self:unix_dgram_socket create_socket_perms;
polaris_iosd_dgram_send(polaris_ioucon_t)
polaris_iosd_tmp_file_use(polaris_ioucon_t)
telnet_use_ptys(polaris_ioucon_t)

# "test platform hardware eobc ping" invokes eobc_ping.sh
# send sigchld when it is done
gen_require(
    type ping_t;
')
allow ping_t polaris_bexecute_t:process sigchld;
polaris_confdomtrans(polaris_bexecute_t)

# app-hosting connect appid <-> console/session
# Beluga/Meraki container
ifdef(`ms_platform',`
polaris_iox_container_domtrans(polaris_bexecute_t)
')

# Bottlenose/Meraki container
ifdef(`bottlenose_platform',`
polaris_iox_container_domtrans(polaris_bexecute_t)
')

# IOx downloads the application package using network protocol (e.g http)
gen_require(
    type fifo_var_run_t;
')
allow polaris_bexecute_t fifo_var_run_t:fifo_file read;

# on vxe platforms with MBRv2/MBRv4/GPTv1/GPTv3 partition layouts
# /config is file system and export_mcp_environment tries to create it anyway
polaris_getattr_disk_config(polaris_bexecute_t)

##########################################
# This block is policies for
# "hw-module session <x/y>" CLI.
# It invokes usr/binos/conf/ngio_module_session.sh, eventually invoking
# open64.
polaris_utility_domain_template(ngio_module_session)
polaris_bexecute_domain(polaris_ngio_module_session_t, polaris_ngio_module_session_exec_t)
corecmd_exec_bin(polaris_ngio_module_session_t)
polaris_bexecute_domtrans(polaris_ngio_module_session_t)
term_use_unallocated_ttys(polaris_ngio_module_session_t)
dev_read_sysfs(polaris_ngio_module_session_t)
allow polaris_ngio_module_session_t self:process setsched;
auth_map_passwd(polaris_ngio_module_session_t)
polaris_chasfs_read(polaris_ngio_module_session_t)
polaris_cpld_read(polaris_ngio_module_session_t)
telnet_use_ptys(polaris_ngio_module_session_t)

# work with /tmp files
type polaris_ngio_module_session_tmp_t;
files_tmp_file(polaris_ngio_module_session_tmp_t)
manage_dirs_pattern(polaris_ngio_module_session_t, tmp_t, polaris_ngio_module_session_tmp_t)
manage_files_pattern(polaris_ngio_module_session_t, polaris_ngio_module_session_tmp_t, polaris_ngio_module_session_tmp_t)
manage_fifo_files_pattern(polaris_ngio_module_session_t, polaris_ngio_module_session_tmp_t, polaris_ngio_module_session_tmp_t)
files_tmp_filetrans(polaris_ngio_module_session_t, polaris_ngio_module_session_tmp_t, { file dir })

# CLI: show platform software tech-support
# requires bshell execution
# /bin/bash /usr/binos/conf/bshell.sh -S -P ---- __CMD__ ---- -f
/usr/binos/conf/mcp_tech_support_command_file.txt
gen_require(
  type polaris_bshell_t;
  type polaris_bshell_exec_t;
')
domtrans_pattern(polaris_bexecute_t, polaris_bshell_exec_t, polaris_bshell_t)
# scripts stdin is set by hman and needs write/append access to pipes like pipe:[80159]
polaris_hman_use_fifo(polaris_bshell_t)
# in case of ISR4k show tech input for bshell dynamically created
polaris_tech_support_tmp_read(polaris_bshell_t)

# CLI: show software authenticity running
# this results in hman invoking below command:
# /bin/sh /usr/binos/conf/bexec.sh -c "/usr/bin/code_sign_verify show3 abcd "
polaris_code_verify_domtrans(polaris_bexecute_t)

# stdin is inherited when bexecute calls fts_client
polaris_fts_client_tmp_manage(polaris_bexecute_t)

# disk space full issue
allow polaris_platform_shell_t self:capability sys_resource;

# CLI: request platform software sdwan admin-tech

# executes: /bin/sh vconfd_script_show_installerfs.sh
polaris_confd_unix_stream_stdio_use(polaris_bexecute_t)

# executes: bash bshell.sh -S -P ---- __CMD__ ---- -f /tmp/sdwan_tech_support_command_file_out.txt
polaris_confd_unix_stream_stdio_use(polaris_bshell_t)
# write to /tmp/out_$(date "+%Y%m%d%H%M%S%N") for base version verification on smu install
polaris_install_tmp_write(polaris_bexecute_t)

# Nutella-XE install image
/bin/bash /usr/binos/conf/brelay.sh -E rp 0 16023 -c /usr/binos/conf/install_engine.sh --operation install_commit --isremote
polaris_conf_fd_tmp_use_fifo(polaris_bexecute_t)

#awk -v what=^.BuildPath: $pkginfo_file ~ what { print $2 } /tmp/sw/rp/0/0/rp_security/mount/.pkginfo
polaris_read_packages_conf(polaris_bexecute_t)

dev_read_rand(polaris_bexecute_t)

#/usr/bin/python3 /usr/binos/conf/issu_client_comp.py compare -b /usr/binos/conf/base_clients.txt -n /bootflash/.installer/current_clients.txt
polaris_disk_install_read(polaris_bexecute_t)

# allow "/usr/binos/conf/module_direct.py" (bexecute_t) to execute
# "/usr/sbin/ethtool" (ifconfig_exec_t) when invoking CLI
# "show platform1 hardware sublot <slot/card> backplane statistics"
sysnet_domtrans_ifconfig(polaris_bexecute_t)
# Write into pipe created by stack_mgr
# Parent Child Relation - stack_mgr -> mcp_trace_request -> brelay (to relay output to active)
optional_policy(
    polaris_use_stack_mgr_fifo(polaris_bexecute_t)
)
polaris_etc_list(polaris_bexecute_t)
#manage /tmp/existing_rommon_info file
polaris_manage_rommon_info(polaris_capsule_upgrade_t)

#Policies for "upgrade rom-monitor capsule primary switch 1 R0" CLI
#/usr/binos/conf/bexecute.sh -c /usr/binos/conf/cat9k-primary-capsule-upgrade.sh
#cat9k-primary-capsule-upgrade.sh have to run in its own domain
polaris_utility_domain_template(capsule_upgrade)
polaris_bootflash_manage(polaris_capsule_upgrade_t)

type polaris_capsule_upgrade_log_t;
polaris_pfile_type(polaris_capsule_upgrade_log_t)
polaris_capsule_upgrade_log_use(polaris_capsule_upgrade_t)
polaris_bexecute_domain(polaris_capsule_upgrade_t, polaris_capsule_upgrade_exec_t)
polaris_bexecute_domtrans(polaris_capsule_upgrade_t)
corecmd_exec_bin(polaris_capsule_upgrade_t)
auth_use_nsswitch(polaris_capsule_upgrade_t)
polaris_chasfs_manage(polaris_capsule_upgrade_t)
polaris_cpld_read(polaris_capsule_upgrade_t)
telnet_use_ptys(polaris_capsule_upgrade_t)

polaris_rommon_device_read(polaris_capsule_upgrade_t)

# For "/bin/sh /usr/binos/conf/mcp_chvrf.sh eobc
# /usr/binos/conf/bexecute.sh -c /usr/binos/conf/install_engine.sh
# --operation install_c”.
# uses unix stream socket created by confd as standard I/O.
polaris_confd_unix_stream_stdio_use(polaris_chvrf_t)

############################################################################
# mcp_dmesg_service
############################################################################
polaris_utility_domain_template(mcp_dmesg)
polaris_bexecute_domain(polaris_mcp_dmesg_t, polaris_mcp_dmesg_exec_t)
polaris_bexecute_dmomtr(polaris_mcp_dmesg_t)
dmesg_dmomtr(polaris_mcp_dmesg_t)
corecmd_exec_bin(polaris_mcp_dmesg_t)
polaris_smand_use_fifo(polaris_mcp_dmesg_t)
auth_use_nsswitch(polaris_mcp_dmesg_t)
telnet_use_ptys(polaris_mcp_dmesg_t)

# allow creation/access of temporary files like /tmp/sh-thd-1608024622
type polaris_mcp_dmesg_tmp_t;
files_type(polaris_mcp_dmesg_tmp_t)
files_tmp_file(polaris_mcp_dmesg_tmp_t)
files_tmp_filetrans(polaris_mcp_dmesg_t, polaris_mcp_dmesg_tmp_t, file)
manage_files_pattern(polaris_mcp_dmesg_t, polaris_mcp_dmesg_tmp_t, polaris_mcp_dmesg_tmp_t)
fs_getattr_tmpfs(polaris_mcp_dmesg_t)

# allowing reload_fru.sh for doing systemctl list-jobs
systemd_config_generic_services(polaris_bexecute_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbexecute.te
No license file was found, but licenses were detected in source scan.

#
# July 2017, Victor Kamensky
#
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Open Source Used In BGP TE Controller Version 4.3.0 6207

```
#

/dev/quack -c gen_context(system_u:object_r:polaris_quack_device_t,s0)

Found in path(s):
*/opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisquack.fc
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#
# March 2017, Victor Kamensky
#
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#

policy_module(polarisdbm, 1.0);

gen_require('    type polaris_dbm_t;
')

################################################################################
# mqipc manual, one that missing in platform tdl file
################################################################################

ifdef('nyquist_platform',
    gen_require('        type polaris_bt_logger_dbm_mqipc_t;
')
    # dbm may start first and create this mqipc channel
    polaris_mqipc_create_name(polaris_dbm_t, polaris_bt_logger_dbm_mqipc_t, bt_logger_dbm)
')

polaris_btrace_data_manage(polaris_dbm_t)
polaris_crft_data_manage(polaris_dbm_t)
polaris_chasfs_manage(polaris_dbm_t)
polaris_tdlresolve_read(polaris_dbm_t)
polaris_tdlldb_list_dirs(polaris_dbm_t)
polaris_cpld_read(polaris_dbm_t)
polaris_flashlib_read(polaris_dbm_t)
polaris_ripc_sman_ui_serv_connect(polaris_dbm_t)
polaris_db_tdl ldb_dir_use(polaris_dbm_t)
polaris_libeiutil_build_config_directory(polaris_dbm_t)
polaris_cfg_data_manage(polaris_dbm_t)
```
allow polaris_dbm_t self:capability { sys_resource }
allow polaris_dbm_t self:process setrlimit;

# dbm listen on 9090 port; in case of ultra only in tcp6
corenet_tcp_bind_websm_port(polaris_dbm_t)
polaris_dyncfg_tmp_read(polaris_dbm_t)

allow polaris_dbm_t self:capability dac_override;

# port 9090, is it exclusively wnc_mgd port?
corenet_tcp_bind_polaris_wnc_mgd_port(polaris_dbm_t)
allow polaris_dbm_t self:tcp_socket {shutdown};

# working dbm persistent files in /bootflash/.dbpersist
type polaris_disk_dbm_t;
polaris_disk_type(polaris_disk_dbm_t)
polaris_tdldbpersist_setup(polaris_dbm_t)

# dbm on active syncs with /bootflash/.dbpersist on standby
# related call dbm_persist_binary_cfg_sync_to_standby()
gen_require('  
    type rsync_t;
')
rsync_entry_domtrans(polaris_dbm_t, rsync_t)
polaris_tmp_tdldb_persist_setup(polaris_dbm_t)
logging_send_syslog_msg(polaris_dbm_t)
corecmd_exec_bin(polaris_dbm_t)
corecmd_exec_shell(polaris_dbm_t)

# dbm needs access to "/flash1/user/.installer/install_issu_state"
polaris_disk_install_read(polaris_dbm_t)

# runs over /usr/bin/rsync
corenet_tcp_connect_rsync_port(polaris_dbm_t)

# tar invocation in dbm code necessitates this permission
auth_map_passwd(polaris_dbm_t)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdbm.te
No license file was found, but licenses were detected in source scan.

#  
# Sep 2020, Sridhar C  
#  
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#  
/tmp/tlscd(/.*)? gen_context(system_u:object_r:polaris_tlscd_uds_t,s0)

Found in path(s):  
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristlscd.fc
No license file was found, but licenses were detected in source scan.

#  
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#  
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#  
/tmp/fp/lipc -d gen_context(system_u:object_r:polaris_lipc_t,s0)
/tmp/np/lipc -d gen_context(system_u:object_r:polaris_lipc_t,s0)
/tmp/cc/lipc -d gen_context(system_u:object_r:polaris_lipc_t,s0)

Found in path(s):  
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislipc.fc
No license file was found, but licenses were detected in source scan.

#  
# April 2017, Victor Kamensky  
#  
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#  
policy_module(polarisdmmincsshdfwd, 1.0);

gen_require('  
    type polaris_dmi_ncsshd_fwd_t;
')

polaris_btrace_data_manage(polaris_dmi_ncsshd_fwd_t)  
polaris_chasfs_manage(polaris_dmi_ncsshd_fwd_t)  
polaris_tdlresolve_read(polaris_dmi_ncsshd_fwd_t)  
polaris_tdlldb_list_dirs(polaris_dmi_ncsshd_fwd_t)  
polaris_cpld_read(polaris_dmi_ncsshd_fwd_t)  
polaris_flashlib_read(polaris_dmi_ncsshd_fwd_t)
polaris_rip_sman_ui_serv_connect(polaris_dmi_ncsshd_fwd_t)

allow polaris_dmi_ncsshd_fwd_t self:unix_stream_socket create_stream_socket_perms;

type polaris_dmi_ncsshd_log_t;
files_tmp_file(polaris_dmi_ncsshd_log_t)
manage_files_pattern(polaris_dmi_ncsshd_fwd_t, polaris_dmi_ncsshd_log_t, polaris_dmi_ncsshd_log_t)
manage_sock_files_pattern(polaris_dmi_ncsshd_fwd_t, polaris_dmi_ncsshd_log_t, polaris_dmi_ncsshd_log_t)
files_tmp_filetrans(polaris_dmi_ncsshd_fwd_t, polaris_dmi_ncsshd_log_t, { file sock_file })

logging_send_syslog_msg(polaris_dmi_ncsshd_fwd_t)

polaris_cpld_read(polaris_dmi_ncsshd_fwd_t)

# allow to execute execute_confd_cli.sh under confd domain
polaris_confd_domtrans(polaris_dmi_ncsshd_fwd_t)

# starts bexec.sh
polaris_bexecute_domtrans(polaris_dmi_ncsshd_fwd_t)
polaris_send_signal_to_bexecute(polaris_dmi_ncsshd_fwd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmincsshdfwd.te
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#
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#
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#

/usr/bin/os/conf/cyan_init.sh -- gen_context(system_u:object_r:polaris_dyncfg_exec_t,s0)
/usr/bin/os/conf/dyncfg_setup.sh -- gen_context(system_u:object_r:polaris_dyncfg_exec_t,s0)

# temp files created by cyan_init.sh
/tmp/cyan/cyan.log gen_context(system_u:object_r:polaris_dyncfg_log_t,s0)
/tmp/cyan/cyan_runtime.log gen_context(system_u:object_r:polaris_dyncfg_log_t,s0)

/tmp/cyan(/.*)? gen_context(system_u:object_r:polaris_dyncfg_tmp_t,s0)
/tmp/cyan\.lock gen_context(system_u:object_r:polaris_dyncfg_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscyan.fc
No license file was found, but licenses were detected in source scan.

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#

## <summary>Polaris bexecute Policy Rules.</summary>

########################################
## <summary>
## Execute bexecute in the polaris_bexecute domain.
## </summary>
## <param name="domain">
## Domain allowed to transition.
## </param>
#
interface(`polaris_bexecute_domtrans',`
    gen_require(`
        type polaris_bexecute_t, polaris_bexecute_exec_t;
    ')
)

corecmd_search_bin($1)
domtrans_pattern($1, polaris_bexecute_exec_t, polaris_bexecute_t)
')

########################################
## <summary>
## Allow domain to be started by bexecute with transition into specific service domain.
## </summary>
## <param name="domain">
## Type to be used to run utility.
## </param>
## <param name="entry_point">
## Type of the program to be used as an entry point to this domain.
## </param>
interface(`polaris_bexecute_domain',`
    gen_require(`
        type polaris_bexecute_t;
    ')
)
domtrans_pattern(polaris_bexecute_t, $2, $1)
### <summary>
## Execute mcp_chvrf.sh in the polaris_chvrf domain.
### </summary>
### <param name="domain">
### <summary>
## Domain allowed to transition.
### </summary>
### </param>
#
interface('polaris_chvrf_domtrans',
gen_require('type polaris_chvrf_t, polaris_chvrf_exec_t;
')
corecmd_search_bin($1)
domtrans_pattern($1, polaris_chvrf_exec_t, polaris_chvrf_t)
')

### <summary>
## Execute mcp_chvrf.sh in the caller domain.
### </summary>
### <param name="domain">
### <summary>
## Domain allowed access.
### </summary>
### </param>
#
interface('polaris_exec_chvrf',
gen_require('type polaris_chvrf_exec_t;
')
corecmd_search_bin($1)
can_exec($1, polaris_chvrf_exec_t)
')

### <summary>
## Execute ngio_module_session.sh in the polaris_ngio_module_session domain
### </summary>
### <param name="domain">
### <summary>
## Domain allowed to transition.
### </summary>
### </param>
interface('polaris_ngio_module_session_domtrans',
    gen_require(
        type polaris_ngio_module_session_t, polaris_ngio_module_session_exec_t;
    )
)
manage_dirs_pattern($1, user_home_dir_t, polaris_bash_tmp_t)
manage_files_pattern($1, polaris_bash_tmp_t, polaris_bash_tmp_t)

')

########################################
## <summary>
##	Execute bexecute in the polaris_bexecute domain.
## </summary>
## <param name="domain">
##	<summary>
##	Domain allowed to transition.
##	</summary>
## </param>
#
# interface('polaris_bconsole_domtrans',`
# gen_require('`
# type polaris_bconsole_t, polaris_bconsole_exec_t;
# ')

corecmd_search_bin($1)
domtrans_pattern($1, polaris_bconsole_exec_t, polaris_bconsole_t)

')

########################################
## <summary>
##      Send messages to ioucon unix datagram sockets.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_ioucon_dgram_send',`
# gen_require('`
# type polaris_ioucon_t;
# ')
#
# allow $1 polaris_ioucon_t:unix_dgram_socket sendto;
#
')

########################################
## <summary>
##     Execute cat9k-primary-capsule-upgrade.sh , cat9k-capsule-upgrade.sh in its own domain.
## </summary>
## <param name="domain">
##     <summary>
##     Domain allowed to transition.
interface('polaris_capsule_upgrade_domtrans',
    gen_require(
        type polaris_capsule_upgrade_t, polaris_capsule_upgrade_exec_t;
    '))

corecmd_search_bin($1)
domtrans_pattern($1, polaris_capsule_upgrade_exec_t, polaris_capsule_upgrade_t)
')

interface('polaris_capsule_upgrade_log_use',
    gen_require(
        type polaris_disk_bootflash_t;
        type polaris_capsule_upgrade_log_t;
    '))

allow $1 polaris_capsule_upgrade_log_t:filesystem getattr;

filetrans_pattern($1, polaris_disk_bootflash_t, polaris_capsule_upgrade_log_t, file, "capsule-upgrade.log")
manage_files_pattern($1, polaris_capsule_upgrade_log_t, polaris_capsule_upgrade_log_t)
create_files_pattern($1, polaris_capsule_upgrade_log_t, polaris_capsule_upgrade_log_t)
getattr_files_pattern($1, polaris_capsule_upgrade_log_t, polaris_capsule_upgrade_log_t)
append_files_pattern($1, polaris_capsule_upgrade_log_t, polaris_capsule_upgrade_log_t)
allow $1 polaris_capsule_upgrade_log_t:file map;
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbexecute.if
No license file was found, but licenses were detected in source scan.

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#
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#
policy_module(polarisobfl, 1.0);

#############################################################################
# Obfl policy
#############################################################################

type polaris_obfl_data_t;
files_type(polaris_obfl_data_t)

gen_require(
    type init_t;
    type default_t;
    type tmp_t;
    attribute domain;
)

filetrans_pattern(domain, default_t, polaris_obfl_data_t, lnk_file, "obfl")
# edison uses obfl0 name
filetrans_pattern(domain, default_t, polaris_obfl_data_t, lnk_file, "obfl0")
# /tmp/obfl
files_tmp_filetrans(domain, polaris_obfl_data_t, dir, "obfl")

# allow obfl data file reside on persistent storage
polaris_pfile_type(polaris_obfl_data_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisobfl.te
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#
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#

policy_module(polarisbtlogger, 1.0);

gen_require(
    type polaris_bt_logger_t;
)

polaris_btrace_data_manage(polaris_bt_logger_t)
polaris_crft_data_manage(polaris_bt_logger_t)
polaris_chasfs_manage(polaris_bt_logger_t)
polaris_tdlresolve_read(polaris_bt_logger_t)
polaris_tdlldb_list_dirs(polaris_bt_logger_t)
polaris_cpld_read(polaris_bt_logger_t)
polaris_flashlib_read(polaris_bt_logger_t)

circular_ripc_sman_ui_serv_connect(polaris_bt_logger_t)

circular_db_tdlldb_dir_use(polaris_bt_logger_t)

#########################################################################
# mqipc manual, one that missing in platform tdl file
#########################################################################

# mq.-bt_logger_dbm
type polaris_bt_logger_dbm_mqipc_t;
polaris_mqipc_type(polaris_bt_logger_dbm_mqipc_t)

# mq.-bt_logger_fman-rp
type polaris_bt_logger_fman_rp_mqipc_t;
polaris_mqipc_type(polaris_bt_logger_fman_rp_mqipc_t)

# mq.-bt_logger_iosd
type polaris_bt_logger_iosd_mqipc_t;
polaris_mqipc_type(polaris_bt_logger_iosd_mqipc_t)

# mq.-bt_logger_smd
type polaris_bt_logger_smd_mqipc_t;
polaris_mqipc_type(polaris_bt_logger_smd_mqipc_t)

polaris_mqipc_create_name(polaris_bt_logger_t, polaris_bt_logger_dbm_mqipc_t, bt_logger_dbm)
polaris_mqipc_create_name(polaris_bt_logger_t, polaris_bt_logger_fman_rp_mqipc_t, bt_logger_fman-rp)
polaris_mqipc_create_name(polaris_bt_logger_t, polaris_bt_logger_iosd_mqipc_t, bt_logger_iosd)
polaris_mqipc_create_name(polaris_bt_logger_t, polaris_bt_logger_smd_mqipc_t, bt_logger_smd)

allow polaris_bt_logger_t self:capability { dac_override };

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbtlogger.te
No license file was found, but licenses were detected in source scan.

#
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#
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#
#
## <summary>Polaris gnmib Policy Rules.</summary>

#########################################################################
## <summary>
### Create rule for ndbutils file ".l.schema_use.gnmib" under /var/lock/ndbutil
### </summary>
### <param name="domain">
###   <summary>
###   Domain allowed access.
###   </summary>
### </param>
#
# interface(`polaris_gnmib_ndbutil_lock',
  gen_require(
    type polaris_confndbutil_lock_t;
    type polaris_gnmib.ndbutil_t;
  ')
)

filetrans_pattern($1, polaris_confndbutil_lock_t, polaris_gnmib.ndbutil_t, file, $2)
manage_files_pattern($1, polaris_confndbutil_lock_t, polaris_gnmib.ndbutil_t)

allow $1 polaris_gnmib.ndbutil_t:file { watch watch_reads };
')

########################################################################
### <summary>
### Allow reading gnoi image files
### </summary>
### <param name="domain">
###   <summary>
###   Domain allowed access.
###   </summary>
### </param>
#
# interface(`polaris_gnmib.gnoi_images_read',
  gen_require(
    type polaris_gnmib.gnoi_images_t;
  ')
)

read_files_pattern($1, polaris_gnmib.gnoi_images_t, polaris_gnmib.gnoi_images_t)
  mmap_files_pattern($1, polaris_gnmib.gnoi_images_t, polaris_gnmib.gnoi_images_t)
')

########################################################################
### <summary>
### Allow manage gnoi image files
### </summary>
### <param name="domain">
###   <summary>
###   Domain allowed access.
###   </summary>
### </param>
#
interface('polaris_gnmib_gnoi_images_manage',
    gen_require(
        type polaris_gnmib_gnoi_images_t;
    )
)

manage_files_pattern($1, polaris_gnmib_gnoi_images_t, polaris_gnmib_gnoi_images_t)
mmap_files_pattern($1, polaris_gnmib_gnoi_images_t, polaris_gnmib_gnoi_images_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisgnmib.if
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#
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#
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#

policy_module(polaristdldb, 1.0);

# Polaris tdldb (infra/tdllib)
type polaris_tdldb_t;
polaris_tdldb_type(polaris_tdldb_t)

attribute polaris_tdldb;

# any process creating tdldb in /tmp/rp/tdldb should transition into its domain
gen_require(
    attribute domain;
')
files_tmp_filetrans(domain, polaris_tdldb_t, dir, "tdldb")

# DB_DIR database is not described in TDL
type polaris_dir_db_tdldb_t;
polaris_tdldb_type(polaris_dir_db_tdldb_t)

type polaris_tdldb_persist_t;
polaris_tdldb_type(polaris_tdldb_persist_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristdldb.te
No license file was found, but licenses were detected in source scan.
policy_module(polarislfts, 1.0);

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#
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#

type polaris_lfts_device_t;
dev_node(polaris_lfts_device_t)

# "ip netns add foo" commands mounts "foo" under "/var/run/netns"
gen_require(
    type ifconfig_t;
    type var_run_t;
)
allow ifconfig_t var_run_t:dir mounton;

# "ip netns exec 16 sysctl -w net.core.vrfid=16" commands mounts "16" to "/sys"
gen_require(
    type ifconfig_t;
    type unlabeled_t;
)
allow ifconfig_t unlabeled_t:dir mounton;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislfts.te
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#

/var/tmp/trace/nginx_access.log  gen_context(system_u:object_r:httpd_log_t, s0)
/var/tmp/trace/nginx_error.log   gen_context(system_u:object_r:httpd_log_t, s0)
/var/tmp/trace/nginx.pid        gen_context(system_u:object_r:httpd_log_t, s0)
/var/tmp/trace/nginx.lock.accept gen_context(system_u:object_r:httpd_log_t, s0)
/var/tmp/trace/nginx.lock.cookie_tbl gen_context(system_u:object_r:httpd_log_t, s0)
/var/tmp/trace/nginx.lock.login_count gen_context(system_u:object_r:httpd_log_t, s0)
/tmp/nginx_aaa      gen_context(system_u:object_r:polaris_nginx_tmp_t, s0)
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnginx.fc
No license file was found, but licenses were detected in source scan.

#
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#
#

policy_module(polarismdtpubd, 1.0);

gen_require(
    type polaris_mdt_pubd_t;
)

polaris_btrace_data_manage(polaris_mdt_pubd_t)
polaris_chasfs_manage(polaris_mdt_pubd_t)
polaris_tdlresolve_read(polaris_mdt_pubd_t)
polaris_tdldb_list_dirs(polaris_mdt_pubd_t)
polaris_cpld_read(polaris_mdt_pubd_t)
polaris_lua_read(polaris_mdt_pubd_t)
polaris_flashlib_read(polaris_mdt_pubd_t)
polaris_ripc_sman_ui_serv_connect(polaris_mdt_pubd_t)

polaris_db_tdl_db_dir_use(polaris_mdt_pubd_t)

#For initializing capabilities DB cfg file
polaris_libiutil_build_config_directory(polaris_mdt_pubd_t)
polaris_cfg_data_manage(polaris_mdt_pubd_t)

optional_policy(
  # deals with /dev/shm/confd setup (schema and pid)
polaris_confd_shm_setup(polaris_mdt_pubd_t)
  # and allow read shared schema
polaris_confd_shared_schema_read(polaris_mdt_pubd_t)
  # read /proc/confd_pid/exe file
polaris_confd_read(polaris_mdt_pubd_t)
)

# pubd could be configured to connect any port on DNAC
# please see cndp_setup_tcp_socket function
polaris_lfts_dev_use(polaris_mdt_pubd_t)
corenets_tcp_connect_all_ports(polaris_mdt_pubd_t)

polaris_ndbload_lock_use(polaris_mdt_pubd_t)

corenets_tcp_connect_polaris_port(polaris_mdt_pubd_t)
corenets_tcp_bind_polaris_interceptor_port(polaris_mdt_pubd_t)
corenets_tcp_bind_all_unreserved_ports(polaris_mdt_pubd_t)

allow polaris_mdt_pubd_t self:capability { dac_override dac_read_search };

# create ndbutil directory under /var/lock
polaris_confd_ndbutil_create(polaris_mdt_pubd_t)
polaris_nbdutil_lock_template(polaris_mdt_pubd_t, pubd, ".l.schema_use.pubd")

# grpc library through sysconf accesses /sys/devices/system/cpu
# to get number of CPUs
dev_read_sysfs(polaris_mdt_pubd_t)

# handling /tmp/rp/.telemetry and /tmp/rp/telemetry
type polaris_mdt_pubd_tmp_t;
files_tmp_file(polaris_mdt_pubd_tmp_t)
files_tmp_filetrans(polaris_mdt_pubd_t, polaris_mdt_pubd_tmp_t, dir, "telemetry")
files_tmp_filetrans(polaris_mdt_pubd_t, polaris_mdt_pubd_tmp_t, dir, ".telemetry")
gen_require(
  type tmp_t;
manage_dirs_pattern(polaris_mdt_pubd_t, { tmp_t polaris_mdt_pubd_tmp_t }, polaris_mdt_pubd_tmp_t)
manage_files_pattern(polaris_mdt_pubd_t, polaris_mdt_pubd_tmp_t, polaris_mdt_pubd_tmp_t)

# from evconfd_dynamic_load
polaris_confd_shared_schema_watch(polaris_mdt_pubd_t)

# allow grpc library to shutdown socket
allow polaris_mdt_pubd_t self:tcp_socket create_socket_perms;

# allow pubd to access logging facility
logging_send_syslog_msg(polaris_mdt_pubd_t)

# enabling access to /etc/etns and /etc/hosts
polaris_namespace_set_netns_with_etc(polaris_mdt_pubd_t)
gen_require(
  type net_conf_t;
  )
files_etc_filetrans(polaris_mdt_pubd_t, net_conf_t, file, "hosts")
files_etc_filetrans(polaris_mdt_pubd_t, net_conf_t, file, "resolv.conf")
files_etc_filetrans(polaris_mdt_pubd_t, net_conf_t, dir, "netns")

# allow pubd to create, modify, delete system network config files/dir
sysnet_manage_config(polaris_mdt_pubd_t)
sysnet_manage_config_dirs(polaris_mdt_pubd_t)

# allow pubd to connect socket
allow polaris_mdt_pubd_t self:udp_socket connect;

# allow pubd (object net_conf_t) to watch /etc/etns/1/resolv.conf
allow polaris_mdt_pubd_t net_conf_t:{file dir} watch;

# read access to /dev/random
dev_read_rand(polaris_mdt_pubd_t)

#DB persistence
polaris_tlddbpersist_setup(polaris_mdt_pubd_t)
polaris_tmp_tlddb_persist_setup(polaris_mdt_pubd_t)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismdtpubd.te
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dnl

# Mar 2020, Manu Roy

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dnl Hellcat Platform Max Bay Limits

max_bay_map_set(`rp', `per_bay', 0)
max_bay_map_set(`cc', `per_bay', 0)
max_bay_map_set(`fp', `per_bay', 0)

---

policy_module(polarisperiodic, 1.0);

gen_require(`
    type polaris_periodic_t;
`)

corecmd_exec_bin(polaris_periodic_t)
corecmd_exec_shell(polaris_periodic_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_periodic_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_periodic_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_periodic_t)
# read /etc/init.d/common-utility-functions
init_read_script_files(polaris_periodic_t)

fs_getattr_all_fs(polaris_periodic_t)

# work with /tmp files
type polaris_periodic_tmp_t;
files_tmp_file(polaris_periodic_tmp_t)
manage_files_pattern(polaris_periodic_t, tmp_t, polaris_periodic_tmp_t)
files_tmp_filetrans(polaris_periodic_t, polaris_periodic_tmp_t, file)

allow polaris_periodic_t self:capability sys_resource;
polaris_btrace_data_manage(polaris_periodic_t)
polaris_chasfs_manage(polaris_periodic_t)
polaris_cpld_read(polaris_periodic_t)
polaris_proc_rmonbifo_read(polaris_periodic_t)
polaris_rmonbifo_tmp_read(polaris_periodic_t)
polaris_boot_tmp_read(polaris_periodic_t)
polaris_read_debug_conf(polaris_periodic_t)
polaris_persistent_manage(polaris_periodic_t)

# reads /tmp/issu_proc
polaris_install_tmp_read(polaris_periodic_t)

optional_policy(
  polaris.ncd.tmp_read(polaris_periodic_t)
)
# "install add file" CLI triggers logger sending syslog messages
logging_send_syslog_msg(polaris_periodic_t)
# "install add file" CLI triggers logger executing "pidof linux_iosd-image" which
# read "/sys/devices/system/cpu/online"
dev_read_sysfs(polaris_periodic_t)
#
#/usr/bin/os/conf/cleanup.sh do_cleanup does packages and other umount calls
mount_domtrans(polaris_periodic_t)
polaris_sw_data_manage(polaris_periodic_t)

# determine if the installer is executing
domain_read_all_domains_state(polaris_periodic_t)

# access to /cdrom0/ when *ova image is booted during
# first instance of vwlc on ucs server
polaris_removable_read(polaris_periodic_t)

Found in path(s):
  */opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisperiodic.te
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#  
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#  
/tmp/pm_post_result -- gen_context(system_u:object_r:polaris_ngwc_plfm_mgr_tmp_t,s0)  
/tmp/microcode_update(/.*)? gen_context(system_u:object_r:polaris_ngwc_plfm_mgr_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwcplfmmgr.fc  
No license file was found, but licenses were detected in source scan.

#  
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#  
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#  
policy_module(polarisfpm, 1.0);

    gen_require(  
        type polaris_fpm_t;  
    )
  
polaris_chasfs_manage(polaris_fpm_t)  
polaris_cpld_read(polaris_fpm_t)  
polaris_flashlib_read(polaris_fpm_t)  
polaris_tdlresolve_read(polaris_fpm_t)

  
polaris_ripc_sman_ui_serv_connect(polaris_fpm_t)

  
polaris_db_tdlldb_dir_use(polaris_fpm_t)

  
logging_send_syslog_msg(polaris_fpm_t)

  
# vconfd_load_shared_schemas  
polaris_confd_shared_schema_read(polaris_fpm_t)

  
# /var/run/fpmd socket and pid  
type polaris_fpm_var_run_t;  
files_pid_file(polaris_fpm_var_run_t)

  manage_files_pattern(polaris_fpm_t, polaris_fpm_var_run_t, polaris_fpm_var_run_t)  
manage_sock_files_pattern(polaris_fpm_t, polaris_fpm_var_run_t, polaris_fpm_var_run_t)

  files_pid_filetrans(polaris_fpm_t, polaris_fpm_var_run_t, { file sock_file })
polaris_ttm_var_sock_write(polaris_fpm_t)

# fp_scaling_init calls posix_sysconf
dev_read_sysfs(polaris_fpm_t)

# PLEASE LOOK AT ME: write access to /boot/hugepage.conf
# which on ultra translates into /varied/hugepage.conf access
# But no code in polaris uses it
polaris_disk_varied_manage(polaris_fpm_t)
files_manage_boot_files(polaris_fpm_t)

polaris_cedge_tmpfs_manage(polaris_fpm_t)

polaris_fmrp2fpm_mqipc_use(polaris_fpm_t)

# manually create mqipc channel: missing in TDL
type polaris_fpm2fmrp_mqipc_t;
polaris_mqipc_type(polaris_fpm2fmrp_mqipc_t)
polaris_mqipc_create_name(polaris_fpm_t, polaris_fpm2fmrp_mqipc_t, fpm2fmrp_vulcan_mqipc)

# fp_scaling_read_core_count accesses cgroups file at
# /sys/fs/cgroup/cpu,io processes/cpuio.cpus
fs_read_cgroup_files(polaris_fpm_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfpm.te
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dnl
dnl April 2018, Victor Kamensky
dnl
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dnl
dnl divert(-1)

include('polaris_process.m4')
include('polaris_process_te.m4')

include('polaris_ipc_mqipc.m4')
include('polaris_ipc_mqipc_te.m4')

include('polaris_ipc_ripc.m4')
include('polaris_ipc_ripc_te.m4')

include('polaris_ipc_lipc.m4')
include('polaris_ipc_lipc_te.m4')
dnl Stub out non existent one
define('polaris_websocket_service_server',``)
define('polaris_cipc_service_server',``)

include('polaris_max_scope.m4')

divert(0)dnl
#
# This is a generated file! Instead of modifying this file,
# modify proper platform TDL file.
#
policy_module(polarisplatformipcauto, 1.0);

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_te.m4
No license file was found, but licenses were detected in source scan.

#
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#
## <summary>Polaris polarisbhytoolsd Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbhytoolsd.if
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
/tmp/tdlresolve_tmp(/.*)?     gen_context(system_u:object_r:polaris_tdlresolve_t,s0)
/tmp/tdlresolve(/.*)?         gen_context(system_u:object_r:polaris_tdlresolve_t,s0)
/usr/binos/conf/global.service.conf   -- gen_context(system_u:object_r:polaris_global_service_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdlresolve.fc
No license file was found, but licenses were detected in source scan.

#
## <summary>Polaris ttm Policy Rules.</summary>

### INTERFACE

interface(`polaris_ttm_var_sock_write',`
          gen_require(`
          type polaris_ttm_t;
          type polaris_ttm_var_run_t;
          type var_run_t;
          `)
          write_sock_files_pattern($1, var_run_t, polaris_ttm_var_run_t)
          allow $1 polaris_ttm_t:unix_stream_socket { connectto };
        `)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristtm.if

No license file was found, but licenses were detected in source scan.

## <summary>Polaris CYAN Policy Rules.</summary>

### INTERFACE

# EXECUTE DYNCFG IN THE DYNCFG DOMAIN.
interface('polaris_dyncfg_domtrans',
  gen_require('type polaris_dyncfg_t, polaris_dyncfg_exec_t;
')

corecmd_search_bin($1)
domtrans_pattern($1, polaris_dyncfg_exec_t, polaris_dyncfg_t)
')

########################################
## Make the specified domain able to read tmp file created by
cyan_init.sh like /tmp/cyan/mono.cdb
## </summary>
## <param name="type">
## Domain allowed access.
## </summary>
## </param>
#
interface('polaris_dyncfg_tmp_read',
  gen_require('type polaris_dyncfg_tmp_t;
  type tmp_t;
')

read_files_pattern($1, { tmp_t polaris_dyncfg_tmp_t }, polaris_dyncfg_tmp_t)
read_lnk_files_pattern($1, { tmp_t polaris_dyncfg_tmp_t }, polaris_dyncfg_tmp_t)
allow $1 polaris_dyncfg_tmp_t:file map;

# need by shell that is called from luajit script
auth_read_passwd($1)
')

########################################
## Make the specified domain able to manage tmp file created by
cyan_init.sh like /tmp/cyan.lock
## </summary>
## <param name="type">
## Domain allowed access.
## </summary>
## </param>
interface('polaris_dyncfg_tmp_manage',`
    gen_require('`
        type polaris_dyncfg_tmp_t;
        type tmp_t;
')

manage_files_pattern($1, { tmp_t polaris_dyncfg_tmp_t }, polaris_dyncfg_tmp_t)
manage_lnk_files_pattern($1, { tmp_t polaris_dyncfg_tmp_t }, polaris_dyncfg_tmp_t)
allow $1 polaris_dyncfg_tmp_t:file map;
')

########################################
## <summary>
##      Execute /tmp/dyncfg/N intialization within given domain.
##
##      Effectively one need this if it needs to run dyncfg_db_run_init_script,
##      dyncfg_db_init functions within domain context.
##
##      Note it involves lua execution that leads to execmem. Also lua script
##      may execve shell and some other simple bin processes like mkdir or ln.
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_dyncfg_setup',`
    gen_require('`
        type polaris_dyncfg_tmp_t;
        type tmp_t;
')

files_tmp_filetrans($1, polaris_dyncfg_tmp_t, dir, "cyan")
manage_dirs_pattern($1, polaris_dyncfg_tmp_t, polaris_dyncfg_tmp_t)
manage_files_pattern($1, { tmp_t polaris_dyncfg_tmp_t }, polaris_dyncfg_tmp_t)
manage_lnk_files_pattern($1, { tmp_t polaris_dyncfg_tmp_t }, polaris_dyncfg_tmp_t)
allow $1 polaris_dyncfg_tmp_t:file map;

# dyncfg_setup calls luajit and luajit needs execute JIT generated code
allow $1 self:process execmem;

# LOOK AT ME lua initialization code still uses system function call do some
# trivial things like mkdir. But because of that we need to grant shell and
# bin access to all callers of
corecmd_exec_shell($1)
corecmd_exec_bin($1)
In chassis_attrs.lua method THIS.WIRELESS checks whether wireless package is installed
by opening (why open, not stat) wncmgrd binary.

optional_policy('  
gen_require('  
    type polaris_wncmgrd_exec_t;  
    type bin_t;  
  ')  
  read_files_pattern($1, bin_t, polaris_wncmgrd_exec_t)  
')

lua code reads /tmp/sw/boot/rmonbifo/boardtype
polaris_rmonbifo_tmp_read($1)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscyan.if
No license file was found, but licenses were detected in source scan.

policy_module(polariscppcp, 1.0);

gen_require('  
    type polaris_cpp_cp_t;  
')

polaris_btrace_data_manage(polaris_cpp_cp_t)
polaris_crft_data_manage(polaris_cpp_cp_t)
polaris_chasfs_manage(polaris_cpp_cp_t)
polaris_tdlresolve_read(polaris_cpp_cp_t)
polaris_tdlldb_list_dirs(polaris_cpp_cp_t)
polaris_cpld_read(polaris_cpp_cp_t)
polaris_flashlib_read(polaris_cpp_cp_t)
polaris_ripc_sman.ui_serv_connect(polaris_cpp_cp_t)
polaris_db_tdlldb_dir_use(polaris_cpp_cp_t)
polaris_cpp_process(polaris_cpp_cp_t)
polaris_cpp_dev_use(polaris_cpp_cp_t)
polaris_icc_broken_relocations(polaris_cpp_cp_t)
logging_send_syslog_msg(polaris_cpp_cp_t)

polaris_cpp_cavium_sdk_ipc_use(polaris_cpp_cp_t)

# LOOK AT ME: raw memory access in cavium vendor SDK
# related to octeon driver (BUG CSCvh58515)
ifdef(`crankshaft_family',`
polaris_dev_mem_use(polaris_cpp_cp_t)
`)

# cpp_palci_wallclock_time_ticks function reads /var/lock/subsys/sntp.offset
files_read_all_locks(polaris_cpp_cp_t)

# allow objstore access
polaris_disk_objstore_read(polaris_cpp_cp_t)

optional_policy(`
polaris_spd_dev_use(polaris_cpp_cp_t)
`)

# handle geodb file access
polaris_geodb_files_manage(polaris_cpp_cp_t)

optional_policy(`
polaris_cbdma_dev_use(polaris_cpp_cp_t)
`)

polaris_hkp_dev_use(polaris_cpp_cp_t)

# Access /dev/astro
polaris_astro_dev_use(polaris_cpp_cp_t)
polaris_vega_dev_use(polaris_cpp_cp_t)
`)
polaris_cpp_tmpfs_manage(polaris_cpp_cp_t)
polaris_cpld_dev_use(polaris_cpp_cp_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppcp.te
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#
# July 2017, Victor Kamensky
#
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#

policy_module(polariscppstats, 1.0);

gen_require(`
type polaris_cpp_stats_t;
'}

polaris_btrace_data_manage(polaris_cpp_stats_t)
polaris_crft_data_manage(polaris_cpp_stats_t)
polaris_chasfs_manage(polaris_cpp_stats_t)
polaris_tdlresolve_read(polaris_cpp_stats_t)
polaris_tdlldb_list_dirs(polaris_cpp_stats_t)
polaris_cpld_read(polaris_cpp_stats_t)
polaris_flashlib_read(polaris_cpp_stats_t)
polaris_rpic_sman_ui_serv_connect(polaris_cpp_stats_t)
polaris_cpp_tmp_files_use(polaris_cpp_stats_t)
# works with /dev/cpp_dev_info, /dev/cpp and /dev/cpp_kipc
polaris_cpp_dev_use(polaris_cpp_stats_t)
polaris_cpp_tmpfs_ifdev_rw(polaris_cpp_stats_t)
polaris_icc_broken_relocations(polaris_cpp_stats_t)

# get attributes of /dev/shm from glibc where_is_shmfs function
fs_getattr_tmpfs(polaris_cpp_stats_t)

optional_policy(
  polaris cbdma_dev_use(polaris_cpp_stats_t)
')
polaris_cpp_tmpfs_manage(polaris_cpp_stats_t)
polaris_cpld_dev_use(polaris_cpp_stats_t)

Found in path(s):
  */opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppstats.te
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#
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#
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#

policy_module(polarislm, 1.0);

gen_require(
  type polaris_lm_t;
')
polaris_btrace_data_manage(polaris_lm_t)
polaris_crft_data_manage(polaris_lm_t)
polaris_chasfs_manage(polaris_lm_t)
polaris_tdlresolve_read(polaris_lm_t)
polaris_tdlldb_list_dirs(polaris_lm_t)
polaris_cpld_read(polaris_lm_t)
polaris_flashlib_read(polaris_lm_t)

polaris_ripc_sman_ui_serv_connect(polaris_lm_t)

allow polaris_lm_t self:capability { dac_override };

# allow to read /proc/mtd
kernel_read_system_state(polaris_lm_t)

# work with /tmp files (/tmp/iosd_level)
type polaris_lm_temp_t;
files_temp_file(polaris_lm_temp_t)
files_temp_filetrans(polaris_lm_t, polaris_lm_temp_t, file, "iosd_level")
files_temp_filetrans(polaris_lm_t, polaris_lm_temp_t, file, "stack_apcount")
manage_files_pattern(polaris_lm_t, tmp_t, polaris_lm_temp_t)

polaris_dyncfg_temp_read(polaris_lm_t)
polaris_disk_license_manage(polaris_lm_t)
polaris_disk_csl_manage(polaris_lm_t)

logging_send_syslog_msg(polaris_lm_t)

polaris_lua_read(polaris_lm_t)
# permission to access /tmp/rp/lipc/lmanrtu_stackrtu_socket
# polaris_lm_t policy
allow polaris_lm_t self:unix_stream_socket connectto;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislm.te
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#
# August 2017, Victor Kamensky
#
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#

/usr/binos/conf/flash_check.sh -- gen_context(system_u:object_r:polaris_flashcheck_exec_t,s0)

Found in path(s):
policy_module(polarislipc, 1.0);

## LIPC policy

```c
gen_require(`
    type polaris_pvp_t;
    attribute polaris_extended_domain;
```

type polaris_lipc_t;
files_type(polaris_lipc_t)

files_tmp_filetrans(polaris_extended_domain, polaris_lipc_t, dir, "lipc")
init_script_tmp_filetrans(polaris_extended_domain, polaris_lipc_t, dir, "lipc")

# in some cases pvp.sh creates lipc tmp directory it needs permissions for that
manage_dirs_pattern(polaris_pvp_t, tmp_t, polaris_lipc_t)

gen_require(`
    attribute polaris_extended_domain;
    type polaris_pvp_tmp_t;
```
)
filetrans_pattern(polaris_extended_domain, polaris_pvp_tmp_t, polaris_lipc_t, dir, "lipc")

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislipc.te
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## September 2018, Anubha Balani

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### <summary>Polaris Memory Service Policy Rules.</summary>
# Polaris memory: libmaroon and such

```
#<summary>
# Allow the specified domain to check existence of
# /lib/systemd/system/ksm.service file. Effectively checking
# whether KSM kernel feature is enabled on device or not.
#</summary>
#<param name="domain">
# Domain allowed access.
#</param>
#
interface('polaris_ksm_run_check',
    gen_require(
        type systemd_unit_file_t;
    )
)

gattrs_files_pattern($1, systemd_unit_file_t, systemd_unit_file_t)
)

#<summary>
# Manage temporary maroon files
#</summary>
#<param name="domain">
# Domain allowed access.
#</param>
#<rolebase/>
#
interface('polaris_maroon_data_manage_all',
    gen_require(
        attribute polaris_maroon_data_domain;
        type polaris_maroon_base_t;
    )
)

manage_files_pattern($1, polaris_maroon_base_t, polaris_maroon_data_domain)
allow $1 polaris_maroon_data_domain:file map;

# manage temporary files in maroon_stats directory
manage_files_pattern($1, polaris_maroon_base_t, polaris_maroon_base_t)
)
### Make the specified type usable as maroon data file type.

```cpp
interface('polaris_maroon_data_type',
    files_type($1)
    gen_require(
        attribute polaris_maroon_data_domain;
    )
    typeattribute $1 polaris_maroon_data_domain;
)
```

### Process to manage its own maroon files

```cpp
interface('polaris_maroon_data_client',
    type polaris_maroon_base_t;
    gen_require(
        manage_files_pattern($1, polaris_maroon_base_t, $2)
        allow $1 $2:file map;
        filetrans_pattern($1, polaris_maroon_base_t, $2, file)
    )
)
```
## <summary>
## <param name="domain_stem">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolebase/>
#
# interface('polaris_maroon_data_client_template',
gen_require('
    type polaris_maroon_base_t;
')

type polaris_\$1_maroon_t;
    polaris_maroon_data_type(polaris_\$1_maroon_t)

     polaris_maroon_data_client(polaris_\$1_t, polaris_\$1_maroon_t)
')

#########################################################################
## <summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolebase/>
#
# interface('polaris_zram_getattr',
gen_require('
    type device_t;
    type polaris_zram_device_t;
')
     getattr_blk_files_pattern($1, device_t, polaris_zram_device_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismemory.if
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#
Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdbm.fc
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#
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#

policy_module(polarisreflector, 1.0);

polaris_process_domain_template(reflector)

corecmd_exec_bin(polaris_reflector_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_reflector_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_reflector_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_reflector_t)

# read /etc/hosts file
sysnet_read_config(polaris_reflector_t)

# work with /tmp files
 type polaris_reflector_tmp_t;
 files_tmp_file(polaris_reflector_tmp_t)
 manage_dirs_pattern(polaris_reflector_t, tmp_t, polaris_reflector_tmp_t)
 manage_files_pattern(polaris_reflector_t, polaris_reflector_tmp_t, polaris_reflector_tmp_t)
 manage_fifo_files_pattern(polaris_reflector_t, polaris_reflector_tmp_t, polaris_reflector_tmp_t)
 files_tmp_filetrans(polaris_reflector_t, polaris_reflector_tmp_t, polaris_reflector_tmp_t, 
 [ file dir ])

# reflector can work with droputil tmp files
polaris_droputil_manage_tmp_files(polaris_reflector_t)

#rsync_exec(polaris_reflector_t)
gen_require(
   type rsync_t;
   )
rsync_entry_domtrans(polaris_reflector_t, rsync_t)
allow rsync_t polaris_reflector_t:process sigchld;
# upon exec rsync inherits reflector.sh stdout/stderr which are
# polaris_reflector_t fifo_files
allow rsync_t polaris_reflector_t:fifo_file write;

allow polaris_reflector_t self:capability { sys_resource dac_override };
allow polaris_reflector_t self:process setpgid;

polaris_btrace_data_manage(polaris_reflector_t)
polaris_cpld_read(polaris_reflector_t)
polaris_chasfs_manage(polaris_reflector_t)
polaris_boot_tmp_read(polaris_reflector_t)
polaris_read_debug_conf(polaris_reflector_t)
polaris_disk_crashinfo_getattr(polaris_reflector_t)
polaris_rmonbifo_tmp_read(polaris_reflector_t)

# watch over /tmp/rp/dropbox
polaris_droputil_tmp_watch(polaris_reflector_t)

# Allow /tmp/ufs/bootflash & /tmp/ufs/harddisk read access
optional_policy(`
polaris_ncd_tmp_read(polaris_reflector_t)
`
)

# 'rm -rf /tmp/rp/reflectors'
fs_getattr_tmpfs(polaris_reflector_t)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisreflector.te
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#
# March 2017, Victor Kamensky
#
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#

policy_module(polarispman, 1.0);

polaris_process_domain_template(pman)

# reaccess all permissions granted here for new pman
# - do we clone this domain to pmanc, or replace it?

gen_require(`
type polaris_psvp_t;
  type polaris_pvp_t;
corecmd_exec_bin(polaris_pman_t)
corecmd_exec_shell(polaris_pman_t)
# can execute process in polaris domain
polaris_exec(polaris_pman_t)

# LOOK AT ME start-stop-daemon from busy box iterates all
# /proc/<pid> directories and reads /proc/<pid>/cmdline
# /proc/<pid>/exe. I.e it need quite a bit of priviledges
domain_read_all_domains_state(polaris_pman_t)

# pman wants to write to /proc/<pid>/oom_adj of each process
# it started. Now oom_adj is under label of process that owns
# it, so for now let pman to be able to write into any file
# in polaris_domain. Latter try to clean it up by transitioning
# oom_adj into separate domain?
gen_require(''
    attribute polaris_domain;
')
manage_files_pattern(polaris_pman_t, polaris_domain, polaris_domain)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_pman_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_pman_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_pman_t)

# read /proc/sys/vm.nr_hugepages
kernel_read_vm_sysctls(polaris_pman_t)

# read/write cgroups files
fs_rw_cgroup_files(polaris_pman_t)

dmidecode_domtrans(polaris_pman_t)

allow polaris_pman_t self:capability { sys_nice sys_resource dac_override sys_rawio sys_admin };

polaris_btrace_data_manage(polaris_pman_t)
polaris_chasfs_manage(polaris_pman_t)
polaris_cpld_read(polaris_pman_t)
ifdef(`ngwc_family',`
polaris_cpld_write(polaris_pman_t)
')
polaris_proc_rmonbifo_read(polaris_pman_t)
polaris_rmonbifo_tmp_read(polaris_pman_t)
polaris_boot_tmp_read(polaris_pman_t)
polaris_read_debug_conf(polaris_pman_t)
polaris_disk_crashinfo_getattr(polaris_pman_t)

# work with /tmp files

type polaris_pman_tmp_t;
files_tmp_file(polaris_pman_tmp_t)
manage_dirs_pattern(polaris_pman_tmp_t, tmp_t, polaris_pman_tmp_t)
manage_files_pattern(polaris_pman_tmp_t, polaris_pman_tmp_t, polaris_pman_tmp_t)
manage_fifo_files_pattern(polaris_pman_tmp_t, polaris_pman_tmp_t, polaris_pman_tmp_t)
files_tmp_filetrans(polaris_pman_tmp_t, polaris_pman_tmp_t, { file dir })
filetrans_pattern(domain, tmp_t, polaris_pman_tmp_t, dir, "process")
filetrans_pattern(domain, tmp_t, polaris_pman_tmp_t, dir, "pman_ports")

# pcohort reads files in /tmp/rp/process directory
gen_require(''
    attribute polaris_extended_domain;
')
read_files_pattern(polaris_extended_domain, polaris_pman_tmp_t, polaris_pman_tmp_t)
list_dirs_pattern(polaris_extended_domain, polaris_pman_tmp_t, polaris_pman_tmp_t)

# bash needs setpgid in its make_child function
allow polaris_pman_t self:process { setpgid };

# pmanlite uses getsid
allow polaris_pman_t self:process { getsession };

# pman call renice utility to change process nice level
allow polaris_pman_t self:process { setsched };

# pman needs to work with pvp tmp files
polaris_pvp_manage_tmp_files(polaris_pman_t)

# on ultra pman waits for /tmp/cpp_ifdev_rep pipes appearence before
# proceeding further before it starts iosd
optional_policy(''
polaris_cpp_tmp_ifdev_getattr(polaris_pman_t)

# /tmp/vxe_ucode_image created by some systemd units and accessed
# by pman, lets transition it into polaris_pman_tmp_t domain
gen_require(''
    type initrc_t;
    type init_t;
')
files_tmp_filetrans({ initrc_t init_t }, polaris_pman_tmp_t, file, "vxe_ucode_image")
files_tmp_filetrans({ initrc_t init_t }, polaris_pman_tmp_t, file, "wlc_ucode_image")
files_tmp_filetrans({ initrc_t init_t }, polaris_pman_tmp_t, file, "utah_ucode_image")
files_tmp_filetrans({ initrc_t init_t }, polaris_pman_tmp_t, file, "fugazi_ucode_image")

# pman needs to manage cgroups membership of different processes
# See move_to_cgroup pman function. It needs setsched permission
domain_setpriority_all_domains(polaris_pman_t)

# pman.sh can call logger command
logging_send_syslog_msg(polaris_pman_t)

# pman can receive signals from any polaris domain process
polaris_receive_signal_from_domain(polaris_pman_t)

# pman.sh calls pidof command (similar to ps)
# pidof needs access to /sys/devices/system/cpu/online
dev_read_sysfs(polaris_pman_t)
# pidof commands wants sys_ptrace
allow polaris_pman_t self:capability sys_ptrace;

# pman can send signal to anything
domain_signal_all_domains(polaris_pman_t)

# pmanlite can getpgid to its child group processes
domain_getpgid_all_domains(polaris_pman_t)

# pmanlite uses killpg(<child pid>,SIGNULL) to test its child processes
domain_signull_all_domains(polaris_pman_t)

term_use_unallocated_ttys(polaris_pman_t)

optional_policy('polaris_repm_tmp_manage(polaris_pman_t)')

optional_policy('# pman on nyquist ls /tmp/ufs/crashinfo
polaris_ncd_tmp_read(polaris_pman_t)')

# runs find over /proc
kernel_getattr_proc(polaris_pman_t)

# PLEASE LOOK AT ME: pman removes /tmp/subpkg directory after CSCvm14562 commit
# back out and change properly after CSCvm51181 is fixed
polaris_install_tmp_manage(polaris_pman_t)

# rm from coreutils-8.30 wants to know filesystem type
fs_getattr_tmpfs(polaris_pman_t)
fs_getattr_xattr_fs(polaris_pman_t)
# domain for gdbserver started by pman

polaris_utility_domain_template(gdb)

domtrans_pattern(polaris_pman_t, polaris_gdb_exec_t, polaris_gdb_t)

# pman starts gdbserver with stdout pointing to btrace fifo
polaris_use_btrace_fifo(polaris_gdb_t)

# gdbserver reads /proc/$pid/exe of a process it gets attached to.
# Allow to read state of all processes for now.
domain_read_all_domains_state(polaris_gdb_t)

# allow gdbserver to bind to all unreserverd ports for now
corenets_tcp_bind_unreserved_ports(polaris_gdb_t)
corenets_tcp_bind_generic_node(polaris_gdb_t)

allow polaris_gdb_t self:process { ptrace setpgid };
allow polaris_gdb_t self:tcp_socket { accept bind create getattr listen setopt };

# pman update iosxe_control_processes/iosxe_mgmt_processes/tasks
fs_manage_cgroup_dirs(polaris_pman_t)
fs_manage_cgroup_files(polaris_pman_t)

optional_policy(')
container_runtime_domtrans(polaris_pman_t)
')

# pman calls show_version for dockerd executable
optional_policy(')
polaris_container_runtime_show_version(polaris_pman_t)
')

# needs to access nsfs file during killall invocation
fs_read_nsfs_files(polaris_pman_t)

# runs over /proc/<pid>/net/arp
kernel_read_network_state(polaris_pman_t)

# runs over /proc/<pid>/net/stat
kernel_read_network_state_symlinks(polaris_pman_t)

# runs over /proc/<pid>/net/rpc
kernel_read_rpc_sysctls(polaris_pman_t)

# LOOK AT ME: why pman doing it
# from mgmt/confd/confd/src/confd_startup_sh_post_exit.sh archive_errlog function
polaris_btrace_persistent_data_manage(polaris_pman_t)
polaris_confd_log_manage(polaris_pman_t)
allow polaris_pman_t self:process setfscreate;

# access /bootflash/installer/install_issu_state
polaris_disk_install_read(polaris_pman_t)

#/usr/binos/conf/umbrella_init.sh that runs under pman
# copies into /bootflash/ios_core.p7b
polaris_bootflash_manage(polaris_pman_t)

optional_policy(')
# we may write bits to the exiting_bays file in /proc
polaris_rw_exiting_bays(polaris_pman_t)
')

ifdef('ngwc_family, ')
# linux_iosd_image_post_exit.sh restores the slot-based address
# for the management ethernet should be restored on dual RP system.
polaris_chvrf_domtrans(polaris_pman_t)
sysnet_domtrans_ifconfig(polaris_pman_t)

# For use of flashutil preparing for reload
polaris_flashlib_read(polaris_pman_t)
polaris_flashlib_write(polaris_pman_t)
')

# File description leaks for TDL db lock files as processes are managed by
# pman.
# TODO Eventually these fd leaks should be fixed in the calling processes
#
# Note that TDL db lock file interfaces are typically generated by TDL and
# are not found in our local .if files
polaris_tdlresolve_read(polaris_pman_t)
polaris_db_tldb_ios_oper_use(polaris_pman_t)

ifdef('nyquist_platform, ')
polaris_db_tldb_ewlc_operational_use(polaris_pman_t)
polaris_db_tldb_rogued_use(polaris_pman_t)
polaris_db_tldb_ewlc_config_use(polaris_pman_t)
polaris_db_tldb_wstatsd_use(polaris_pman_t)
polaris_db_tldb_client_global_use(polaris_pman_t)
')

# delete /tmp/booted from linux_iosd_image_post_exit.sh when iosd goes down.
# For example: preparing for reload.
gen_require(''
    type polaris_iosd_tmp_files_t;
allow polaris_pman_t polaris_iosd_tmp_files_t:file { delete_file_perms open };  

# Upon exit of a process, pman needs to remove sai directory and files  
# associated with the process  
polaris_pvp_delete_sai_files(polaris_pman_t)  
# rsync port want to establish Tcp connection  
# runs over /usr/bin/rsync  
corenet_tcp_connect_rsync_port(polaris_pman_t)  
rsync_entry_type(polaris_pman_t)  

ifdef('crankshaft_family',  
# Provide process signal perms to pman.  
polaris_caf_proc_signal_perms(polaris_pman_t)  
')  

# open connections from processes managed by pman can leak. The selinux  
# errors associated with these typically come from a forked and renamed  
# elastic process like wncl_0. During process forking/startup, node  
# binds may cause denials as they are brought up by pman  
ifdef('ngwc_family',  
corenet_tcp_bind_generic_node(polaris_pman_t)  
corenet_udp_bind_generic_node(polaris_pman_t)  
corenet_tcp_connect_lisp_cons_control_port(polaris_pman_t)  
')  

# pman can stop itself on reload  
allow polaris_pman_t self:capability kill;  

# For pmanlite, allow pman's grand-children rsync to be able to operate on pipe created by pman.  
gen_require('  
    type rsync_t;  
')  
polaris_use_pman_fifo(rsync_t)  

ifdef('sumatra_platform',  
# Allow pman to execute cman_fp in the polaris_cm_fp_t domain  
polaris_cm_fp_domtrans(polaris_pman_t)  
')  

Found in path(s):  
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispman.te  
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dnl  
dnl April 2018, Victor Kamensky  
dnl  
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dnl Nyquist Platform Max Bay Limits
max_bay_map_set(`rp', `per_bay', 0)
max_bay_map_set(`cc', `per_bay', 0)
max_bay_map_set(`fp', `per_bay', 0)

dnl in elastic scope each process has its own value
max_elastic_map_set(`rp', `elastic', BPROC_ODM, 0)
max_elastic_map_set(`cc', `elastic', BPROC_ODM, 0)
max_elastic_map_set(`fp', `elastic', BPROC_ODM, 0)

max_elastic_map_set(`rp', `elastic', BPROC_WNCD, 0)
max_elastic_map_set(`cc', `elastic', BPROC_WNCD, 0)
max_elastic_map_set(`fp', `elastic', BPROC_WNCD, 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/nyquistmaps.m4
No license file was found, but licenses were detected in source scan.

#
# Aug 2020, Sridhar
#
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#
#
## <summary>Polaris xcopy Policy Rules.</summary>

#######################################
## <summary>
##      Execute xcopy related scripts in its own domain.
## </summary>
## <param name="domain">
##      Domain allowed to transition.
## </param>
#
interface(`polaris_xcopy_script_domtrans',
  gen_require(
    type polaris_xcopy_script_t, polaris_xcopy_script_exec_t;
    )
  )
  domtrans_pattern($1, polaris_xcopy_script_exec_t, polaris_xcopy_script_t)
)
## <summary>
## xcopy progress temp file access
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_xcopy_tmp_manage',
    gen_require('`
    type polaris_xcopy_tmp_t;
    ')
    manage_dirs_pattern($1,polaris_xcopy_tmp_t, polaris_xcopy_tmp_t)
    manage_files_pattern($1,polaris_xcopy_tmp_t, polaris_xcopy_tmp_t)
)'

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisxcopy.if

No license file was found, but licenses were detected in source scan.

#
# April 2017, Victor Kamensky
#
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#
## <summary>Polaris dmi_ncsshd_mgmt Policy Rules.</summary>

###############################################################################
## <summary>
## Read polaris_ncsshd_keys_t files, effectively access
## /tmp/.ncsshd_authorized_keys created by psd and read by ncsshd
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_ncsshd_authorized_keys_read',
    gen_require('`
    type polaris_ncsshd_keys_t;
    ')
    read_files_pattern($1, polaris_ncsshd_keys_t, polaris_ncsshd_keys_t)
    list_dirs_pattern($1, polaris_ncsshd_keys_t, polaris_ncsshd_keys_t)
)
#'  

##################################################
## <summary>
## Watch /var/run/netns and list contents
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_watch_netns',
   gen_require('  
      type ifconfig_var_run_t;
   ')
   list_dirs_pattern($1, ifconfig_var_run_t, ifconfig_var_run_t)
   allow $1 ifconfig_var_run_t:dir watch;
')

##################################################
## <summary>
## Manage polaris_pttcd_tmp_t files, effectively files under /tmp/tmppub/interceptor
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_interceptor_manage',
   gen_require('  
      type polaris_pttcd_tmp_t;
   ')
   manage_files_pattern($1, polaris_pttcd_tmp_t, polaris_pttcd_tmp_t)
   manage_dirs_pattern($1, polaris_pttcd_tmp_t, polaris_pttcd_tmp_t)
   allow $1 polaris_pttcd_tmp_t:{ dir file } watch;
')

##################################################
## <summary>
## Execute a domain transition to run ncshd polaris process.
## </summary>
## <param name="domain">
## Domain allowed to transition.
## </summary>
## </param>
#
interface(`polaris_nccshd_mgmtdomtrans',`
  gen_require(`
    type polaris_dmi_nccshd_mgmtdomiexec_t, polaris_dmi_nccshd_mgmtdomiexec_t;
  `)

  domtrans_pattern($1, polaris_dmi_nccshd_mgmtdomiexec_t, polaris_dmi_nccshd_mgmtdomiexec_t)
  `)

Found in path(s):
  */opt/cola/permits/1103963160_1615183271.10/selinux-tarselinux/polarisdmicnccshdmgmt.if
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

## <summary>Polaris cm_rp Policy Rules.</summary>

#<summary>
####<summary>
###<summary>
##
##
##
##
## Execute cmand_fp in the polaris_cm_fp_t domain.
## </summary>
##<summary>
##<param name="domain">##
##<summary>
## Domain allowed to transition.
##</summary>
##<param name="domain">
#
interface(`polaris_cm_rp_domtrans',`
  gen_require(`
    type polaris_cm_rp_t, polaris_cm_rp_exec_t;
  `)

corecmd_search_bin($1)
domtrans_pattern($1, polaris_cm_rp_exec_t, polaris_cm_rp_t)
  `)

###<summary>
###<summary>
### Write into fifo file created by cmrp, typical case when
### cmrp starts script under popen.
###</summary>
###<param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
## <rolecap/>
#
interface('polaris_cmrp_use_fifo',
    gen_require('type polaris_cm_rp_t;
')
    write_fifo_files_pattern($1, polaris_cm_rp_t, polaris_cm_rp_t)
')

### Write/read /tmp/pfu_oirtime.lock file
## <summary>
## Write/read /tmp/pfu_oirtime.lock file
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
#
interface('polaris_cmrp_tmp_manage',
    gen_require('type polaris_cm_rp_tmp_t;
    type tmp_t;
')
    manage_dirs_pattern($1, { tmp_t polaris_cm_rp_tmp_t }, polaris_cm_rp_tmp_t)
    manage_files_pattern($1, { tmp_t polaris_cm_rp_tmp_t }, polaris_cm_rp_tmp_t)
')

### Setup policies to access dir and file
## <summary>
## Setup policies to access dir and file
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
#
interface('polaris_cm_rp_inv_log_setup',
    gen_require('type polaris_cm_rp_inv_log_file_t;
    type polaris_disk_harddisk_t;
type polaris_disk_bootflash_t;

filetrans_pattern($1, {polaris_disk_harddisk_t polaris_disk_bootflash_t}, polaris_cm_rp_inv_log_file_t, dir, ".inv")
  # allow access to /vol/harddisk/.inv
manage_dirs_pattern($1, {polaris_disk_harddisk_t polaris_disk_bootflash_t}, polaris_cm_rp_inv_log_file_t)
  # allow access to /vol/harddisk/.inv/inv_log_file
manage_files_pattern($1,{polaris_cm_rp_inv_log_file_t}, polaris_cm_rp_inv_log_file_t)
')

##############################################
## <summary>
##     Write into /tmp/codesign.txt file created by cm_rp
## </summary>
## <param name="domain">
##     <summary>
##     Domain allowed to transition.
##     </summary>
## </param>
#
interface(`polaris_cm_rp_tmp_write',
  gen_require(
    type polaris_cm_rp_tmp_t;
  )
  write_files_pattern($1, { tmp_t polaris_cm_rp_tmp_t }, polaris_cm_rp_tmp_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmrp.if
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#
# February 2020, Victor Kamensky
#
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#

policy_module(polarisvdaemon, 1.0);

gen_require(
  type polaris_vdaemon_t;
')
polaris_chasfs_manage(polaris_vdaemon_t)
# read and write /bootflash/sdwan/etc/vdaemon_gen_id
polaris_bootflash_manage(polaris_vdaemon_t)
polaris_tdlresolve_read(polaris_vdaemon_t)
polaris_cpld_read(polaris_vdaemon_t)
polaris_flashlib_read(polaris_vdaemon_t)

polaris_ripc_sman_ui_serv_connect(polaris_vdaemon_t)

polaris_db_tdlldb_dir_use(polaris_vdaemon_t)

logging_send_syslog_msg(polaris_vdaemon_t)

# vconfd_load_shared_schemas
polaris_confdd_shared_schema_read(polaris_vdaemon_t)

# manage /etc/viptela
polaris_cedge_etc_manage(polaris_vdaemon_t)

polaris_cedge_reset_ns(polaris_vdaemon_t)

# calls ifconfig for tun_0_0 interface
sysnet_domtrans_ifconfig(polaris_vdaemon_t)

# calls dmidecode get system serial number
dmidecode_domtrans(polaris_vdaemon_t)

# /var/run/vdaemon socket and pid
type polaris_vdaemon_var_run_t;
files_pid_file(polaris_vdaemon_var_run_t)
manage_files_pattern(polaris_vdaemon_t, polaris_vdaemon_var_run_t, polaris_vdaemon_var_run_t)
manage_sock_files_pattern(polaris_vdaemon_t, polaris_vdaemon_var_run_t, polaris_vdaemon_var_run_t)
files_pid_filetrans(polaris_vdaemon_t, polaris_vdaemon_var_run_t, { file sock_file })

polaris_ttm_var_sock_write(polaris_vdaemon_t)

# generate_instance_uuid reads /sys/devices/virtual/dmi/id/product_uuid
dev_read_sysfs(polaris_vdaemon_t)

# vip_util_set_fd_limits calls setrlimit
allow polaris_vdaemon_t self:process { setrlimit setpgid };

allow polaris_vdaemon_t self:capability { dac_override fowner sys_resource };

# vdaemon_init_tunn_intf initilize tun_0_0 in vrf 1
allow polaris_vdaemon_t self:tun_socket create;
corennet_rw_tun_tap_dev(polaris_vdaemon_t)

polaris_persistent_watch(polaris_vdaemon_t)
# from vdaemon_misc.vdaemon_init_inotify function
polaris_cedge_etc_watch(polaris_vdaemon_t)

# set_netns_with_etc mounts on / and /sys
# set_netns_with/etc opens /etc/netns/1 dir
polaris_namespace_set_netns_with/etc(polaris_vdaemon_t)

# DNS thread complains about tmp_t mounton
# on /sys when switching namespace
gen_require(
    type tmp_t;
)
allow polaris_vdaemon_t tmp_t:dir mounton;

# vip_util_set_ns opens /var/run/netns/
polaris_cedge_set_ns(polaris_vdaemon_t)
# vip_dns_process_request switches namespace from linux n/w namespace to
# original mount namespace
allow polaris_vdaemon_t self:capability { net_admin sys_chroot }; allow polaris_vdaemon_t self:udp_socket { bind connect create_getattr getopt setopt shutdown };

# control linux routes vip_route_delete and vdaemon_setup_system_ip_route
allow polaris_vdaemon_t self:netlink_route_socket { bind create_getattr nlmsg_read nlmsg_write };

# binds to vbond udp ports
corenets_udp_bind_generic_node(polaris_vdaemon_t)
corenets_udp_bind_polaris_vbond_port(polaris_vdaemon_t)

# though default ports exist, users can configure the tcp ports in vManage and vSmart
corenets_tcp_connect_all_ports(polaris_vdaemon_t)

# vbond_proc_hello executes VIP_CDB_BACKUP_SCRIPT
polaris_confd_domtrans(polaris_vdaemon_t)
# VIP_CDB_BACKUP_SCRIPT makes use of /etc/confd/confd_ipc_secret
auth_map_passwd(polaris_vdaemon_t)

# vdaemon_write_authorized_keys_to_ncsshd opens VDAEMON_NCSSHD_AUTH_KEY_FILE file
polaris_ncsshd_keys_manage(polaris_vdaemon_t)
# vbond_encode_version opens /etc/version
polaris_confd_etc_read(polaris_vdaemon_t)

# generate_or_parse_uuid() invokes uuid_generate that needs read on
# random-number generator devices (e.g., /dev/random).
dev_read_rand(polaris_vdaemon_t)

# vdaemon_exec_iptables() is invoked by vdaemon all over the place
iptables_domtrans(polaris_vdaemon_t)

allow polaris_vdaemon_t self:capability net_raw;
allow polaris_vdaemon_t self:rawip_socket create_socket_perms;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisvdaemon.te
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# March 2017, Victor Kamensky
#
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#

## <summary>Polaris fman_rp Policy Rules.</summary>

### <summary>Manage mqipc fmrp2fpm shared memory file in /dev/shm directory</summary>

### <param name="domain">
Domain allowed access.

### </param>

```c
interface(`polaris_fmrp2fpm_mqipc_use',
gen_require(`
type polaris_fmrp2fpm_mqipc_t;
')
polaris_mqipc_use($1, polaris_fmrp2fpm_mqipc_t)
')
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfmanrp.if

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dnl
dnl May 2019
dnl
dnl Copyright (c) 2019 by Cisco Systems, Inc.
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dnl
dnl confined and permissive domain maps
divert(-1)
define(`permissive_domain', `defn(format(``permissive_domain[%s]", `$1'))')
define(`permissive_domain_set', `define(format(``permissive_domain[%s]", `$1', `$2'))')

define(`confined_domain', `defn(format(``confined_domain[%s]", `$1'))')
define(`confined_domain_set', `define(format(``confined_domain[%s]", `$1', `$2'))')

dnl
dnl list of all subjects that should be in confined mode
dnl
confined_domain_set(`polaris_iosd_t', `polaris_iosd_t')


dnl
dnl list of all subjects that should be placed in permissive mode
dnl
permissive_domain_set(`polaris_nginx_t', `polaris_nginx_t')
permissive_domain_set(`polaris_nginx_webui_t', `polaris_nginx_webui_t')
permissive_domain_set(`polaris_nginx_webui_install_t', `polaris_nginx_webui_install_t')
diver(0)dnl

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/domainmaps.m4

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# # March 2017, Victor Kamensky
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#

/tmp/dbgmn_log_svr gen_context(system_u:object_r:polaris_fed_sock_t,s0)
/tmp/fed_post_result -- gen_context(system_u:object_r:polaris_fed_tmp_t,s0)

flash/shfwd_params.txt gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwcfed.fc

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# # March 2017, Victor Kamensky
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#

policy_module(polarisrollbacktimer, 1.0);
polaris_process_domain_template(rbtimer)
corecmd_exec_bin(polaris_rbtimer_t)
# allow to read /proc/meminfo
kernel_read_system_state(polaris_rbtimer_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_rbtimer_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_rbtimer_t)

# work with /tmp files
type polaris_rbtimer_tmp_t;
files_tmp_file(polaris_rbtimer_tmp_t)
manage_dirs_pattern(polaris_rbtimer_t, tmp_t, polaris_rbtimer_tmp_t)
manage_files_pattern(polaris_rbtimer_t, polaris_rbtimer_tmp_t, polaris_rbtimer_tmp_t)
manage_fifo_files_pattern(polaris_rbtimer_t, polaris_rbtimer_tmp_t, polaris_rbtimer_tmp_t)
files_tmp_filetrans(polaris_rbtimer_t, polaris_rbtimer_tmp_t, { file dir })

# work with /bootflash/.rollback_timer (RBT_CONTROL_DIR) file
type polaris_rbtimer_bootflash_t;
polaris_disk_type(polaris_rbtimer_bootflash_t)
polaris_rbtimer_bootflash_manage(polaris_rbtimer_t)

allow polaris_rbtimer_t self:capability sys_resource;
allow polaris_rbtimer_t self:capability dac_override;
allow polaris_rbtimer_t self:process setpgid;

polaris_btrace_data_manage(polaris_rbtimer_t)
polaris_chasfs_manage(polaris_rbtimer_t)
polaris_cpld_read(polaris_rbtimer_t)
polaris_boot_tmp_read(polaris_rbtimer_t)
polaris_read_debug_conf(polaris_rbtimer_t)
polaris_proc_rmonbifo_read(polaris_rbtimer_t)
polaris_rmonbifo_tmp_read(polaris_rbtimer_t)
polaris_disk_crashinfo_getattr(polaris_rbtimer_t)
polaris_disk_harddisk_read_link(polaris_rbtimer_t)
polaris_bootflashmanage(polaris_rbtimer_t)

logging_send_syslog_msg(polaris_rbtimer_t)

# uses pidof
domain_read_all_domains_state(polaris_rbtimer_t)
dev_read_sysfs(polaris_rbtimer_t)

# rollbacktimer runs install_engine.sh
polaris_install_engine_domtrans(polaris_rbtimer_t)

polaris_script_errmsg_use(polaris_rbtimer_t)
# watch over /bootflash/.rollback_timer
allow polaris_rbtimer_t polaris_rbtimer_bootflash_t:dir watch;
# watch over /tmp/rp/rollback_timer
allow polaris_rbtimer_t polaris_rbtimer_tmp_t:dir watch;

# access to /tmp/ufs//crashinfo
optional_policy(`
polaris_ncd_tmp_read(polaris_rbtimer_t)
`)
# access to read packages.conf
polaris_read_packages_conf(polaris_rbtimer_t)

# access to /cdrom0/ when *ova image is booted during
# first instance of vwlc on ucs server
polaris_removable_read(polaris_rbtimer_t)

# access to "/bootflash/.installer/install_abort_timer_val"
polaris_disk_install_read(polaris_rbtimer_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrollbacktimer.te
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# # March 2017, Victor Kamensky
#
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#

policy_module(polarisbhytoolsd, 1.0);
polaris_process_domain_template(bhytoolsd)
polaris_btrace_data_manage(polaris_bhytoolsd_t)
polaris_chasfs_manage(polaris_bhytoolsd_t)
polaris_cpld_read(polaris_bhytoolsd_t)

# vmtoolsd transtions from polaris_bhytoolsd_t to vmtools_t -
# bhytoolsd is small wrapper that calls vmtoolsd
vmtools_domtrans(polaris_bhytoolsd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbhytoolsd.te
No license file was found, but licenses were detected in source scan.

# # August 2017, Shawn Lu
policy_module(polarismobilityd, 1.0);

gen_require(
    type polaris_mobilityd_t;
)

polaris_btrace_data_manage(polaris_mobilityd_t)
polaris_crft_data_manage(polaris_mobilityd_t)
polaris_chasfs_manage(polaris_mobilityd_t)
polaris_tdlresolve_read(polaris_mobilityd_t)
polaris_tdlldb_list_dirs(polaris_mobilityd_t)
polaris_cpld_read(polaris_mobilityd_t)
polaris_lua_read(polaris_mobilityd_t)
polaris_flashlib_read(polaris_mobilityd_t)
polaris_ripc_sman_ui_serv_connect(polaris_mobilityd_t)
polaris_db_tdlldb_dir_use(polaris_mobilityd_t)
# allow to use setrlimit
allow polaris_mobilityd_t self:capability sys_resource;
allow polaris_mobilityd_t self:process setrlimit;
allow polaris_mobilityd_t self:capability dac_override;
allow polaris_mobilityd_t self:udp_socket { create_socket_perms recv_msg send_msg };

logging_send_syslog_msg(polaris_mobilityd_t)
polaris_lfts_dev_use(polaris_mobilityd_t)
polaris_cpld_read(polaris_mobilityd_t)
polaris_odm_clnt2svr_mqipc_create(polaris_mobilityd_t)
polaris_tmp_tdlldb_persist_setup(polaris_mobilityd_t)
polaris_tdlldb_persist_setup(polaris_mobilityd_t)
corenet_udp_bind_generic_node(polaris_mobilityd_t)
corenet_udp_bind_polaris_mobility_ctl_port(polaris_mobilityd_t)
corenet_udp_bind_polaris_mobility_data_port(polaris_mobilityd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismobilityd.te
No license file was found, but licenses were detected in source scan.

#  
# June 2017, Victor Kamensky  
#  
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#  
/usr/bin/os/conf/wui-lighttpd-launch.sh -- gen_context(system_u:object_r:polaris_webui_lighttpd_exec_t,s0)

/usr/bin/os/conf/wui-app-launch.sh -- gen_context(system_u:object_r:polaris_webui_exec_t,s0)

/usr/bin/os/conf/wui-tipc-launch.sh -- gen_context(system_u:object_r:polaris_webui_exec_t,s0)

/webui(/.*)? gen_context(system_u:object_r:polaris_webui_file_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswebui.fc

No license file was found, but licenses were detected in source scan.

#  
# April 2017, Victor Kamensky  
#  
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#  
/tmp/.DmiAuth\.socket -s gen_context(system_u:object_r:polaris_dmi_dmiauthd_tmp_t,s0)

/tmp/netconf-yang-diag(/.*)? gen_context(system_u:object_r:polaris_dmi_dmiauthd_tmp_diags_t,s0)

/usr/bin/os/conf/dmid_diag_logs.sh -- gen_context(system_u:object_r:polaris_dmid_diag_logs_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmidmialauthd.fc

No license file was found, but licenses were detected in source scan.

#  
# August 2017, Shawn Lu  
#  
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#  
# polarisrrmmgr file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrrmmgr.fc
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## <summary>Polaris pttcd Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispttcd.if

No license file was found, but licenses were detected in source scan.

# # March 2017, Victor Kamensky # # Copyright (c) 2016-2019 by Cisco Systems, Inc. # All rights reserved #

/usr/binos/conf/oom.sh -- gen_context(system_u:object_r:polaris_oom_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisoom.fc

No license file was found, but licenses were detected in source scan.

# # July 2020, Swati Kumari # # Copyright (c) 2020 by Cisco Systems, Inc. # All rights reserved #

policy_module(polarisptpdrp, 1.0);

gen_require("
    type polaris_ptpd_rp_t;
"
) polaris_chasfs_read(polaris_ptpd_rp_t) polaris_cpld_read(polaris_ptpd_rp_t) polaris_tdlresolve_read(polaris_ptpd_rp_t) polaris_lsmpi_dev_use(polaris_ptpd_rp_t)

# ptpd needs to have open,read,write access with /dev/ds31408 polaris_ds31408_dev_use(polaris_ptpd_rp_t)
# blzi device
polaris_blzi_dev_use(polaris_ptpd_rp_t)

allow polaris_ptpd_rp_t self:capability sys_nice;
allow polaris_ptpd_rp_t self:process setsched;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisptpdrp.te
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

/tmp/lsn.log -- gen_context(system_u:object_r:polaris_epc_ws_liaison_tmp_t,s0)

/tmp/epc_ws(/.*)? gen_context(system_u:object_r:polaris_epc_ws_liaison_tmp_t,s0)

# CLI: show platform software wireshark
/usr/bin/os/conf/wireshark_show.sh -- gen_context(system_u:object_r:polaris_wireshark_show_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisepcwsliaison.fc
No license file was found, but licenses were detected in source scan.

#
# July 2017, Victor Kamensky
#
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#

policy_module(polarisgsdrp, 1.0);

gen_require('　
type polaris_gsd_rp_t;
')

#allow to run readlink /dev/loop0 & /bin/date
corecmd_exec_bin(polaris_gsd_rp_t)

#run ldd, which in turn exec "ld.so --verify"
libs_exec_ld_so(polaris_gsd_rp_t)

# allow to run mount in its own domain
mount_domtrans(polaris_gsd_rp_t)
#    awk -v what=^.BuildPath: $pkginfo_file ~ what { print $2 } /tmp/sw/boot/pkginfo
polaris_boot_tmp_read(polaris_gsd_rp_t)
polaris_btrace_data_manage(polaris_gsd_rp_t)
polaris_chasfs_manage(polaris_gsd_rp_t)
polaris_read_debug_conf(polaris_gsd_rp_t)
polaris_disk_crashinfo_getattr(polaris_gsd_rp_t)
polaris_guestshell_exec_files_exec(polaris_gsd_rp_t)
polaris_guestshell_files_read(polaris_gsd_rp_t)
polaris_ncd_tmp_read(polaris_gsd_rp_t)
polaris_proc_rmonbifo_read(polaris_gsd_rp_t)
polaris_cpld_read(polaris_gsd_rp_t)
polaris_bootflash_read(polaris_gsd_rp_t)
polaris_harddisk_read(polaris_gsd_rp_t)

# read /proc/cmdline
kernel_read_system_state(polaris_gsd_rp_t)

auth_use_nsswitch(polaris_gsd_rp_t)
polaris_rmonbifo_tmp_read(polaris_gsd_rp_t)

allow polaris_gsd_rp_t self:capability { dac_override sys_resource };
allow polaris_gsd_rp_t self:process setpgid;

type polaris_gsd_rp_tmp_t;
files_tmp_file(polaris_gsd_rp_tmp_t)
manage_dirs_pattern(polaris_gsd_rp_t, tmp_t, polaris_gsd_rp_tmp_t)
manage_files_pattern(polaris_gsd_rp_t, tmp_t, polaris_gsd_rp_tmp_t)
manage_fifo_files_pattern(polaris_gsd_rp_t, polaris_gsd_rp_tmp_t, polaris_gsd_rp_tmp_t)
# work with /tmp/guestshell_stk directory
files_tmp_filetrans(polaris_gsd_rp_t, polaris_gsd_rp_tmp_t, dir, "guestshell_stk")

gen_require(
    type rsync_t;
')
rsync_entry_domtrans(polaris_gsd_rp_t, rsync_t)
allow rsync_t polaris_gsd_rp_t:process sigchld;

# read /opt/cisco/caf directory
polaris_caf_files_read(polaris_gsd_rp_t)

gen_require(
    type polaris_caf_api_port_t;
    type polaris_caf_exec_t;
')
allow polaris_gsd_rp_t polaris_caf_api_port_t:tcp_socket name_connect;
allow polaris_gsd_rp_t polaris_caf_exec_t:file { setattr open read };
allow polaris_gsd_rp_t tmp_t:dir { create rmdir };

Open Source Used In BGP TE Controller Version 4.3.0 6264
polaris_flashlib_read(polaris_gsd_rp_t)
polaris_flashlib_write(polaris_gsd_rp_t)

# watch over /tmp/udev/etc/udev
polaris_udev_tmp_read(polaris_gsd_rp_t)
polaris_udev_tmp_watch(polaris_gsd_rp_t)
# watch over /bootflash/gs_script
polaris_persistent_watch(polaris_gsd_rp_t)
#allow iox_ha_utils.sh to read /etc/docker/daemon.json.
gen_require(
   type container_config_t;
')
read_files_pattern(polaris_gsd_rp_t, container_config_t, container_config_t)

# allow guestshell_ha.sh to log messages
logging_send_syslog_msg(polaris_gsd_rp_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisgsdrp.te
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#

## <summary>Polaris Rmonbifo Policy Rules.</summary>

# Polaris Rmonbifo Driver policy

## <summary>
## Read /proc/rmonbifo files.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <//summary>
## <//param>
#
interface('polaris_proc_rmonbifo_read',
gen_require(''
type polaris_proc_rmonbifo_t;
read_files_pattern($1, polaris_proc_rmonbifo_t, polaris_proc_rmonbifo_t)
list_dirs_pattern($1, polaris_proc_rmonbifo_t, polaris_proc_rmonbifo_t)

read_files_pattern($1, polaris_rmonbifo_tmp_t, polaris_rmonbifo_tmp_t)
read_files_pattern($1, polaris_rmonbifo_tmp_t, polaris_rmonbifo_tmp_t)
read_files_pattern($1, polaris_rmonbifo_tmp_t, polaris_rmonbifo_tmp_t)
read_files_pattern($1, polaris_boot_tmp_t, polaris_boot_tmp_t)
read_files_pattern($1, polaris_boot_tmp_t, polaris_boot_tmp_t)
read_files_pattern($1, polaris_boot_tmp_t, polaris_boot_tmp_t)

search_dirs_pattern($1, polaris_boot_tmp_t, polaris_rmonbifo_tmp_t)
search_dirs_pattern($1, polaris_boot_tmp_t, polaris_rmonbifo_tmp_t)
search_dirs_pattern($1, polaris_boot_tmp_t, polaris_rmonbifo_tmp_t)

#/tmp/sw/boot/rmonbifo dir is inside of polaris_boot_tmp_t dir

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrmonbifo.if
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#
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#
/usr/binos/conf/ncd.sh -- gen_context(system_u:object_r:polaris_ncd_exec_t,s0)
/etc/conf/unifiedfs/mount_data  gen_context(system_u:object_r:polaris_ncd_etc_t,s0)

/usr/binos/conf/iosd_console_attach.sh -- gen_context(system_u:object_r:polaris_console_attach_exec_t,s0)
/usr/binos/conf/unifiedfs/unifiedfs_helper.sh -- gen_context(system_u:object_r:polaris_ufs_helper_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisncd.fc
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#
### <summary>Polaris iosd Policy Rules.</summary>

##########################################################################
### <summary>
### Make the specified domain able to work with /tmp/restconf
### </summary>
### <param name="type">
### Domain allowed access.
### </param>
#
# interface(`polaris_restconf_tmp_use',
  gen_require(
    type polaris_restconf_tmp_t;
  ')
  manage_files_pattern($1, polaris_restconf_tmp_t, polaris_restconf_tmp_t)
  manage_dirs_pattern($1, polaris_restconf_tmp_t, polaris_restconf_tmp_t)
')

##########################################################################
### <summary>
## Create domain for IOSD Polaris processes. Note depending on policy build setting it could be confined or not confined

```c
#interface(`polaris_iosd_domain',`
polaris_process_domain_confined($1, $2)

    polaris_iosd_maybe_unconfined($1)
')
```

## Make the specified domain able to work with iosd2iox files

```c
#interface(`polaris_iosd2iox_tmp_manage',`
gen_require(`
    type polaris_iosd2iox_tmp_t;
')

    manage_files_pattern($1, polaris_iosd2iox_tmp_t, polaris_iosd2iox_tmp_t)
')
```

## Make the specified domain able to read iosd2iox files

```c
#interface(`polaris_iosd2iox_tmp_manage',`
gen_require(`
    type polaris_iosd2iox_tmp_t;
')

    manage_files_pattern($1, polaris_iosd2iox_tmp_t, polaris_iosd2iox_tmp_t)
')
```
# interface('polaris_iosd2iox_tmp_read',
    gen_require(
        type polaris_iosd2iox_tmp_t;
    )

    read_files_pattern($1,polaris_iosd2iox_tmp_t,polaris_iosd2iox_tmp_t)
)

########################################################################
## <summary>
## Send messages to iosd unix datagram sockets.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_iosd_dgram_send',
    gen_require(
        type polaris_iosd_t;
    )

    allow $1 polaris_iosd_t:unix_dgram_socket sendto;
)

########################################################################
## <summary>
## Make the specified domain to read /tmp/rp/.iosp_dmiauthd
## </summary>
## <param name="type">
## Domain allowed access.
## </param>
#
interface('polaris_dmiauthd_token_read',
    gen_require(
        type polaris_dmiauthd_token_t;
    )

    read_files_pattern($1, polaris_dmiauthd_token_t, polaris_dmiauthd_token_t)
)

########################################################################
## <summary>
## Make the specified domain to read /tmp/rp/.iosp_gnmib
```c
interface("polaris_gnmib_token_read");
gen_require(
    type polaris_gnmib_token_t;
    
    manage_files_pattern($1, polaris_gnmib_token_t, polaris_gnmib_token_t)
)

interface("polaris_iosd_tmp_files_t");
gen_require(
    type polaris_iosd_tmp_files_t;
    
    manage_files_pattern($1, polaris_iosd_tmp_files_t, polaris_iosd_tmp_files_t)
    allow $1 polaris_iosd_tmp_files_t:sock_file { manage_sock_file_perms};
)

interface("polaris_geodb_files_manage");
gen_require(
    type polaris_geodb_files_t;
    
    manage_files_pattern($1, polaris_geodb_files_t, polaris_geodb_files_t)
)
```
type polaris_geodb_files_t;
}

manage_files_pattern($1, polaris_geodb_files_t, polaris_geodb_files_t)
manage_dirs_pattern($1, polaris_geodb_files_t, polaris_geodb_files_t)
manage_lnk_files_pattern($1, polaris_geodb_files_t, polaris_geodb_files_t)
}

########################################
## <summary>
##      Allow the specified domain to read /boot/vcpu_template.txt
## or /csl_p_0/vcpu_template.txt
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface(`polaris_iosd_vcpu_read',
   gen_require(
      type polaris_iosd_vcpu_t;
      type polaris_disk_varied_t;
      type polaris_disk_csl_p_t;
   )
)

   read_files_pattern($1, { polaris_disk_varied_t polaris_disk_csl_p_t }, polaris_iosd_vcpu_t)
}

########################################
## <summary>
##      Allow the specified domain to read /tmp/usb-disable
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface(`polaris_iosd_usb_disable_tmp_manage',
   gen_require(
      type polaris_iosd_usb_disable_tmp_t;
   )
)

   manage_files_pattern($1, polaris_iosd_usb_disable_tmp_t, polaris_iosd_usb_disable_tmp_t)
   files_tmp_filetrans($1, polaris_iosd_usb_disable_tmp_t, file, "usb-disable")
)
### <summary>
### Allow the specified domain to access /bootflash/EFI
### </summary>
### <param name="type">
### Domain allowed access.
### </param>
#
interface(`polaris_efi_files_list_dirs',
    gen_require(`
        type polaris_efi_files_t;
    ')
    list_dirs_pattern($1, polaris_efi_files_t, polaris_efi_files_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.10/selinux-tar/selinux/polarisiosd.if
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#
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#
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#

# polarissmd file contexts place holder

# dc_profile_dir
/mnt/sd3/user/dc_profile_dir(/.*)? gen_context(system_u:object_r:polaris_smd_disk_t,s0)
/flash1/user/dc_profile_dir(/.*)? gen_context(system_u:object_r:polaris_smd_disk_t,s0)
/bootflash/dc_profile_dir(/.*)? gen_context(system_u:object_r:polaris_smd_disk_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.10/selinux-tar/selinux/polarissmd.fc
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# polarismqipc file contexts place holder
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#

## <summary>Polaris iomd Policy Rules.</summary>

### Work (read, write, ioctl) with /dev/ngio[0-9+] devices

### Domain allowed access.

interface(`polaris_ngio_dev_use',`

gen_require(`
    type device_t;
    type polaris_ngio_device_t;
')
    write_chr_files_pattern($1, device_t, polaris_ngio_device_t)
    read_chr_files_pattern($1, device_t, polaris_ngio_device_t)
')

No license file was found, but licenses were detected in source scan.

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#
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#

policy_module(polarisrepm, 1.0);

gen_require(`
    type polaris_repm_t;
polaris_btrace_data_manage(polaris_repm_t)
polaris_crft_data_manage(polaris_repm_t)
polaris_chasfs_manage(polaris_repm_t)
polaris_tdlresolve_read(polaris_repm_t)
polaris_tdlldb_list_dirs(polaris_repm_t)
polaris_cpld_read(polaris_repm_t)
polaris_lua_read(polaris_repm_t)
polaris_flashlib_read(polaris_repm_t)
polaris_ripc_sman_ui_serv_connect(polaris_repm_t)
polaris_db_tdlldb_dir_use(polaris_repm_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_repm_t)

allow polaris_repm_t self:capability { sys_resource dac_override };
allow polaris_repm_t self:process setrlimit;

# temporary files created for repm in /tmp/replication
type polaris_repm_tmp_t;
files_tmp_file(polaris_repm_tmp_t)
polaris_systemd_tmpfiles_tmp_filetrans(polaris_repm_tmp_t, dir, "replication")
manage_files_pattern(polaris_repm_t, polaris_repm_tmp_t, polaris_repm_tmp_t)
polaris_dyncfg_tmp_read(polaris_repm_t)
polaris_tdlldbpersist_setup(polaris_repm_t)
polaris_tmp_tdlldb_persist_setup(polaris_repm_t)

# send syslog
logging_send_syslog_msg(polaris_repm_t)

# mq.-local_rp_1_0
type polaris_repm_local_rp_mqipc_t;
polaris_mqipc_type(polaris_repm_local_rp_mqipc_t)
polaris_mqipc_create_name(polaris_repm_t, polaris_repm_local_rp_mqipc_t, local_rp_1_0)
polaris_mqipc_create_name(polaris_repm_t, polaris_repm_local_rp_mqipc_t, local_rp_0_0)

# repm peer mqipc queues under /dev/shm/repm_peer_mq folder
type polaris_repm_peer_mqipc_t;
polaris_mqipc_type(polaris_repm_peer_mqipc_t)
polaris_mqipc_create_name_dir(polaris_repm_t, polaris_repm_peer_mqipc_t, repm_peer_mq)
# repm invokes installer_api_* api's which need access to /bootflash/.installer/install_issu_state
polaris_install_disk_read(polaris_repm_t)

ifdef(`petra_platform',
# allow access to polaris_cm_rp sem for chasfs
polaris_cm_rp_sem_use(polaris_repm_t)
# allow access to /flash12/moncfg/cfg.dat for config
polaris_swipedrive_file_manage(polaris_repm_t)
)

# execute /bin/tar
corecmd_exec_bin(polaris_repm_t)
# tar reads /etc/passwd
auth_use_nsswitch(polaris_repm_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrepm.te
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#
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#

### <summary>Polaris NGWC Platform Policy Rules.</summary>

瀹堣満 recursos瀹�

### <summary>
### Manage ngwc shared memory /dev/shm/ngwc_shm.
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
#
interface(`polaris_ngwc_shm_manage',
    gen_require(
        type tmpfs_t;
        type polaris_ngwc_shm_t;
    )
    fs_getattr_tmpfs($1)
    manage_files_pattern($1, tmpfs_t, polaris_ngwc_shm_t)
    allow $1 polaris_ngwc_shm_t:file map;
    filetrans_pattern($1, tmpfs_t, polaris_ngwc_shm_t, file, "ngwc_shm")
### <summary>
## Manage ngwc shared memory /dev/shm/ngwc_scc_shm.
### </summary>
### <param name="domain">
## Domain allowed access.
### </param>
#
interface(`polaris_ngwc_scc_shm_manage',`
gen_require(`
  type tmpfs_t;
  type polaris_ngwc_scc_shm_t;
``)
  fs_getattr_tmpfs($1)
  manage_files_pattern($1, tmpfs_t, polaris_ngwc_scc_shm_t)
  allow $1 polaris_ngwc_scc_shm_t:file map;
  filetrans_pattern($1, tmpfs_t, polaris_ngwc_scc_shm_t, file, "ngwc_scc_shm")
``)

### <summary>
## Manage ngwc shared memory /dev/shm/iomd_to_fed_ptp_offload.
### </summary>
### <param name="domain">
## Domain allowed access.
### </param>
#
interface(`polaris_ngwc_itfpo_manage',`
gen_require(`
  type tmpfs_t;
  type polaris_ngwc_itfpo_t;
``)
  fs_getattr_tmpfs($1)
  manage_files_pattern($1, tmpfs_t, polaris_ngwc_itfpo_t)
  allow $1 polaris_ngwc_itfpo_t:file map;
  filetrans_pattern($1, tmpfs_t, polaris_ngwc_itfpo_t, file, "iomd_to_fed_ptp_offload")
``)
## Manage ngwc sdm shared memory /dev/shm/sdm.

### <summary>
### Domain allowed access.
### </summary>
### <param name="domain">
### Work (read, write, ioctl) with /dev/chdrvmmap
### </param>
### <param name="domain">
### Work (read, write, ioctl) with /dev/gettysburg_dev1
### </param>

```c
interface("polaris_sdm_shm_manage",
    gen_require(
        type tmpfs_t;
        type polaris_sdm_shm_t;
    )
    fs_getattr_tmpfs($1)
    manage_files_pattern($1, tmpfs_t, polaris_sdm_shm_t)
    filetrans_pattern($1, tmpfs_t, polaris_sdm_shm_t, file, "sdm")
    allow $1 polaris_sdm_shm_t:file map;
)
```

```
interface("polaris_chdrvmmap_dev_use",
    gen_require(
        type device_t;
        type polaris_chdrvmmap_device_t;
    )
    read_chr_files_pattern($1, device_t, polaris_chdrvmmap_device_t)
    write_chr_files_pattern($1, device_t, polaris_chdrvmmap_device_t)
    allow $1 polaris_chdrvmmap_device_t:chr_file map;
)
```

```
interface("polaris_gettysburg_dev1_use",
    gen_require(
        type device_t;
        type polaris_gettysburg_dev1_device_t;
    )
    read_chr_files_pattern($1, device_t, polaris_gettysburg_dev1_device_t)
    write_chr_files_pattern($1, device_t, polaris_gettysburg_dev1_device_t)
    allow $1 polaris_gettysburg_dev1_device_t:chr_file map;
)
## Domain allowed access.

```c
interface('polaris_gettysburg_fpga_dev_use',
        gen_require(
            type device_t;
            type polaris_gettysburg_fpga_device_t;
        )
        write_chr_files_pattern($1, device_t, polaris_gettysburg_fpga_device_t)
        read_chr_files_pattern($1, device_t, polaris_gettysburg_fpga_device_t)
        mmap_chr_files_pattern($1, device_t, polaris_gettysburg_fpga_device_t)
    )
```

## Work (read, write, ioctl) with /dev/cisco/dplriomem

```c
interface('polaris_dplr_iomem_mmapdrv_dev_use',
        gen_require(
            type device_t;
            type polaris_dplr_iomem_mmapdrv_device_t;
        )
        write_chr_files_pattern($1, device_t, polaris_dplr_iomem_mmapdrv_device_t)
        read_chr_files_pattern($1, device_t, polaris_dplr_iomem_mmapdrv_device_t)
        allow $1 polaris_dplr_iomem_mmapdrv_device_t:chr_file map;
    )
```

## Allow access to semaphore of quake flashlib. Pure hack

```c
interface('polaris_quake_flashlib_sem_use',
        gen_require(
            type device_t;
            allow $1 polaris_quake_flashlib_sem_use:sem_file map;
        )
    )
```

---

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gen_require(
    type polaris_dyncfg_t;
)
allow $1 polaris_dyncfg_t:sem rw_sem_perms;
)

###################################################
## <summary>
## Manage quake i2c semaphores /dev/shm/sem.i2c_sem00N
## and work with corresponding i2c devices (/dev/i2c-XXX)
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_quake_i2c_manage',
    gen_require(
        type tmpfs_t;
        type polaris_quake_i2c_t;
    )
    manage_files_pattern($1, tmpfs_t, polaris_quake_i2c_t)
    polaris_i2c_use($1)
)

###################################################
## <summary>
## Allow caller to read or write the exiting_bays file
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_rw_exiting_bays',
    gen_require(
        type polaris_proc_exiting_bays_t;
        type proc_t;
    )
    rw_files_pattern($1, polaris_proc_exiting_bays_t, polaris_proc_exiting_bays_t)
# FIXME/TODO:
# The kernel does not reliably create /proc/exiting_bays on all platforms
# The following lines should be removed when CSCvv27097 is addressed
allow $1 polaris_proc_exiting_bays_t:file create;
allow $1 proc_t:file create;
allow $1 proc_t:dir { add_name write };

Allow caller to create open write /tmp/fpga_upgrade

## <summary>
## Domain allowed access.
## </summary>

interface(`polaris_fpga_upgrade_tmp_use',
    gen_require(`
        type polaris_fpga_upgrade_tmp_t;
    `)
    allow $1 polaris_fpga_upgrade_tmp_t::file { create open write };
`)

## <summary>
## Execute a domain transition to run cat9k_ssd_unmount.sh
## Domain allowed access.
## </summary>

interface(`polaris_ssd_unmount_domtrans',
    gen_require(`
        type polaris_ssd_unmount_t, polaris_ssd_unmount_exec_t;
    `)
    domtrans_pattern($1, polaris_ssd_unmount_exec_t, polaris_ssd_unmount_t)
`)

## <summary>
## Read lnk_file /ucode0, polaris_disk_ucode0_t.
## Domain allowed access.
## </summary>

interface(`polaris_disk_ucode0_read_lnk',
    gen_require(`
        type polaris_disk_ucode0_t;
    `)
    allow $1 polaris_disk_ucode0_t::file { create open write };
`)
type polaris_disk_ucode0_t;

')
read_link_files_pattern($1, polaris_disk_ucode0_t, polaris_disk_ucode0_t)
')

# Read Write access with /dev/cisco/fpgaiomem
#
# Work (read, write, ioctl) with /dev/cisco/fpgaiomem
#
## <summary>
##      Work (read, write, ioctl) with /dev/cisco/fpgaiomem
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_fpga_iomem_mmapfpga_dev_use',
gen_require('type device_t;
type polaris_fpga_iomem_mmapfpga_device_t;
')
allow $1 polaris_fpga_iomem_mmapfpga_device_t:chr_file map;
    write_chr_files_pattern($1, device_t, polaris_fpga_iomem_mmapfpga_device_t)
    read_chr_files_pattern($1, device_t, polaris_fpga_iomem_mmapfpga_device_t)
')

# Read Write access to /bootflash/nplusm-power
#
# Read Write access to /bootflash/nplusm-power
#
## <summary>
## Read Write access to /bootflash/nplusm-power
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_nplusm_power_manage',
gen_require('type polaris_nplusm_power_file_t;
type polaris_disk_bootflash_t;
')
filetrans_pattern($1, polaris_disk_bootflash_t, polaris_nplusm_power_file_t, file, "nplusm-power")
allow $1 polaris_nplusm_power_file_t:file { write create read open getattr unlink };
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwc.if
No license file was found, but licenses were detected in source scan.


```

#/usr/bin/os/conf/boothelper_evt.sh -- gen_context(system_u:object_r:polaris_boothelper_evt_exec_t,s0)
/tmp/udev(/.*)?                      gen_context(system_u:object_r:polaris_udev_tmp_files_t,s0)
/tmp/rommon_upgrade_ngwc(/.*)?       gen_context(system_u:object_r:polaris_boothelper_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisboothelper.fc
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#/ December 2018, Victor Kamensky
#
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#

### <summary>Polaris ezman_cc Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisezmancc.if
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dnl
dnl April 2018, Victor Kamensky
dnl
dnl Copyright (c) 2018-2019 by Cisco Systems, Inc.
dnl All rights reserved
dnl define(`polaris_lipc_service_server',"")
dnl define(`polaris_lipc_service_client',"")

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_lipc.fc.m4
No license file was found, but licenses were detected in source scan.

#
# July 2019, Victor Kamensky
#
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#
```
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisgrmgr.fc
No license file was found, but licenses were detected in source scan.

#
# July 2017, Victor Kamensky
#
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#
/usr/bin/os/conf/install_issu_monitor.sh -- gen_context(system_u:object_r:polaris_issu_monitor_exec_t,s0)
/tmp/rp/issu_mon_dir -d gen_context(system_u:object_r:polaris_issu_monitor_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisissumonitor.fc
No license file was found, but licenses were detected in source scan.

#
# March 2019, Shikhar Dogra
#
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#
## <summary>Polaris fman_cc Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfmancc.if
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#
# March 2017, Victor Kamensky
#
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#
## <summary>Polaris smand Policy Rules.</summary>

########################################################
##<summary>
##Allow domain to be started by smand with
## transition into specific service domain.
##</summary>
##<param name="domain">
##</summary>
## Type to be used to run utility.
## </summary>
## </param>
## <param name="entry_point">
## <summary>
## Type of the program to be used as an entry point to this domain.
## </summary>
## </param>
interface(‘polaris_smand_domain’,
  gen_require(
    type polaris_smand_t;
  ‘)

domtrans_pattern(polaris_smand_t, $2, $1)
’)

########################################################################
## <summary>
## Write into fifo file created by smand, typical case when
##     smand starts script under popen.
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
## <rolecap/>
#
interface(‘polaris_smand_use_fifo’,
  gen_require(
    type polaris_smand_t;
  ‘)

        write_fifo_files_pattern($1, polaris_smand_t, polaris_smand_t)
’)

########################################################################
## <summary>
## Read access to CRDU fifo file created by smand
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
## <rolecap/>
#
interface(‘polaris_smand_crdu_pipe_read’,

gen_require(
    type polaris_crdu_pipe_tmp_t;
)

read_fifo_files_pattern($1, polaris_crdu_pipe_tmp_t, polaris_crdu_pipe_tmp_t)
)

####################################################
## <summary>
## Manage CRDU fifo file created by smand
## </summary>
## <param name="domain">
##   Domain allowed access.
## </param>
## <rolecap/>
#
interface('polaris_smand_crdu_pipe_manage',
    gen_require(
        type polaris_crdu_pipe_tmp_t;
    )
    manage_fifo_files_pattern($1, polaris_crdu Pipe_tmp_t, polaris_crdu_pipe_tmp_t)
)

####################################################
## <summary>
## Write to polaris_sman_bshell_serv_lipc
## </summary>
## <param name="domain">
##   Domain allowed to connect and write into this lipc file.
## </param>
## <rolecap/>
#
interface('polaris_sman_bshell_serv_lipc_write',
    gen_require(
        type polaris_sman_bshell_serv_lipc_t;
        type polaris_smand_t;
    )
    polaris_lipc_write($1, polaris_sman_bshell_serv_lipc_t, polaris_smand_t)
)

####################################################
## <summary>
## Manage /tmp/show_ports_tmp
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed to manage tmp files.
##      </summary>
## </param>
## <rolecap/>
interface('polaris_trans_ports_tmp_manage',
    gen_require(
        type polaris_trans_stats_tmp_t;
    '
    )
    manage_files_pattern($1, polaris_trans_ports_tmp_t, polaris_trans_ports_tmp_t)
')
#######################################
## <summary>
##   create /tmp/trans_tmp and /tmp/trans_tmp.1 to store lsof output
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed to manage tmp files.
##      </summary>
## </param>
## <rolecap/>
interface('polaris_trans_stats_tmp_manage',
    gen_require(
        type polaris_trans_stats_tmp_t;
    '
    )
    manage_files_pattern($1, polaris_trans_stats_tmp_t, polaris_trans_stats_tmp_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissmand.if
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#
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#
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#

/usr/cpp/bin/cpp_cdm_svr -- gen_context(system_u:object_r:polaris_cpp_cdm_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppcdm.fc
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
## <summary>Polaris Flashlib Policy Rules.</summary>

# Flashlib policy (infra/flashlib)

### Read Polaris /tmp/.flashlock file

```c
interface(`polaris_flashlib_lock',`
    gen_require(`
        type tmp_t;
        type polaris_flashlib_lock_t;
    `)

    manage_files_pattern($1, tmp_t, polaris_flashlib_lock_t)
    allow $1 self:capability dac_override;

    ifdef(`quake_platform',`
        polaris_quake_flashlib_sem_use($1)
    `)
    # access of .flashlock on ultra
    ifdef(`vxe_family',`
        allow $1 self:capability dac_override;
    `)
)
```

### Write Polaris /tmp/flashdev.log file

```c
interface(`polaris_flashlib_lock',`
    gen_require(`
        type tmp_t;
        type polaris_flashlib_lock_t;
    `)

    manage_files_pattern($1, tmp_t, polaris_flashlib_lock_t)
    allow $1 self:capability dac_override;
```

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#
interface('polaris_flashlib_log',``
gen_require(`
    type tmp_t;
    type polaris_flashlib_log_t;
``)
manage_files_pattern($1, tmp_t, polaris_flashlib_log_t)
``)

########################################
## <summary>
##	Read partition disk device that contains rommon variables.
## C8KV reads object store and reads grub files in BIOS and EFI partitions.
## </summary>
## <param name="domain">
##<summary>
##	Domain allowed access.
##</summary>
##</param>
#
interface('polaris_flashlib_read',``
    gen_require(`
        type device_t;
        type polaris_flashlib_device_t;
``)
polaris_flashlib_lock($1)
polaris_flashlib_log($1)
read_blk_files_pattern($1, device_t, polaris_flashlib_device_t)
read_chr_files_pattern($1, device_t, polaris_flashlib_device_t)
ifdef(`vxe_family',``
polaris_vxeinstall_info_read($1)
polaris_grub_info_read($1)
``)
ifdef(`vwlc_platform',``
polaris_vwlcinstall_info_read($1)
polaris_vwlc_grub_info_read($1)
``)

# processes that use tdllib/DB will access romvar
# via flashlib mcp_getmonvar API which read /objstore.
optional_policy(`
polaris_disk_objstore_read($1)
``)
polaris_flash_shm_manage($1)
``)

################################################################
## <summary>
## Write partition disk device that contains rommon variables.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_flashlib_write',`
   gen_require(
      type device_t;
      type polaris_flashlib_device_t;
   )

   polaris_flashlib_lock($1)
   write_blk_files_pattern($1, device_t, polaris_flashlib_device_t)
   polaris_flash_shm_manage($1)
)

########################################
## <summary>
## Manage ngwc shared memory /dev/shm/flash_shm.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_flash_shm_manage',`
   gen_require(
      type tmpfs_t;
      type polaris_flash_shm_t;
   )
   fs_getattr_tmpfs($1)
   manage_files_pattern($1, tmpfs_t, polaris_flash_shm_t)
   allow $1 polaris_flash_shm_t:file map;
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisflashlib.if
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# # March 2017, Victor Kamensky # # Copyright (c) 2016-2019 by Cisco Systems, Inc.
## <summary>Polaris LUA Policy Rules.</summary>

# Lua policy

### <summary>Read Polaris lua files (/lua)</summary>

### <param name="domain">

## Domain allowed access.

### </param>

```
interface('polaris_lua_read',
gen_require(''
type polaris_lua_file_t;
')

allow $1 polaris_lua_file_t:file read_file_perms;
allow $1 polaris_lua_file_t:dir { read_file_perms search_dir_perms };
')
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislua.if
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#
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#
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#

### <summary>Polaris tamd_rp Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristamdrp.if
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
## <summary>Polaris polarisiptbl Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisiptbl.if
No license file was found, but licenses were detected in source scan.

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#
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#

# autopolarisplatformbase file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/autopolarisplatformbase.fc
No license file was found, but licenses were detected in source scan.

# February 2020, Victor Kamensky
#
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#

policy_module(polarisdmiportsfetch, 1.0);

gen_require(`
   type polaris_dmi_ports_fetch_t;
`)
polaris_chasfs_manage(polaris_dmi_ports_fetch_t)
polaris_tdlresolve_read(polaris_dmi_ports_fetch_t)
polaris_cpld_read(polaris_dmi_ports_fetch_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmiportsfetch.te
No license file was found, but licenses were detected in source scan.

# July 2018, Victor Kamensky
#
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policy_module(polarisngwcfeddebug, 1.0);

gen_require(
    type polaris_ngwc_fed_debug_mgr_t;
);

polaris_bootflash_manage(polaris_ngwc_fed_debug_mgr_t)
polaris_btrace_data_manage(polaris_ngwc_fed_debug_mgr_t)
polaris_cpld_read(polaris_ngwc_fed_debug_mgr_t)
polaris_flashlib_read(polaris_ngwc_fed_debug_mgr_t)
polaris_chasfs_read(polaris_ngwc_fed_debug_mgr_t)
polaris_tdlresolve_read(polaris_ngwc_fed_debug_mgr_t)
polaris_disk_bootflash_read_lnk(polaris_ngwc_fed_debug_mgr_t)
polaris_dmammap_dev_use(polaris_ngwc_fed_debug_mgr_t)
polaris_chdrvmmmap_dev_use(polaris_ngwc_fed_debug_mgr_t)
polaris_dplr_iomem_mmapdrv_dev_use(polaris_ngwc_fed_debug_mgr_t)

# opens /proc/pid/net/dev
kernel_read_network_state(polaris_ngwc_fed_debug_mgr_t)

# calls tcpdump, let it run in its own domain
netutils_domtrans(polaris_ngwc_fed_debug_mgr_t)

# calls system function
corecmd_exec_shell(polaris_ngwc_fed_debug_mgr_t)

# calls lspci and other utilities
corecmd_exec_bin(polaris_ngwc_fed_debug_mgr_t)

auth_use_nsswitch(polaris_ngwc_fed_debug_mgr_t)

# lspci needs sysfs access
dev_list_sysfs(polaris_ngwc_fed_debug_mgr_t)
dev_read_sysfs(polaris_ngwc_fed_debug_mgr_t)

# dope.py /tmp/idope_svr, /tmp/shfwd_svr socket files
type polaris_fed_debug_sock_t;
files_tmp_file(polaris_fed_debug_sock_t)

files_tmp_filetrans(polaris_ngwc_fed_debug_mgr_t, polaris_fed_debug_sock_t, socket_file, "idope_svr")
files_tmp_filetrans(polaris_ngwc_fed_debug_mgr_t, polaris_fed_debug_sock_t, socket_file, "shfwd_svr")

gen_require(
    type tmp_t;
)
manage_sock_files_pattern(polaris_ngwc_fed_debug_mgr_t, tmp_t, polaris_fed_debug_sock_t)

# allow show-forward to use following temp files in /tmp dir

type polaris_fed_debug_tmp_t;
files_tmp_file(polaris_fed_debug_tmp_t)
files_tmp_filetrans(polaris_ngwc_fed_debug_mgr_t, polaris_fed_debug_tmp_t, file, "pktgen.txt")
files_tmp_filetrans(polaris_ngwc_fed_debug_mgr_t, polaris_fed_debug_tmp_t, file, "DopeElam.sh")
files_tmp_filetrans(polaris_ngwc_fed_debug_mgr_t, polaris_fed_debug_tmp_t, file, "MemDumpElam.sh")
gen_require(  
    type tmp_t;
)  
manage_files_pattern(polaris_ngwc_fed_debug_mgr_t, { tmp_t polaris_fed_debug_tmp_t}, polaris_fed_debug_tmp_t)

# talk to fed over unix sockets
polaris_fed_sock_write(polaris_ngwc_fed_debug_mgr_t)

# /dcmlog.txt
type polaris_fed_debug_dcmlog_t;
files_type(polaris_fed_debug_dcmlog_t)
gen_require(  
    type root_t;
)  
filetrans_pattern(polaris_ngwc_fed_debug_mgr_t, root_t, polaris_fed_debug_dcmlog_t, file, "dcmlog.txt")
manage_files_pattern(polaris_ngwc_fed_debug_mgr_t, root_t, polaris_fed_debug_dcmlog_t)

# dope.py listens on port 12255
corennet_tcp_bind_generic_node(polaris_ngwc_fed_debug_mgr_t)
allow polaris_ngwc_fed_debug_mgr_t self:tcp_socket { getattr setopt ioctl getopt bind create listen accept connect read write }
corennet_tcp_bind_polaris_fed_debug_trace_rpc_port(polaris_ngwc_fed_debug_mgr_t)
corennet_tcp_connect_polaris_fed_debug_trace_rpc_port(polaris_ngwc_fed_debug_mgr_t)

# dope.py listens on port 5389 for shfwd commands
corenet_tcp_bind_polaris_fed_debug_shfwd_command_port(polaris_ngwc_fed_debug_mgr_t)

# LOOK AT ME: /dev/mem access restriction remove after fix for CSCvm07702 is committed.
ifdef(‘nyquist_platform’,  
polaris_dev_mem_use(polaris_ngwc_fed_debug_mgr_t)  
)  
ifdef(‘starfleet_platform’,  
polaris_dev_mem_use(polaris_ngwc_fed_debug_mgr_t)  
)  
ifdef(‘quake_platform’,  
polaris_dev_mem_use(polaris_ngwc_fed_debug_mgr_t)  
)
type polaris_fed_debug_asic_config_t;
files_tmp_file(polaris_fed_debug_asic_config_t);
files_tmp_filetrans(polaris_ngwc_fed_debug_mgr_t, polaris_fed_debug_asic_config_t, file, "asic_config.pickle")
gen_require(
    type tmp_t;
')
manage_files_pattern(polaris_ngwc_fed_debug_mgr_t, tmp_t, polaris_fed_debug_asic_config_t)

# dope.py invokes scapy.py for DP trace which needs to create socket to seek
# interface info via ioctl ifreq
allow polaris_ngwc_fed_debug_mgr_t self:udp_socket { create ioctl };

# /tmp/rdope_ffi handle directory where libffi will create file with execute
# mapping. Files system should be executable and /tmp so far is. Note TMPDIR
# environment variable is the first choice where to create libffi executable
# mapped files.
type polaris_fed_debug_ffi_t;
files_tmp_file(polaris_fed_debug_ffi_t);
files_tmp_filetrans(polaris_ngwc_fed_debug_mgr_t, polaris_fed_debug_ffi_t, dir, "rdope_ffi")
gen_require(
    type tmp_t;
')
manage_dirs_pattern(polaris_ngwc_fed_debug_mgr_t, tmp_t, polaris_fed_debug_ffi_t)
manage_files_pattern(polaris_ngwc_fed_debug_mgr_t, polaris_fed_debug_ffi_t, polaris_fed_debug_ffi_t)
allow polaris_ngwc_fed_debug_mgr_t polaris_fed_debug_ffi_t:file { execute map };

# allow to read /proc/mtd called from mcp_getmonvar
kernel_read_system_state(polaris_ngwc_fed_debug_mgr_t)
polaris_remap_mem_dev_use(polaris-ngwc_fed_debug_mgr_t)

allow polaris-ngwc_fed_debug_mgr_t self:capability sys_resource;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwcfeddebug.te
No license file was found, but licenses were detected in source scan.

dnl
dnl April 2018, Victor Kamensky
dnl
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dnl
dnl Process Names Map
define('process_map', `defn(format(``process_map[%s]`, `$1`))')
define('process_map_set', `define(format(``process_map[%s]`, `$1`, `$2`))')
dnl Process Names and Labels
define(`process_short_name', `patsubst($1, `^BPROC_', `'))
define(`process_default_stem', `translit(process_short_name($1), `A-Z', `a-z')')
define(`process_stem', `ifelse(process_map(process_short_name($1)), `', process_default_stem($1), process_map(process_short_name($1))))')
define(`process_label', `format(`polaris_%s_t', process_stem($1))')
define(`process_exec_label', `format(`polaris_%s_exec_t', process_stem($1))')

dnl Process Type Map: track that type declations unique
define(`process_type_map', `defn(format(``process_type_map[%s]'', `$1'))')
define(`process_type_map_set', `define(format(``process_type_map[%s]'', `$1'), `$2')')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_process.m4
No license file was found, but licenses were detected in source scan.

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dnl
process_map_set(AUTO_UPGRADE_CLIENT_RP, autoupgrade)
process_map_set(BSM_RP, bsm)
process_map_set(BTM_CC, btman)
process_map_set(BTM_FP, btman)
process_map_set(BTM_RP, btman)
process_map_set(BTM_BP, btman)
process_map_set(CCD_RP, caf)
process_map_set(DMI_CONF, confd)
process_map_set(DMI_PTTCD, pttcd)
process_map_set(SDWAN_CONF, confd)
process_map_set(EMD_CC, emd)
process_map_set(EMD_FP, emd)
process_map_set(EMD_RP, emd)
process_map_set(FCD_RP, flashcheck)
process_map_set(FM_FP, fman_fp)
process_map_set(FM_CC, fman_cc)
process_map_set(FM_RP, fman_rp)
process_map_set(HM_CC, hm)
process_map_set(HM_FP, hm)
process_map_set(HM_RP, hm)
process_map_set(IOXM_RP, ioxman)
process_map_set(ISSU_STK, issu_stack)
process_map_set(LM_RP, lm)
process_map_set(MAINT_RP, periodic)
process_map_set(PLOGD_CC, plogd)
process_map_set(PLOGD_FP, plogd)
process_map_set(PLOGD_RP, plogd)
process_map_set(REPM_RP, repm)
process_map_set(SERVICE_MGR_RP, service_mgr)
process_map_set(SORT_RP, sort_files)
process_map_set(SERVICE_MGR_FP, service_mgr)
process_map_set(SORT_RP, sort_files)
process_map_set(SERVICE_MGR_RP, service_mgr)
process_map_set(SORT_RP, sort_files)
process_map_set(SM, smand)
process_map_set(SM, smand)
process_map_set(SM, smand)
process_map_set(SORT_RP, sort_files)
process_map_set(SM, smand)
process_map_set(SORT_RP, sort_files)
process_map_set(SM, smand)
process_map_set(SORT_RP, sort_files)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/processmap.m4
No license file was found, but licenses were detected in source scan.

dnl

dnl April 2018, Victor Kamensky

dnl

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dnl
dnl divert(-1)

dnl

dnl
include(`polaris_process.m4')

dnl
include(`polaris_database_db.m4')
include(`polaris_database_db_if.m4')

include(`polaris_max_scope.m4')

divert(0)dnl
#
# This is a generated file! Instead of modifying this file,
# modify proper platform TDL file.
#
## <summary>Polaris Platform DB Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_database_if.m4
No license file was found, but licenses were detected in source scan.


dnl

dnl April 2018, Victor Kamensky

dnl
VXE Platform Max Bay Limits

max_bay_map_set(`rp', `per_bay', 0)
max_bay_map_set(`cc', `per_bay', 0)
max_bay_map_set(`fp', `per_bay', 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/vxemaps.m4
No license file was found, but licenses were detected in source scan.

# January 2021, Gabriel Lee, Shawn Liu
#
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#

/ezManage_v1/ezManage_sms_handler.py -- gen_context(system_u:object_r:polaris_ezmanage_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisezmanage.fc
No license file was found, but licenses were detected in source scan.

# April 2017, Victor Kamensky
#
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#

## <summary>Polaris dmi_vtyserverutild Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmivtyserverutild.if
No license file was found, but licenses were detected in source scan.

# August 2017, Victor Kamensky
#
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#

# polarisbsm file contexts place holder
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbsm.fc
No license file was found, but licenses were detected in source scan.

#  
# February 2020, Victor Kamensky  
#  
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#  
## <summary>Polaris dmi_ports_fetch Policy Rules.</summary>

########################################
## <summary>
##     Work with /bootflash/sdavc
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#  
interface(`polaris_sdavc_proxy_manage',
  gen_require(
    type polaris_sdavc_proxy_files_t;
  )
  manage_files_pattern($1, polaris_sdavc_proxy_files_t, polaris_sdavc_proxy_files_t)
  manage_dirs_pattern($1, polaris_sdavc_proxy_files_t, polaris_sdavc_proxy_files_t)
 )

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissdavcproxy.if
No license file was found, but licenses were detected in source scan.

#  
# March 2017, Victor Kamensky  
#  
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#  
/usr/binos/bin/cman_fp_ledp -- gen_context(system_u:object_r:polaris_cm_fp_exec_t,s0)
/usr/binos/bin/cman_fp_us_ledp -- gen_context(system_u:object_r:polaris_cm_fp_exec_t,s0)
/usr/binos/bin/cman_fp_vwlce -- gen_context(system_u:object_r:polaris_cm_fp_exec_t,s0)
/usr/binos/bin/cman_fp_vwlceldp -- gen_context(system_u:object_r:polaris_cm_fp_exec_t,s0)
/usr/binos/bin/cman_fp_sumatra_ledp -- gen_context(system_u:object_r:polaris_cm_fp_exec_t,s0)
Open Source Used In BGP TE Controller Version 4.3.0  6299

/usr/binos/conf/mcp_pcie_status_cmd.sh  -- gen_context(system_u:object_r:polaris_pcie_status_cmd_exec_t,s0)
/dev/hkp -c gen_context(system_u:object_r:polaris_hkp_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmfp.fc
No license file was found, but licenses were detected in source scan.

#
# June 2020, Manu Roy
#  
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#

# /bootflash labels
/bootflash(/.*)?  gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
/bootflash/ssh(/.*)?  gen_context(system_u:object_r:ssh_home_t,s0)
/bootflash/ssh/ssh_host.*_key\.*_pub  gen_context(system_u:object_r:sshd_key_t,s0)
/bootflash/ssh/ssh_host.*_key  gen_context(system_u:object_r:sshd_key_t,s0)
/bootflash/core(/.*)?  gen_context(system_u:object_r:polaris_core_file_t,s0)

# /flash is symbolic link /flash10/USER
/flash  gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

#flash1
/flash1(/.*)?  gen_context(system_u:object_r:polaris_disk_crashinfo_t,s0)
/flash1/CRASH(/.*)?  gen_context(system_u:object_r:polaris_disk_crashinfo_t,s0)
/flash1/CRASH/tracelogs(/.*)?  gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/flash7(/.*)?  gen_context(system_u:object_r:polaris_disk_license_t,s0)
/flash8(/.*)?  gen_context(system_u:object_r:polaris_disk_license_t,s0)
/flash9(/.*)?  gen_context(system_u:object_r:polaris_obfl_data_t,s0)

# /flash10
# USER is a reserved selinux keyword - escape it like this
/flash10(/.*)?  gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
/flash10/USE[R]/core(/.*)?  gen_context(system_u:object_r:polaris_core_file_t,s0)
/flash10/USE[R]/nvram_config --  gen_context(system_u:object_r:polaris_nvram_file_t,s0)
/flash10/USER/ssh/ssh_host_rsa_key --  gen_context(system_u:object_r:sshd_key_t,s0)

#sdflash
/dev/mmcblk1p1  -b  gen_context(system_u:object_r:polaris_iots_swipedrive_device_t,s0)
/dev/sdflash  gen_context(system_u:object_r:polaris_iots_swipedrive_file_t,s0)
#usb device
/dev/sda1  -b  gen_context(system_u:object_r:polaris_iots_swipedrive_device_t,s0)
#DMA ASIC driver
/dev/mvDmaDrv  gen_context(system_u:object_r:polaris_iots_mvDmaDrv_device_t,s0)
/dev/mvIntDrv  gen_context(system_u:object_r:polaris_iots_mvIntDrv_device_t,s0)

# /crashinfo is symbolic link to /mnt/sd1 created by systemd-tmpfiles
/crashinfo  gen_context(system_u:object_r:polaris_disk_crashinfo_t,s0)

#/dev
/dev/petra-fpga  -c  gen_context(system_u:object_r:polaris_iots_fpga_device_t,s0)
/dev/petra-zynq-ps-gpio -c  gen_context(system_u:object_r:polaris_iots_fpga_device_t,s0)
/dev/petra-gpio-pc3 -c  gen_context(system_u:object_r:polaris_iots_fpga_device_t,s0)
#Line card fpga driver for mmap
/dev/petra-lc-fpga -c  gen_context(system_u:object_r:polaris_iots_fpga_device_t,s0)

#memory devices
/dev/tm -c  gen_context(system_u:object_r:polaris_iots_tm_device_t,s0)
/dev/hcam -c  gen_context(system_u:object_r:polaris_iots_tm_device_t,s0)
#vlan-virtual ethernet
/dev/petra-krport -c  gen_context(system_u:object_r:polaris_iots_tm_device_t,s0)
/tmp/udev/etc/udev/sdflash/udev-info  gen_context(system_u:object_r:polaris_udev_tmp_files_t,s0)

# hellcat
/dev/spidev0.0 -c  gen_context(system_u:object_r:polaris_iots_led_device_t,s0)
/dev/spidev0.1 -c  gen_context(system_u:object_r:polaris_iots_led_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisiotswitch.fc
No license file was found, but licenses were detected in source scan.

#
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#
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#

policy_module(polarisngwcfed, 1.0);

gen_require(
    type polaris_ngwc_fed_t;
')
polaris_btrace_data_manage(polaris_ngwc_fed_t)
polaris_chasfs_manage(polaris_ngwc_fed_t)
polaris_tdlresolve_read(polaris_ngwc_fed_t)
polaris_tdlldb_list_dhrs(polaris_ngwc_fed_t)
polaris_lua_read(polaris_ngwc_fed_t)
polaris_flashlib_read(polaris_ngwc_fed_t)
polaris_chasync_files_manage(polaris_ngwc_fed_t)

# LOOK AT ME: system() call restriction remove after
# CSCvn19282 is fixed using CSCvn19287.
#
# fed executes cp_trace_request.sh when a sv stack split occurs.
# cp_trace_request.sh does source of pglobals.sh which requires the
# access of /crashinfo.
polaris_disk_crashinfo_getattr(polaris_ngwc_fed_t)

polaris_ripc_sman_ui_serv_connect(polaris_ngwc_fed_t)

polaris_db_tdldb_dir_use(polaris_ngwc_fed_t)

corecmd_exec_bin(polaris_ngwc_fed_t)
corecmd_exec_shell(polaris_ngwc_fed_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_ngwc_fed_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_ngwc_fed_t)

# allow read/write to /proc/irq/N/irq files
kernel_rw_irq_sysctls(polaris_ngwc_fed_t)

polaris_obfl_data_manage(polaris_ngwc_fed_t)
polaris_lsmpi_dev_use(polaris_ngwc_fed_t)

allow polaris_ngwc_fed_t self:capability { sys_rawio dac_override ipc_owner sys_nice ipc_lock };
allow polaris_ngwc_fed_t self:capability2 block_suspend;

polaris_dyncfg_tmp_read(polaris_ngwc_fed_t)

optional_policy('polaris_ngwc_shm_manage(polaris_ngwc_fed_t)
')

optional_policy('polaris_ngwc_scc_shm_manage(polaris_ngwc_fed_t)
')

# cpp bleeds into switching platforms through fman_fp and fed
# apparently even on nyquist fed creates /tmp/cpp_anon_db
polaris_cpp_process(polaris_ngwc_fed_t)
polaris_cpp_tmp_files_use(polaris_ngwc_fed_t)
optional_policy(
    # /dev/dplr_intrpt usage
    polaris_dplr_dev_use(polaris_ngwcFed_t)
)

# /dev/dma_map usage
polaris_dmaMap_dev_use(polaris_ngwcFed_t)

# /dev/remap_mem0 usage
polaris_remap_mem_dev_use(polaris_ngwcFed_t)

# /dev/cli2xcvr_pipe and /dev/xcvr2cli_pipe


type polarisFed_xcvr_pipe_t;
files_type(polarisFed_xcvr_pipe_t)
devoassociate(polarisFed_xcvr_pipe_t)
gen_require(
    type device_t;
    )
filetrans_pattern(polaris_ngwcFed_t, device_t, polarisFed_xcvr_pipe_t, fifo_file, "cli2xcvr_pipe")
filetrans_pattern(polaris_ngwcFed_t, device_t, polarisFed_xcvr_pipe_t, fifo_file, "xcvr2cli_pipe")
manage_fifo_files_pattern(polaris_ngwcFed_t, device_t, polarisFed_xcvr_pipe_t)

polaris_disk_bootflash_search(polaris_ngwcFed_t)

allow polaris_ngwcFed_t self:process setsched;

# work with /dev/msi/Slot0/Doppler0/GroupN files
dev_rwlock_generic_chr_files(polaris_ngwcFed_t)

# read /sys/devices/system/cpu/online
dev_read_sysfs(polaris_ngwcFed_t)

# bind to shbw port
corenets_bind(polaris_ngwcFed_shbw_port(polaris_ngwcFed_t)

# connect to shbw port
corenets_tcp_connect(polarisFed_debug_shbw_command_port(polaris_ngwcFed_t)

# creates and write /flash/shbw_params.txt file
polaris_bootflash_manage(polaris_ngwcFed_t)

# use polaris_ngwcFed_t as syslog_client_type
logging_send_syslog_msg(polaris_ngwcFed_t)

# bind to dbgmn port
corenets_udp_bind(polaris_ngwcFed_dbgmn_port(polaris_ngwcFed_t)
corenet_udp_bind_generic_node(polaris_ngwc_fed_t)
allow polaris_ngwc_fed_t self:udp_socket { bind create getopt }

optional_policy(')
# on macallan cman_fp needs access to /dev/cisco/dplriomem
# for mapping dplr io memory to application space.
polaris_dplr_iomem_mmapdrv_dev_use(polaris_ngwc_fed_t);')

# On Macallan as part of doppler sdk_asic_init(), a
# rw call is made to /dev/cpld
polaris_cpld_dev_use(polaris_ngwc_fed_t)
polaris_cpld_read(polaris_ngwc_fed_t)
#ptp_init_systemclock() called during fed process init writes
# /sys/devices/platform/cpld/reg_doppe_1588_sync
polaris_cpld_write(polaris_ngwc_fed_t)

optional_policy(')
# In Macallan cards which use Doppler ASIC,
# ngmod_doppler_mmap() api is called to get hold of
# MMapped Asic address. As part of the operation it uses
# /dev/chdrvmmap device.
polaris_chdrvmmap_dev_use(polaris_ngwc_fed_t)
')

# LOOK AT ME: /dev/mem access restriction remove after
# CSCvk00737 is fixed using CSCvk00741
ifdef('nyquist_platform',
polaris_dev_mem_use(polaris_ngwc_fed_t)
')

# LOOK AT ME: /dev/mem access restriction remove after
# CSCvm34589 is fixed using CSCvm34617
ifdef('starfleet_platform',
polaris_dev_mem_use(polaris_ngwc_fed_t)
')

# LOOK AT ME: /dev/mem access restriction remove after
# CSCvn64182 is fixed using CSCvn64184
ifdef('quake_platform',
polaris_dev_mem_use(polaris_ngwc_fed_t)
')

ifdef('sumatra_platform',
# LOOK AT ME: After direct usage of /dev/mem is removed (CSCvw80796)
polaris_dev_mem_use(polaris_ngwc_fed_t)
polaris_sumatra_doppler_dev_use(polaris_ngwc_fed_t)
')
ifdef("passport_platform","");
polaris_dev_mem_use(polaris_ngwc_fed_t);
"

#Entropy number is read from ACT2 and stored in /tmp/hw_entropy
#Allow sesa library read from /tmp/hw_entropy to update random
#number seed.
polaris_hw_entropy_read(polaris_ngwc_fed_t)

# fed is server for /tmp/dbgmn_log_svr socket file
type polaris_fed_sock_t;
files_tmp_file(polaris_fed_sock_t)

files_tmp_filetrans(polaris_ngwc_fed_t, polaris_fed_sock_t, socket_file, "dbgmn_log_svr")

gen_require(
    type tmp_t;
')
manage_sock_files_pattern(polaris_ngwc_fed_t, tmp_t, polaris_fed_sock_t)

optional_policy(
    # talk to rdope.sh over unix sockets
    polaris_fed_debug_sock_write(polaris_ngwc_fed_t)
')

# /dev/shm/sdm access
optional_policy(
    polaris_sdm_shm_manage(polaris_ngwc_fed_t)
')

# creates few files under /tmp/installer (e.g like
# /tmp/installer/phy_shannon_ver_1) to indicate current h/w conditions
polaris_install_tmp_manage(polaris_ngwc_fed_t)

# communication between the nif manager and fed use directories under /tmp/sv
polaris_sv_tmp_use(polaris_ngwc_fed_t)

optional_policy(
    polaris_quake_i2c_manage(polaris_ngwc_fed_t)
')

# work with /tmp files (/tmp/fed_post_results)
type polaris_fed_tmp_t;
files_tmp_file(polaris_fed_tmp_t)
files_tmp_filetrans(polaris_ngwc_fed_t, polaris_fed_tmp_t, file, "fed_post_result")
manage_files_pattern(polaris_ngwc_fed_t, polaris_fed_tmp_t, polaris_fed_tmp_t)
manage_dirs_pattern(polaris_ngwc_fed_t, polaris_fed_tmp_t, polaris_fed_tmp_t)
manage_fifo_files_pattern(polaris_ngwc_fed_t, polaris_fed_tmp_t, polaris_fed_tmp_t)
polaris_cm_rp_tmp Manage(polaris_ngwc_fed_t)

# Allow write to flash. Needed for template support.
polaris_flashlib_write(polaris_ngwc_fed_t)

# CSCv078054 will be used to fix fed policies on crankshaft properly.
# Below policy is just to unblock Nightwatch boot issue on ISR in
# enforcing mode.
ifdef("crankshaft_family",
   # ISR Nightwatch module accesses libraries compiled with icc
   polaris_icc_broken_relocations(polaris_ngwc_fed_t)
)

   #ISR Nightwatch module creates softlink /flash -> /bootflash
   gen_require(
      type root_t;
   )
   filetrans_pattern(polaris_ngwc_fed_t, root_t, polaris_disk_bootflash_t, lnk_file, "flash")

optional_policy(
   polaris_epc_ws_liaison_tmp_read(polaris_ngwc_fed_t)
)

# ngwc-fed manage /tmp/epc_ws/fed_to_wif_pipe file fifo_file.
optional_policy(
   polaris_epc_ws_liaison_fifo_manage(polaris_ngwc_fed_t)
)

optional_policy(
   polaris_ngwc_itfpo_manage(polaris_ngwc_fed_t)
)

# access SERDES /tmp/serdes_asic_key_dir/*
optional_policy(
   polaris_serdes_asic_key_tmp_manage(polaris_ngwc_fed_t)
)

# ngwc-fed creates /tmp/epc_ws dir
optional_policy(
   polaris_epc_ws_liaison_tmp_file(polaris_ngwc_fed_t)
)
No license file was found, but licenses were detected in source scan.

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#
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#

/usr/bin/os/sbin/ncsshd -- gen_context(system_u:object_r:polaris_dmi_ncsshd_mgmt_exec_t,s0)
/var/run/ncsshd_mgmt.pid -- gen_context(system_u:object_r:polaris_dmi_ncsshd_mgmt_var_run_t,s0)

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#

/usr/bin/os/conf/mcp_smartctl_cmds.sh -- gen_context(system_u:object_r:polaris_smartctl_exec_t,s0)
/tmp/smart.pid -- gen_context(system_u:object_r:polaris_smartctl_tmp_t,s0)

No license file was found, but licenses were detected in source scan.

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#
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#

/tmp/tmp pubb/interceptor(/.*)? gen_context(system_u:object_r:polaris_pttcd_tmp_t,s0)

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#

## <summary>Polaris Cfg Policy Rules.</summary>

### Cfg files policy

---

### <summary>
### Manage cfg files (under /tmp/sw/cfg)
### </summary>

### <param name="domain">
### Domain allowed access.
### </param>

### <rolebase/>

```c
interface('polaris_cfg_data_manage',
gen_require(`
type polaris_cfg_data_t;
')
manage_dirs_pattern($1, polaris_cfg_data_t, polaris_cfg_data_t)
manage_files_pattern($1, polaris_cfg_data_t, polaris_cfg_data_t)
manage_lnk_files_pattern($1, polaris_cfg_data_t, polaris_cfg_data_t)
')
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscfg.if

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#
# July 2017, Victor Kamensky
#
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#

policy_module(polarisngiolite, 1.0);

gen_require('
type polaris_ngiolite_t;

polaris_btrace_data_manage(polaris_ngiolite_t)
polaris_crft_data_manage(polaris_ngiolite_t)
polaris_chasfs_manage(polaris_ngiolite_t)
polaris_tldresolve_read(polaris_ngiolite_t)
polaris_tldldb_list_dirs(polaris_ngiolite_t)
polaris_cpld_read(polaris_ngiolite_t)
polaris_flashlib_read(polaris_ngiolite_t)

optional_policy(
  polaris_cpp_tmp_ifdev_use(polaris_ngiolite_t)
)

# In the file of radium_xcvr.c allow access to create and bind
# the socket using the API bnxt_impl_init_netlink.
allow polaris_ngiolite_t self:netlink_generic_socket { bind create getattr setopt };

# in iot platforms, ngiolite needs access to /proc/sys/net/ipv6/conf/mvsw/disable_ipv6
optional_policy(
  kernel_rw_net_sysctls(polaris_ngiolite_t)
  kernel_search_network_sysctl(polaris_ngiolite_t)
)

# PLEASE LOOK AT code should not use sysv IPC ARIs,
# instead POSIX variants must be used. Remove after
# code changed in proper way
# allow access sysv semaphor created by qfp process
ifdef('crankshaft_family','
  polaris_qfp_sem_use(polaris_ngiolite_t)
  polaris_ggpio_dev_read_write(polaris_ngiolite_t)
  polaris_dplr_dev_use(polaris_ngiolite_t)
')

ifdef('fugazi_platform','
  polaris_qfp_sem_use(polaris_ngiolite_t)
')

# write access to /sys/bus/pci/rescan
dev_rw_sysfs(polaris_ngiolite_t)
# LOOK AT ME ngiolite does it through "echo 1 > /sys/bus/pci/rescan" seems to much
# to grunt shell and bin access just to write "1" string into the file
corecmd_exec_bin(polaris_ngiolite_t)
corecmd_exec_shell(polaris_ngiolite_t)
# allow read of /etc/passwd
auth_use_nsswitch(polaris_ngiolite_t)
polaris_firmware_read(polaris_ngiolite_t)

polaris_udev_tmp_list_dirs(polaris_ngiolite_t)

# allow access to read the file cman rommon file.
polaris_proc_rmonbifo_getattr(polaris_ngiolite_t)
polaris_proc_rmonbifo_read(polaris_ngiolite_t)

allow polaris_ngiolite_t self:capability { net_admin sys_rawio }

# allow system time capability to check for system timeout
# while checking the state using API cwan_modem_check_ready_state
allow polaris_ngiolite_t self:capability sys_time;

# allow access to nim_xxd file created by cmcc
polaris_nim_xxd_tmp_open_unlink(polaris_ngiolite_t);

# ngiolite needs to work with /dev/sd /dev/sg devices to figure out disk driver
# paramters. drivers/userspace/nim_xxd library
storage_raw_read_fixed_disk(polaris_ngiolite_t)
storage_read_scsi_generic(polaris_ngiolite_t)
storage_write_scsi_generic(polaris_ngiolite_t)

polaris_sysfs_platform_dev_use(polaris_ngiolite_t)

# LOOK AT ME: ngiolite needs to work with /dev/ds31408, which is generic device_t now
gen_require(`
type device_t;
`)

rw_chr_files_pattern(polaris_ngiolite_t, device_t, device_t)

# modprobe nim_dm dm_drv_log_level=0x01
ifdef(`crankshaft_family',`
modutils_domtrans_insmod(polaris_ngiolite_t)
`)

polaris_smartctl_domtrans(polaris_ngiolite_t)

# utah_fpge_driver.c needs socket to configure interface parameters
allow polaris_ngiolite_t self:udp_socket create_socket_perms;

polaris_utility_domain_template(smartctl)
corecmd_exec_bin(polaris_smartctl_t)
corecmd_exec_shell(polaris_smartctl_t)

# allow access to polaris_cpp_tmpfs_t file
# Example is ifdef shared memory /dev/shm/cpp_ifdev_shmem
# The ngiolite init function calls the api ifdev_init
# to initialize shared memory control info.
fs_getattr_tmpfs(polaris_ngiolite_t)
polaris_cpp_tmpfs_ifdev_rw(polaris_ngiolite_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_smartctl_t)

logging_send_syslog_msg(polaris_smartctl_t)

fstools_domtrans(polaris_smartctl_t)

# runs tar /bin/tar -xvzf /firmware/MicronP400m-MTFDDAK200MAN.pkg -C /firmware
polaris_firmware_manage(polaris_smartctl_t)
files_getattr_all_dirs(polaris_smartctl_t)
files_read_all_symlinks(polaris_smartctl_t)

# work with /dev/sgX
storage_read_scsi_generic(polaris_smartctl_t)
storage_write_scsi_generic(polaris_smartctl_t)

allow polaris_smartctl_t self:capability { chown dac_override owner fsetid };

type polaris_smartctl_tmp_t;
files_tmp_file(polaris_smartctl_tmp_t)
files_tmp_filetrans(polaris_smartctl_tmp_t, polaris_smartctl_tmp_t, file, "smart.pid")
manage_files_pattern(polaris_smartctl_t, polaris_smartctl_tmp_t, polaris_smartctl_tmp_t)

# script inherits stdout from ngiolite, needs permission to append to it
polaris_use_btrace_fifo(polaris_smartctl_t)

# LOOK AT ME: raw memory access in cavium vendor SDK
# related to octeon driver (BUG CSCvh55517)
ifdef("crankshaft_family","
polaris_dev_mem_use(polaris_ngiolite_t)
"
)

ifdef("sparrow_platform","
polaris_cm_cc_tmpfs_manage(polaris_ngiolite_t)
polaris_tty_NMEA_dev_use(polaris_ngiolite_t)
"
)

ifdef("blackheart_platform","
polaris_cm_cc_tmpfs_manage(polaris_ngiolite_t)
"
)

ifdef("cabo_platform","
polaris_cm_cc_tmpfs_manage(polaris_ngiolite_t)
')

ifdef(`aventus_platform',
polaris_cm_cc_tmpfs_manage(polaris_ngiolite_t)
polaris_tty_NMEA_dev_use(polaris_ngiolite_t)
')

ifdef(`crankshaft_family',
  # allow scan pci/devices proc dir
  # The ngiolite init function makes call to o2_cvmx_remote_open to
  # open the remote library connection to cavium chip in FFP.
  # The octeon library call invokes pci_get_device, which needs to
  # access /proc.
  kernel_getattr_proc_files(polaris_ngiolite_t)
  kernel_write_proc_files(polaris_ngiolite_t)
  kernel_read_system_state(polaris_ngiolite_t)

  # allow access to /tmp/octeon-remote-lock-pci***
  # This is required as part of ngiolite access of octeon chip.
  # As part of the init, call is made to octeon_remote_lock()
  # which requires access to the /tmp file.
  polaris_cm_fp_tmp_filetrans(polaris_ngiolite_t)
  polaris_cm_fp_tmp_manage(polaris_ngiolite_t)

  #################################################################
  ## CWAN NGIOLITE process policies start##########
  #################################################################
  #cwan running as a ngiolite process needs to be able to RW/IOCTL to qcqiX files
  polaris_qcqmi_dev_use(polaris_ngiolite_t)

  #RDM thread in CWAN running as ngiolite process needs access to ttyUSB0 for DM logging
  term_use_usb_ttys(polaris_ngiolite_t)

  #RDM/Event thread needs to add a newly generated DM log file/Crash dump file to/from bootflash directory
  polaris_bootflash_manage(polaris_ngiolite_t)

  #Modem Monitor thread uses sendto over a Datagram socket to send data to Turing Thread
  allow polaris_ngiolite_t self:unix_dgram_socket sendto;

  #Modem Monitor thread opens a socket to UDEV to process Modem USB addition/disconnection events
  allow polaris_ngiolite_t self:netlink_kobject_uevent_socket create_socket_perms;

  #Modem Monitor thread needs to be able to open/Read and GetAttributes to differentiate between Telit/SWI vendor
  udev_rw_db(polaris_ngiolite_t)

  #Turing thread needs to gather stats as well as set the IP address to /proc/net/cwan_modem0/cwan0/src_ip
  kernel_search_network_state(polaris_ngiolite_t)
polaris_kernel_rwlock_network_state_files(polaris_ngiolite_t)

########################################################################
## CWAN NGIOLITE process policies end####################################
########################################################################

# on tsn need access to /sys/devices/platform/moka_fpga
# /sys/devices/platform/moka_fpga/external_int_pending dev
optional_policy(
    polaris_mokafpga_rwlock(polaris_ngiolite_t)
)

# on radium need to get model info
optional_policy(
    polaris_dash_dev_use(polaris_ngiolite_t)
)

# work with contdev sysfs files
polaris_contdev_dev_read(polaris_ngiolite_t)

sysnet_domtrans_ifconfig(polaris_ngiolite_t)

logging_send_syslog_msg(polaris_ngiolite_t)

ifdef(`neptune_platform',
    polaris_cpp_cavium_sdk_ipc_use(polaris_ngiolite_t)
)

optional_policy(
    polaris_nim_dm_dev_use(polaris_ngiolite_t)
)

ifdef(`radium_platform',
    # allow ngiolite to access nim_phy_device
    polaris_nim_phy_dev_use(polaris_ngiolite_t)
)

# TODO/FIXME, Need to review this permission, this is related to
# the call "echo 1 > /sys/bus/pci/rescan"
dev_managet_sysfs_dirs(polaris_ngiolite_t)
allow polaris_ngiolite_t sysfs_t:file create;

# allow ngiolite to access sfp over i2c bus
polaris_i2c_use(polaris_ngiolite_t)

# on neptune, cavium library in o2_cavm_mem_map wants access to
# /sys/devices/pci0000:00/0000:01.0/0000:01:00.0/resource0
optional_policy('  polaris_cpp_cavium_dma_map(polaris_ngiolite_t)
')

# /dev/sfp-ktr & qfp sem access on Katar
#ifdef('katar_platform','
polaris_sfp_katar_dev_use(polaris_ngiolite_t)
polaris_qfp_sem_use(polaris_ngiolite_t)
fs_getattr_tmpfs(polaris_ngiolite_t)
polaris_cpp_tmpfs_ifdev_rw(polaris_ngiolite_t)
')

# allow /usr/binos/bin/ngiolite to access /tmp/nim_xxdprésent
gen_require('  type polaris_cmrp_nim_xxd_tmp_t;
')
files_tmp_file(polaris_cmrp_nim_xxd_tmp_t)
files_tmp_filetrans(polaris_ngiolite_t, polaris_cmrp_nim_xxd_tmp_t, file, "nim_xxd_present")
manage_files_pattern(polaris_ngiolite_t, polaris_cmrp_nim_xxd_tmp_t, polaris_cmrp_nim_xxd_tmp_t)

# allow /usr/binos/bin/ngiolite to access /tmp/hd_sz
gen_require('  type udev_tmp_t;
')
read_files_pattern(polaris_ngiolite_t, udev_tmp_t, udev_tmp_t)

# allow /usr/sbin/lvm to be executed and to be operated
lvm_domtrans(polaris_ngiolite_t)

# allow /usr/binos/bin/ngiolite to manage /tmp
type polaris_ngiolite_tmp_t;
files_tmp_file(polaris_ngiolite_tmp_t)
# allow /usr/binos/bin/ngiolite to manage /tmp/smartctl.out and
# /tmp/xxdisplay.out
files_tmp_filetrans(polaris_ngiolite_t, polaris_ngiolite_tmp_t, file)
manage_files_pattern(polaris_ngiolite_t, polaris_ngiolite_tmp_t, polaris_ngiolite_tmp_t)

# allow /usr/sbin/smartctl to operate on fsadm_exec_t
fstools_domtrans(polaris_ngiolite_t)

# allow /usr/sbin/smartctl to access nvme device in chr and blk
dev_nvme_chr_files_manage(polaris_ngiolite_t)
dev_nvme_blk_files_manage(polaris_ngiolite_t)

#ifdef('sumatra_platform','
  # dev/cpld
  polaris_cpld_dev_use(polaris_ngiolite_t)
')
# manage "sysctrl_i2c.lck"
gen_require(
    type polaris_cm_rp_tmp_t;
)
files_tmp_filetrans(polaris_ngiolite_t, polaris_cm_rp_tmp_t, file, "sysctrl_i2c.lck")
polaris_cm_rp_tmp_manage(polaris_ngiolite_t)

# access /dev/huron_fpga
polaris_huron_dev_use(polaris_ngiolite_t)

')

ifdef('crankshaft_family',
    # /var/run/cwan socket and pid
    gen_require(
        type polaris_cwan_svr_var_run_t;
    )
    files_pid_filetrans(polaris_ngiolite_t, polaris_cwan_svr_var_run_t, sock_file, "cwan_ezmanage_cwan_server")
    create_sock_files_pattern(polaris_ngiolite_t, polaris_cwan_svr_var_run_t, polaris_cwan_svr_var_run_t)
    delete_sock_files_pattern(polaris_ngiolite_t, polaris_cwan_svr_var_run_t, polaris_cwan_svr_var_run_t)
    ')

# allow /usr/bin/os/bin/ngiolite to access the the following interface
fs_unmount_xattr_fs(polaris_ngiolite_t)
dev_manage_generic_symlinks(polaris_ngiolite_t)
polaris_udev_tmp_manage(polaris_ngiolite_t)

# ngiolite/ezManage access rules - currently only applies to TSN
optional_policy(
    # Allow ngiolite to access ezManage dgram socket
    gen_require(
        type polaris_ezmanage_t;
    )
    allow polaris_ngiolite_t polaris_ezmanage_t:unix_dgram_socket sendto;

    # Allow ngiolite to access ezManage socket file in /var/run
    polaris_manage_ezmanage_var_run_files(polaris_ngiolite_t)
    ')

# allow ngiolite to access /dev/nim_phy
ifdef('crankshaft_family',
    polaris_nim_phy_dev_use(polaris_ngiolite_t)
    ')

# allow ioctl, read, wr permission for ds31408 device
optional_policy(
    polaris_ds31408_dev_use(polaris_ngiolite_t)
    ')

Open Source Used In BGP TE Controller Version 4.3.0  6314
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngiolite.te
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#
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#
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/tmp/.ncsshd_btp.sock -s gen_context(system_u:object_r:polaris_dmi_ncsshd_log_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdnccshdfwd.fc
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#
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#

## <summary>Polaris vdaemon Policy Rules.</summary>

#######################################
## <summary>
##      Write vdaemon /var/run socket file
## </summary>
## <param name="domain">
##      Domain allowed access.
## </param>
#
interface('polaris_vdaemon_var_sock_write',
  gen_require(
    type polaris_vdaemon_t;
    type polaris_vdaemon_var_run_t;
    type var_run_t;
  )
  write_sock_files_pattern($1, var_run_t, polaris_vdaemon_var_run_t)
  allow $1 polaris_vdaemon_t:unix_stream_socket { connectto };
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisvdaemon.if
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#
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#
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#

policy_module(polarisboothelper, 1.0);

polaris_process_domain_template(boothelper_evt)

corecmd_exec_bin(polaris_boothelper_evt_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_boothelper_evt_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_boothelper_evt_t)

polaris_cpld_read(polaris_boothelper_evt_t)

############################################################################
# work with /sys/udev/.

type polaris_udev_tmp_files_t;
files_tmp_file(polaris_udev_tmp_files_t)

polaris_systemd_tmpfiles_tmp_filetrans(polaris_udev_tmp_files_t, dir, "udev")

polaris_bootflash_manage(polaris_boothelper_evt_t)

type polaris_boothelper_tmp_t;
files_tmp_file(polaris_boothelper_tmp_t)

files_tmp_filetrans(polaris_boothelper_evt_t, polaris_boothelper_tmp_t, dir, "rommon_upgrade_ngwc")
manage_files_pattern(polaris_boothelper_evt_t, polaris_boothelper_tmp_t, polaris_boothelper_tmp_t)
manage_dirs_pattern(polaris_boothelper_evt_t, polaris_boothelper_tmp_t, polaris_boothelper_tmp_t)

# watch over /tmp/rommon_upgrade_ngwc
allow polaris_boothelper_evt_t polaris_boothelper_tmp_t:dir watch;

# nyquist creates /tmp/udev_ssd.log
gen_require(
    type udev_t;
)
files_tmp_filetrans(udev_t, polaris_udev_tmp_files_t, file, "udev_ssd.log")
fs_tmpfs_filetrans(udev_t, polaris_udev_tmp_files_t, file, "udev_ssd.log")
# create /dev/harddisk1 softlink during bootup
ifdef('crankshaft_family',
    gen_require(
        type device_t;
        type initrc_t;
        type fixed_disk_device_t;
    ')
filetrans_pattern(initrc_t, device_t, fixed_disk_device_t, lnk_file, "harddisk1")
')
# restorecon under setfiles_t appends to /tmp/udev_ssd.log
gen_require('type setfiles_t;
')
polaris_udev_tmp_manage(setfiles_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisboothelper.te
No license file was found, but licenses were detected in source scan.

#
# August 2017, Shawn Lu
#
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#

policy_module(polarisnmspd, 1.0);

gen_require('type polaris_nmspd_t;
')
polaris_btrace_data_manage(polaris_nmspd_t)
polaris_crft_data_manage(polaris_nmspd_t)
polaris_chasfs_manage(polaris_nmspd_t)
polaris_tdlresolve_read(polaris_nmspd_t)
polaris_tdlldb_listDirs(polaris_nmspd_t)
polaris_cpld_read(polaris_nmspd_t)
polaris_lua_read(polaris_nmspd_t)
polaris_flashlib_read(polaris_nmspd_t)
polaris_ripc_sman_ui_serv_connect(polaris_nmspd_t)
polaris_db_tdlldb_dir_use(polaris_nmspd_t)

##########################################################################
# mqipc manual, one that missing in platform tdl file

polaris_nmspd_testclient1_mqipc_t;
polaris_mqipc_type(polaris_nmspd_testclient1_mqipc_t)

type polaris_nmspd_testclient2_mqipc_t;
polaris_mqipc_type(polaris_nmspd_testclient2_mqipc_t)

type polaris_testclient1_nmspd_mqipc_t;
polaris_mqipc_type(polaris_testclient1_nmspd_mqipc_t)

type polaris_testclient2_nmspd_mqipc_t;
polaris_mqipc_type(polaris_testclient2_nmspd_mqipc_t);

polaris_mqipc_create_name(polaris_nmspd_t, polaris_nmspd_testclient1_mqipc_t, nmspd-testclient1)
polaris_mqipc_use(polaris_nmspd_t, polaris_testclient1_nmspd_mqipc_t)

polaris_mqipc_create_name(polaris_nmspd_t, polaris_nmspd_testclient2_mqipc_t, nmspd-testclient2)
polaris_mqipc_use(polaris_nmspd_t, polaris_testclient2_nmspd_mqipc_t)

stuff related to vrf support of the socket
polaris_lfts_dev_use(polaris_nmspd_t)
polaris_socketat_nsfs_read(polaris_nmspd_t)
# enable listen on tcp port 16113
corenets_tcp_bind_polaris_nmspd_port(polaris_nmspd_t)

allow polaris_nmspd_t self:capability dac_override;

# Allow IPC messages to Btrace Process from NMSPD Process
logging_send_syslog_msg(polaris_nmspd_t)
# Allow NMSPD to read DNS file for nameresolution
sysnet_read_config(polaris_nmspd_t)

# NMSPD uses cURL to open HTTP connections and SSL to open TLS Connections
# to DNASpaces and CMX respectively
gen_require(
    type node_t;
)
allow polaris_nmspd_t node_t:udp_socket node_bind;
allow polaris_nmspd_t self:udp_socket { bind connect getattr };
corenets_tcp_connect_http_port(polaris_nmspd_t)
polaris_odm_clnt2svr_mqipc_create(polaris_nmspd_t)

#DB persistence
polaris_tdldbpersist_setup(polaris_nmspd_t)
polaris_tmp_tdldb_persist_setup(polaris_nmspd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnmspd.te
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#
# February 2020, Victor Kamensky
#
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#

policy_module(polarisftm, 1.0);

gen_require(''
    type polaris_ftm_t;
')
polaris_chasfs_manage(polaris_ftm_t)
polaris_cpld_read(polaris_ftm_t)
polaris_flashlib_read(polaris_ftm_t)
polaris_tdlresolve_read(polaris_ftm_t)

polaris_ripc_sman_ui_serv_connect(polaris_ftm_t)

polaris_db_tldlb_dir_use(polaris_ftm_t)

logging_send_syslog_msg(polaris_ftm_t)

corecmd_exec_bin(polaris_ftm_t)
corecmd_exec_shell(polaris_ftm_t)
auth_use_nsswitch(polaris_ftm_t)

# vconfd_load_shared_schemas
polaris_confd_shared_schema_read(polaris_ftm_t)

# work with /tmp/xml
polaris_cedge_xml_tmp_manage(polaris_ftm_t)

# work with /tmp/tmp
polaris_cedge_tmp_manage(polaris_ftm_t)

polaris_cedge_reset_ns(polaris_ftm_t)

# /var/run/.ftmd-xxx sockets and pid
type polaris_ftm_var_run_t;
files_pid_file(polaris_ftm_var_run_t)
manage_files_pattern(polaris_ftm_t, polaris_ftm_var_run_t, polaris_ftm_var_run_t)
manage_sock_files_pattern(polaris_ftm_t, polaris_ftm_var_run_t, polaris_ftm_var_run_t)
files_pid_filetrans(polaris_ftm_t, polaris_ftm_var_run_t, { file sock_file })

polaris_cfgmgr_var_sock_write(polaris_ftm_t)
polaris_dhgd_var_sock_write(polaris_ftm_t)
polaris_fpm_var_sock_write(polaris_ftm_t)
polaris_ttm_var_sock_write(polaris_ftm_t)
polaris_vdaemon_var_sock_write(polaris_ftm_t)

# PLEASE LOOK AT ME: write access to /boot/hugepage.conf
# which on ultra translates into /varied/hugepage.conf access
# But no code in polaris uses it
polaris_disk_varied_manage(polaris_ftm_t)
files_manage_boot_files(polaris_ftm_t)

# fp_scaling_init calls posix_sysconf
dev_read_sysfs(polaris_ftm_t)

# vip_execute_nowait uses setpgid
allow polaris_ftm_t self:process setpgid;

polaris_cedge_tmpfs_manage(polaris_ftm_t)

# raw socket access from trace_tunnel_socket_icmp_init ftm_binos_trace.c
allow polaris_ftm_t self:rawip_socket create_socket_perms;
allow polaris_ftm_t self:capability net_raw;

# bind to ftm fnf port
corenet_udp_bind_polaris_ftm_fnf_port(polaris_ftm_t)
corenet_udp_bind_generic_node(polaris_ftm_t)

# ftm may create vrf-based netns on demand, vrf.65528
polaris_vrf_netns_manage(polaris_ftm_t)

# creates /tmp/HTX-IOX/sw-htx-service
optional_policy(
    polaris_htx_iox_tmp_manage(polaris_ftm_t)
    )

# fp_scaling_read_core_count accesses cgroups file at
# /sys/fs/cgroup/cpuset/iosxe_control_processes/cpuset_cpus
fs_read_cgroup_files(polaris_ftm_t)

# ftm_change_default_gw_src_ip calls ip utility
sysnet_domtrans_ifconfig(polaris_ftm_t)

# ftm process periodically call nice utility to gzip some xml file
allow polaris_ftm_t self:process setsched;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisftm.te
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#

### <summary>Polaris fman_fp Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfmanfp.if
No license file was found, but licenses were detected in source scan.

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#
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#
/tmp/replication(/.*)? gen_context(system_u:object_r:polaris_repm_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrepm.fc
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#

### <summary>Polaris Btrace Policy Rules.</summary>

###################################################################################################
# Polaris cpp (ultra)
###################################################################################################

###################################################################################################
### <summary>
### Work (read, write, ioctl) with /dev/cpp_dev_info and /dev/cpp_vxe_rsrc
### devices.
### </summary>
### <param name="domain">
### <summary>
## Domain allowed access.
## <summary>
## </summary>
## <param>
## <rolebase/>
#
interface('polaris_cpp_dev_use',
  gen_require(
    type device_t;
    type polaris_cpp_device_t;
  )
  write_chr_files_pattern($1, device_t, polaris_cpp_device_t)
  read_chr_files_pattern($1, device_t, polaris_cpp_device_t)
  allow $1 polaris_cpp_device_t:chr_file map;
  polaris_i95_dev_use($1)
')

########################################
## Make the specified domain as polaris cpp process.
## <summary>
## </summary>
## <param name="type">
## <summary>
## Type to be used as a cpp process.
## </summary>
## </param>
#
interface('polaris_cpp_process',
  gen_require(
    attribute polaris_cpp_domain;
  )
  typeattribute $1 polaris_cpp_domain;
')

########################################
## Make the specified domain able to use cpp /tmp files.
## <summary>
## </summary>
## <param name="type">
## <summary>
## Domain allowed access.
## </summary>
## </param>
## <param name="object">
## <summary>
## File name in /tmp that domains creates and other cpp process
## access.
## </summary>
## </param>

```
interface('polaris_cpp_tmp_files_use',
    gen_require(
        type polaris_cpp_tmp_t;
    )

    files_tmp_filetrans($1, polaris_cpp_tmp_t, file, $2)
    manage_files_pattern($1, tmp_t, polaris_cpp_tmp_t)
    allow $1 polaris_cpp_tmp_t:file map;
)

########################################
## <summary>
##      Specified domain can execute polaris_cpp_tmpifs_t code
##      which resides in /dev/shm/cpp_ucode_dram
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_cpp_tmpfs_exec',
#    gen_require(
#        type polaris_cpp_tmpfs_t;
#    )
#
#    allow $1 polaris_cpp_tmpfs_t:file execute;
#

########################################
## <summary>
##      Read write from polaris_cpp_tmpfs_t file
##      Example is ifdev shared memory /dev/shm/cpp_ifdev_shmem
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_cpp_tmpfs_ifdev_rw',
#    gen_require(
#        type tmpfs_t;
#        type polaris_cpp_tmpfs_t;
#    )
#)
rw_files_pattern($1, tmpfs_t, polaris_cpp_tmpfs_t)
allow $1 polaris_cpp_tmpfs_t:file map;
'}

########################################
## <summary>
##      Make the specified domain able to work with cpp /tmp/cpp_ifdev_rep and
## /tmp/cpp_ifdev_req pipe files.
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_cpp_tmp_ifdev_use',
    gen_require(
        type polaris_cpp_tmp_t;
    ')

manage_fifos_pattern($1, tmp_t, polaris_cpp_tmp_t)
allow $1 polaris_cpp_tmp_t:file map;
')

########################################
## <summary>
##      Make the specified domain able to getattr of /tmp/cpp_ifdev_rep and
## /tmp/cpp_ifdev_req pipe files.
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_cpp_tmp_ifdev_getattr',
    gen_require(
        type polaris_cpp_tmp_t;
    ')

ggetattr_fifos_pattern($1, tmp_t, polaris_cpp_tmp_t)
')

########################################
## <summary>
##      Allow process to use Cavium SDK sysv IPC primitives
## created by octeon_pci_dmap.c. Those could be created either
## by cpp_driver (usually) or by cpp_cdm on utah and overlord,
## and by cm_fp on neptune.
##
## </summary>
## <param name="type">
##  Domain allowed access.
## </summary>
## </param>
#
interface('polaris_cpp_cavium_sdk_ipc_use',
    ifdef('crankshaft_family',
        polaris_cpp_driver_sem_use($1)
polaris_cpp_driver_shm_use($1)
optional_policy(
        polaris_cpp_cdm_sem_use($1)
polaris_cpp_cdm_shm_use($1)
    ')
optional_policy('polaris_cm_fp_sem_use($1)
polaris_cm_fp_shm_use($1)
')
# allow scan pci/devices proc dir
kernel_getattr_proc_files($1)
kerneld_write_proc_files($1)
kerneld_read_system_state($1)
')
')

###################################################################
## <summary>
## Work (read, write, ioctl) with /dev/i95 devices
## </summary>
## <param name="domain">
##  Domain allowed access.
## </summary>
## </param>
#
interface('polaris_i95_dev_use',
    gen_require('type device_t;
type polaris_i95_device_t;
')
write_chr_files_pattern($1, device_t, polaris_i95_device_t)
read_chr_files_pattern($1, device_t, polaris_i95_device_t)
allow $1 polaris_i95_device_t:chr_file map;')
<summary>
Work (read, write, map) with sysfs files required by cavium library in o2_cavm_mem_map.
</summary>

@param name="domain"
<summary>
Domain allowed access.
</summary>

interface('polaris_cpp_cavium_dma_map',
gen_require(
    type sysfs_t;
')

mmap_files_pattern($1, sysfs_t, sysfs_t)
dev_rw_sysfs($1)
')

<summary>
Manage /dev/shm files
</summary>

@param name="domain"
<summary>
Domain allowed access.
</summary>

interface('polaris_cpp_tmpfs_manage',
gen_require(
    type polaris_cpp_tmpfs_t;
    type tmpfs_t;
')

fs_tmpfs_filetrans($1, polaris_cpp_tmpfs_t, file)
manage_files_pattern($1, tmpfs_t, polaris_cpp_tmpfs_t)
allow $1 polaris_cpp_tmpfs_t:file map;
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscpp.if
No license file was found, but licenses were detected in source scan.

#
## <summary>Polaris bt_logger Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbtlogger.if
No license file was found, but licenses were detected in source scan.

## /bootflash labels

/bootflash(/.*)? gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
/bootflash/ssh(/.*)? gen_context(system_u:object_r:ssh_home_t,s0)
/bootflash/ssh/ssh_host.*_key.pub gen_context(system_u:object_r:sshd_key_t,s0)
/bootflash/ssh/ssh_host.*_key gen_context(system_u:object_r:sshd_key_t,s0)
/bootflash/tracelogs(/.*)? gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/bootflash/tan(/.*)? gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/bootflash/core(/.*)? gen_context(system_u:object_r:polaris_core_file_t,s0)
/bootflash/debug.conf gen_context(system_u:object_r:polaris_debug_conf_t,s0)
/bootflash/packages.conf gen_context(system_u:object_r:polaris_packages_conf_t,s0)

## /csl_p_0
/csl_p_0(/.*)? gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)

## /csl_p_1.context
/csl_p_1(/.*)? gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)

## /csl_s_0.context
/csl_s_0(/.*)? gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)

## /csl_s_1.context
/csl_s_1(/.*)? gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)

# /csl_s_2.context

# /obfl is separate on qwlc
/obfl(/.*)? gen_context(system_u:object_r:polaris_obfl_data_t,s0)

## /varied
/varied(/.*)? gen_context(system_u:object_r:polaris_disk_varied_t,s0)
/varied/install_info gen_context(system_u:object_r:polaris_vwlcinstall_info_t,s0)
# /varied/obfl_.*
# gen_context(system_u:object_r:polaris_obfl_data_t,s0)

# /varied/grub_cisco_version
# gen_context(system_u:object_r:polaris_grubver_t,s0)

# /varied/grub(/.*)?
# gen_context(system_u:object_r:boot_t,s0)

# /varied/grub2(/.*)?
# gen_context(system_u:object_r:polaris_grub_bios_t,s0)

# /varied/grub/menu.*
# gen_context(system_u:object_r:bootloader_etc_t,s0)

# /sbin/grub*
# gen_context(system_u:object_r:bootloader_exec_t,s0)

# /bootefi/(.*)?
# gen_context(system_u:object_r:polaris_grub_efi_t,s0)

# hanet driver used by vwlc and ultra, is there better place for it?
# /dev/hanet -c gen_context(system_u:object_r:polaris_hanet_device_t,s0)

# from /lib/tmpfiles.d/binos-vxe.conf
# /lic0 -l
# gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)
# /lic1 -l
# gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)

# /harddisk labels (qwlc)
# /vol/harddisk(/.*)?
# gen_context(system_u:object_r:polaris_disk_harddisk_t,s0)
# /vol/harddisk/trace_logs(/.*)?
# gen_context(system_u:object_r:polaris_btrace_data_t,s0)
# /vol/harddisk/tan(/.*)?
# gen_context(system_u:object_r:polaris_btrace_data_t,s0)
# /vol/harddisk/core(/.*)?
# gen_context(system_u:object_r:polaris_btrace_data_t,s0)
# /vol/harddisk/debug.conf
# gen_context(system_u:object_r:polaris_btrace_data_t,s0)

# /init is symbolic link to /lib/systemd/systemd
# /init -l
# gen_context(system_u:object_r:polaris_init_exec_t,t,s0)

# /disk0 is symbolic link to /vol/disk0
# /disk0 -l
# gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

# /dev/epa device on qwlc
# /dev/epa[0-9]*
# -c gen_context(system_u:object_r:polaris_epa_device_t,s0)
# /dev/epactrl[0-9]*
# -c gen_context(system_u:object_r:polaris_epa_device_t,s0)

# /dev/luna_fpga on qwlc
# /dev/luna_fpga
# -c gen_context(system_u:object_r:polaris_luna_mbfpga_device_t,s0)

# /dev/astro on qwlc
# /dev/astro
# -c gen_context(system_u:object_r:polaris_astro_device_t,s0)

# /dev/cpp_il on qwlc
# /dev/cpp_il
# -c gen_context(system_u:object_r:polaris_cpp_il_device_t,s0)

# /flash is symbolic link to /bootflash on qwlc
# /flash
# gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

# /dev/oob_evfc on qwlc
# /dev/oob_evfc
# -c gen_context(system_u:object_r:polaris_oob_evfc_device_t,s0)
# /dev/sfp-ktr on katar
/dev/sfp-ktr -c gen_context(system_u:object_r:polaris_sfp_katar_device_t,s0)

# To store tcpdump output in file haIntCaptureLo.pcap
/bootflash/haIntCaptureLo.pcap gen_context(system_u:object_r:polaris_netutils_data_t,s0)
/objstore(/.*)? gen_context(system_u:object_r:polaris_disk_objstore_t,s0)

# /config labels
/config(/.*)? gen_context(system_u:object_r:polaris_disk_config_t,s0)
/config/ssh(/.*)? gen_context(system_u:object_r:ssh_home_t,s0)
/config/ssh/ssh_host.*_key.pub gen_context(system_u:object_r:sshd_key_t,s0)
/config/ssh/ssh_host.*_key gen_context(system_u:object_r:sshd_key_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswlc.fc
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dnl
dnl Copyright (c) 2018-2019 by Cisco Systems, Inc.
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dnl
WLC Platform Max Bay Limits
max_bay_map_set(`rp`, `per_bay`, 0)
max_bay_map_set(`cc`, `per_bay`, 0)
max_bay_map_set(`fp`, `per_bay`, 0)

dnl in elastic scope each process has its own value
max_elastic_map_set(`rp`, `elastic`, BPROC_ODM, 1)
max_elastic_map_set(`cc`, `elastic`, BPROC_ODM, 1)
max_elastic_map_set(`fp`, `elastic`, BPROC_ODM, 1)

max_elastic_map_set(`rp`, `elastic`, BPROC_WNCD, 7)
max_elastic_map_set(`cc`, `elastic`, BPROC_WNCD, 7)
max_elastic_map_set(`fp`, `elastic`, BPROC_WNCD, 7)

max_elastic_ripc_map_set(`rp`, `elastic`, BPROC_ODM, 1)
max_elastic_ripc_map_set(`cc`, `elastic`, BPROC_ODM, 1)
max_elastic_ripc_map_set(`fp`, `elastic`, BPROC_ODM, 1)

max_elastic_ripc_map_set(`rp`, `elastic`, BPROC_WNCD, 7)
max_elastic_ripc_map_set(`cc`, `elastic`, BPROC_WNCD, 7)
max_elastic_ripc_map_set(`fp`, `elastic`, BPROC_WNCD, 7)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/vwlcmaps.m4
No license file was found, but licenses were detected in source scan.

#
policy_module(polariswebui, 1.0);

type polaris_webui_file_t;
files_type(polaris_webui_file_t)
polaris_pfile_type(polaris_webui_file_t)

polaris_process_domain_template(webui_lighttpd)

polaris_process_domain_template(webui)

gen_require('  
  type initrc_t;
')
manage_dirs_pattern(initrc_t, polaris_webui_file_t, polaris_webui_file_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.10/selinux-tar/selinux/polariswebui.te
No license file was found, but licenses were detected in source scan.

policy_module(polariscmrp, 1.0);

gen_require('  
  type polaris_cm_rp_t;
')
polaris_btrace_data_manage(polaris_cm_rp_t)
polaris_crft_data_manage(polaris_cm_rp_t)
polaris_chasfs_manage(polaris_cm_rp_t)
polaris_tdlresolve_read(polaris_cm_rp_t)
polaris_tdlldb_list_dirs(polaris_cm_rp_t)
polaris_cpld_read(polaris_cm_rp_t)
polaris_lua_read(polaris_cm_rp_t)
polaris_flashlib_read(polaris_cm_rp_t)
polaris_flashlib_write(polaris_cm_rp_t)
#
# cm_rp opens log file to collect required RP, CC, FP and rommon details
# and write into /vol/harddisk/.inv/inv_log_file
# This file is accessed by crashinfo collecting script and others

type polaris_cm_rp_inv_log_file_t;
polaris_disk_type(polaris_cm_rp_t)
polaris_cm_rp_inv_log_setup(polaris_cm_rp_t);
polaris_ripc_sman_ui_serv_connect(polaris_cm_rp_t);

polaris_cpld_dev_use(polaris_cm_rp_t)
polaris_lfts_dev_use(polaris_cm_rp_t)
polaris_proc_rmonbifo_read(polaris_cm_rp_t)
polaris_obfl_data_read(polaris_cm_rp_t)

polaris_db_tldldb_dir_use(polaris_cm_rp_t)
# cman_rp needs read access to cpu identity
# /dev/cpu/0/msr
dev_read_cpuid(polaris_cm_rp_t)
allow polaris_cm_rp_t self:capability { sys_rawio dac_override chown sys_resource};

allow polaris_cm_rp_t self:process setsched;

# on ultra read eeprom through i2c
# type=AVC msg=audit(1479569571.044:3): avc: denied { getattr } for pid=5283 comm="cmand" path="/sys/devices/i2c-0/i2c-1/1-0056/eeprom" dev="sysfs" ino=25556 scontext=system_u:system_r:polaris_cm_rp_t:s0 tcontext=system_u:object_r:sysfs_t:s0 tclass=file
# type=AVC msg=audit(1479569571.045:4): avc: denied { read write } for pid=5283 comm="cmand" name="eeprom" dev="sysfs" ino=25556 scontext=system_u:system_r:polaris_cm_rp_t:s0 tcontext=system_u:object_r:sysfs_t:s0 tclass=file
dev_rw_sysfs(polaris_cm_rp_t)

polaris_ggpio_dev_read_write(polaris_cm_rp_t)

# accessing obfl files like /obfl/obfl_uptime_v2.log
polaris_bootflash_read(polaris_cm_rp_t)
polaris_obfl_data_manage(polaris_cm_rp_t)

corecmd_exec_shell(polaris_cm_rp_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_cm_rp_t)

# cman_data_chasfs_mgmt_eth_override (cman/rp/src/cman_data.c:1096) tries to do
# ioctl(sk, SIOCGIFHWADDR, &ifr) for "eth2", which is not present on ultra, but
# such ioctl in kernel triggers dev_load attempt in kernel. Since interface
# and module does exist anyway, it is OK to deny it
kernel_dontaudit_request_load_module(polaris_cm_rp_t)
# cmand creates udp socket to get interface hw address cmlib_if_config_addr
allow polaris_cm_rp_t self:udp_socket create_socket_perms;

# dyncfg_setup.sh is started by cmand
polaris_dyncfg_domtrans(polaris_cm_rp_t)
polaris_dyncfg_tmp_read(polaris_cm_rp_t)
# on crankshaft cm_rp does init directly
polaris_dyncfg_setup(polaris_cm_rp_t)

# denied { search read open } subject: polaris_cm_rp_t; object: polaris_disk_varied_t
# name="/" dev="sda5"; path="/varied"
polaris_disk_varied_manage(polaris_cm_rp_t)

#allow polaris_cm_rp_t polaris_udev_tmp_files_t:dir { read search };
polaris_udev_tmp_list_dirs(polaris_cm_rp_t)

# LOOK AT ME: /tmp/rp/chasfs/inventory has symbolic links back to
# /bootflash/core/modules and /bootflash/tracelogs/modules cman_inv_restart_init
# calls chasfs_properties_internal over this node and as result it tries to
# access those directories
polaris_core_file_search(polaris_cm_rp_t)
polaris_disk_bootflash_search(polaris_cm_rp_t)
polaris_btrace_persistent_data_search(polaris_cm_rp_t)

polaris_dyncfg_tmp_manage(polaris_cm_rp_t)

ifdef(`mcp_family',

polaris_scooby_dev_use(polaris_cm_rp_t)
# read/write /dev/ds3100 chr device
dev_rw_generic_chr_files(polaris_cm_rp_t)
polaris_spa_dev_use(polaris_cm_rp_t)
')

# temporary files created for repm in /tmp/replication
type polaris_cm_rp_tmp_t;
files_tmp_file(polaris_cm_rp_tmp_t)
gen_require("

    type tmp_t;
"
)
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "sysctrl_i2c.lck")
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "pfu_oirtime.lock")
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "golden_boot")
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "sr_message_debug.txt")
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "ngwc_sudi_auth_done")
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "codesign.txt")
polaris_cm_rp_tmp_manage(polaris_cm_rp_t)
logging_send_syslog_msg(polaris_cm_rp_t)

# work with /dev/i2c devices
polaris_i2c_use(polaris_cm_rp_t)
dev_getattr_sysfs_fs(polaris_cm_rp_t)

# /var files
gen_require('
    type var_log_t;
    
)  
type polaris_cm_rp_var_log_t;
logging_log_file(polaris_cm_rp_var_log_t)
logging_log_filetrans(polaris_cm_rp_t, polaris_cm_rp_var_log_t, file, "obfl_uptime_v2.log")
manage_files_pattern(polaris_cm_rp_t, var_log_t, polaris_cm_rp_var_log_t)

# needed for "show platform hardware slot R0 eobc interface primary status"
kernel_read_network_state(polaris_cm_rp_t)

########################################################################
# show platform hardware slot R0 pcie status
# mcp_pcie_status_cmd.sh
# /bin/sh /usr/binos/conf/bexec.sh -c /usr/binos/conf/mcp_pcie_status_cmd.sh
########################################################################
polaris_utility_domain_template(pcie_status_cmd)
polaris_bexecute_domtrans(polaris_cm_rp_t)
polaris_bexecute_domain(polaris_pcie_status_cmd_t, polaris_pcie_status_cmd_exec_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_pcie_status_cmd_t)

# "lspci" needs access to files like /sys/devices/pci0000:00/0000:00:00.0/resource
dev_read_sysfs(polaris_pcie_status_cmd_t)
polaris_send_signal_to_bexecute(polaris_cm_rp_t)

# need write/getattr access for pipes like "pipe:[118396]"
polaris_cmrp_use_fifo(polaris_pcie_status_cmd_t)
corecmd_exec_bin(polaris_pcie_status_cmd_t)

# on utah need to get model info
optional_policy('
    polaris_dash_dev_use(polaris_cm_rp_t)
    polaris_nios_dev_use(polaris_cm_rp_t)
    
)
#access to /dev/dash_fpga device on fugazi platform
ifdef(`fugazi_platform',`
        polaris_dash_dev_mcp_use(polaris_cm_rp_t)
')

ifdef(`crankshaft_family',`
polaris_quack_dev_use(polaris_cm_rp_t)
')

ifdef(`sparrow_platform',`
polaris_cm_cc_tmpfs_manage(polaris_cm_rp_t)
')

ifdef(`blackheart_platform',`
polaris_cm_cc_tmpfs_manage(polaris_cm_rp_t)
')

ifdef(`cabo_platform',`
polaris_cm_cc_tmpfs_manage(polaris_cm_rp_t)
')

ifdef(`aventus_platform',`
polaris_cm_cc_tmpfs_manage(polaris_cm_rp_t)
polaris_dio_dev_use(polaris_cm_rp_t)
')

ifdef(`qwlc_platform',`
polaris_quack_dev_use(polaris_cm_rp_t)
')

ifdef(`katar_platform',`
polaris_quack_dev_use(polaris_cm_rp_t)
')

ifdef(`wlc_family',`
etutils_domtrans_ping(polaris_cm_rp_t)
')

ifdef(`ngwc_family',`
    # In cman_rp module fips/entropy component
    # calls cman_ngwc там_platform_get_act2_entropy() to
    # retrieve entropy from ACT2 chip.
polaris_act2_dev_use(polaris_cm_rp_t)

    # cman-rp init needs access to quack chip
    polaris_quack_dev_use(polaris_cm_rp_t)

# read /proc/cmdline
kernel_read_system_state(polaris_cm_rp_t)

# on macallan and nyquist cman_rp needs to access /flash<#/lic0/sudi_cert_data_v3
polaris_disk_license_read(polaris_cm_rp_t)

# on macallan and starfleet cli "show firmware version lan_spi" triggers ethtool usage
sysnet_domtrans_ifconfig(polaris_cm_rp_t)
')

# cman-rp needs to read /tmp/fed_post_result and /tmp/sm_post_result
# on ngwc platforms
optional_policy('polaris_fed_tmp_files_read(polaris_cm_rp_t)
')
optional_policy('polaris_sif_mgr_tmp_files_read(polaris_cm_rp_t)
')

ifdef('starfleet_platform','
polaris_dmammap_dev_use(polaris_cm_rp_t)
')

ifdef('nyquist_platform','
polaris_ngwc_shm_manage(polaris_cm_rp_t)

# /dev/dmammap usage
polaris_dmammap_dev_use(polaris_cm_rp_t)

# /dev/remap_mem0 usage
polaris_remap_mem_dev_use(polaris_cm_rp_t)

files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "pm_post_result")
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, dir, "microcode_update")
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "mcu_upgrading")

# executes tar for microcode
allow polaris_cm_rp_t self:capability { fowner fsetid };)

ifdef('radium_platform','
# /dev/remap_mem0 usage
polaris_remap_mem_dev_use(polaris_cm_rp_t)
')
ifdef(`sumatra_platform',
# /dev/remap_mem0 usage
polaris_remap_mem_dev_use(polaris_cm_rp_t)
#ifdef(`sumatra_platform',
# LOOK AT ME: After direct usage of /dev/mem is removed (CSCvw80796)
polaris_dev_mem_use(polaris_cm_rp_t)
# access huron FPGA
polaris_huron_dev_use(polaris_cm_rp_t)
')

ifdef(`quake_platform',
polaris_ngwc_shm_manage(polaris_cm_rp_t)
#endif

polaris_dev_mem_use(polaris_cm_rp_t)

# /dev/dmammap usage
polaris_dmammap_dev_use(polaris_cm_rp_t)

files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "pm_post_result")
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, dir, "microcode_update")
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "mcu_upgrading")
')

# LOOK AT ME: /dev/mem access restriction remove after
# CSCvm48950 is fixed using CSCvm48953
ifdef(`nyquist_platform',
polaris_dev_mem_use(polaris_cm_rp_t)
')

# LOOK AT ME: /dev/mem access restriction remove after
# CSCvn64182 is fixed using CSCvn64184
ifdef(`quake_platform',
polaris_dev_mem_use(polaris_cm_rp_t)
')

####################################################################################################
# CLI: "show platform hardware slot R0 xaui statistics"
# this results in cman (/usr/binos/bin/cmand) invoking
# "/bin/sh /usr/binos/conf/bexec.sh -c /usr/binos/conf/dash_fpga_xaui.py show".
# The python script dash_fpga_xaui.py runs in polaris_bexecute_t domain
# and as part of its functionality it needs to create an UDP socket and make an ioctl call.
####################################################################################################

polaris_utility_domain_template(dash_fpga_xaui)
polaris_bexecute_domain(polaris_dash_fpga_xaui_t, polaris_dash_fpga_xaui_exec_t)
polaris_cmrp_use_fifo(polaris_dash_fpga_xaui_t)
allow polaris_dash_fpga_xaui_t self:udp_socket { create ioctl };

####################################################################################################
# CLI: show plat soft cpu share
# - invokes functions in binos/tools/bin/cgroup_reports.sh
# - also cman_cli_show_cpu_share_cb in binos/cman/rp/src/cman_cli.c
# - allow open/read/search cgroup files like
#   /sys/fs/cgroup/cpu,cpuacct/iosxe_control_processes/cpu.shares

fs_read_cgroup_files(polaris_cm_rp_t)
fs_list_cgroup_dirs(polaris_cm_rp_t)

# on tsn need access to /dev/moka_fpga
optional_policy(`
polaris_mokafpga_dev_use(polaris_cm_rp_t)
`)

optional_policy(`
# betelgeuse need access to /dev/sirius_fpga
polaris_sirius_fpga_dev_use(polaris_cm_rp_t)
`)

# on tsn read access to /sys/devices/platform/moka_fpga
optional_policy(`
polaris_mokafpga_read(polaris_cm_rp_t)
`)

optional_policy(`
polaris_tam_getattrs_tmp_dirs(polaris_cm_rp_t)
`)

# on vwlc/macallan, cmand creates /tmp/hw_entropy
polaris_hw_entropy_create(polaris_cm_rp_t)

# on tsn need write access to
# /sys/devices/platform/cpld/reg_rp_sku_register
# on starfleet need write access to
# /sys/devices/platform/cpld/reg_fan_fault_shutdown
optional_policy(`
polaris_cpld_write(polaris_cm_rp_t)
`)

# LOOK AT ME: /dev/mem access restriction
ifdef(`tsn_platform`,`
polaris_dev_mem_use(polaris_cm_rp_t)
`)

# reads from, populates chasfs with values and deletes /tmp/package_biv_sums
polaris_kgv_data_manage(polaris_cm_rp_t)

optional_policy(`
polaris_quake_i2c_manage(polaris_cm_rp_t)
')
#endif('qwlc_platform',
  # read/write /dev/ds3100 chr device
dev_rw_generic_chr_files(polaris_cm_rp_t)
')
#endif('katar_platform',
  # read/write /dev/ds3100 chr device
dev_rw_generic_chr_files(polaris_cm_rp_t)
  # Read access to /tmp/ldwm_envelope file
polaris_ldwm_envelope_read(polaris_cm_rp_t)
')
#endif('mcp_family',
  # Read access to /tmp/ldwm_envelope file
polaris_ldwm_envelope_read(polaris_cm_rp_t)
')
#endif('ngwc_family',
  # on nyquist in ngwc_update_member_config nvram_config is
  # copied from /tmp/chassis/local/rp/tam/00001.nvram_config
polaris_nvram_manage(polaris_cm_rp_t)
  # CMAN needs to create nvram_config with the right label instead of bootflash_t
  gen_require('polaris_nvram_file_t;
    type polaris_disk_bootflash_t;
  ')
  filetrans_pattern(polaris_cm_rp_t, polaris_disk_bootflash_t, polaris_nvram_file_t, file, "nvram_config")
')
#endif('ngwc_family',
  # CMANRP needs to create right label instead of bootflash_t
type polaris_user_file_t;
files_type(polaris_user_file_t);
polaris_bootflash_filetrans(polaris_cm_rp_t, polaris_user_file_t, file);
manage_files_pattern(polaris_cm_rp_t, polaris_disk_bootflash_t, polaris_user_file_t)

# on virtual platforms cman reads virtual sudi file /csl_p_0/vudi.pri
ifdef(`vxe_family',`
polaris_disk_csl_read(polaris_cm_rp_t)
')
ifdef(`wlc_family',`
polaris_disk_csl_read(polaris_cm_rp_t)
')

# from cman_util_chasfs_watch_stby_harddisk
polaris_udev_tmp_watch(polaris_cm_rp_t)

# watch read over /tmp/chassis/local/rp/tam by cman_nyq_board_auth_init
polaris_chasfs_watch_read(polaris_cm_rp_t)

# /dev/aikido access
polaris_aikido_dev_use(polaris_cm_rp_t)

# access SERDES /tmp/serdes_asic_key_dir/*
optional_policy(`
polaris_serdes_asic_key_tmp_manage(polaris_cm_rp_t)
')

# run /sbin/hwclock in its own domain
clock_domtrans(polaris_cm_rp_t)

ifdef(`crankshaft_family',``
# modprobe sm_nim_adpt.ko for Switzer-CC
modutils_domtrans_insmod(polaris_cm_rp_t)
# /dev/sm_nim_adpt device files for Switzer-CC
polaris_sm_nim_adpt_dev_use(polaris_cm_rp_t)

# "show platform hardware subslot <slot/card> backplane statistics"
# triggers ethtool with ifconfig_t using fifo_file (pipe) on polaris_cm_rp_t.
gen_require(`
    type ifconfig_t;
')
polaris_cmrp_use_fifo(ifconfig_t)
')
polaris_iosd_vcpu_read(polaris_cm_rp_t)

***************************************************************************
# show platform hardware slot R0 fpga
# mcp_fpga_status_cmd.sh
#/bin/sh /usr/binos/conf/bexec.sh -c /usr/binos/conf/mcp_fpga_status_cmd.sh
polaris_utility_domain_template(fpga_status_cmd)

polaris_bexecute_domtrans(polaris_cm_rp_t)
polaris_bexecute_domain(polaris_fpga_status_cmd_t, polaris_fpga_status_cmd_exec_t)
polaris_cmrp_use_fifo(polaris_fpga_status_cmd_t)

auth_use_nsswitch(polaris_fpga_status_cmd_t)
corecmd_exec_bin(polaris_fpga_status_cmd_t)

# PLEASE LOOK AT ME: /sys/devices/platform/nios should have Cisco specific label
# read content under /sys/devices/platform/nios
dev_read_sysfs(polaris_fpga_status_cmd_t)

ifdef(`sparrow_platform',`
  polaris_dio_dev_use(polaris_cm_rp_t)
')

ifdef(`cabo_platform',`
  polaris_dio_dev_use(polaris_cm_rp_t)
')

ifdef(`starfleet_platform',`
  polaris_fpga_upgrade_tmp_use(polaris_cm_rp_t)
')

type polaris_fpga_upgrade_tmp_t;
files_tmp_file(polaris_fpga_upgrade_tmp_t)
files_tmp_filetrans(polaris_cm_rp_t, polaris_fpga_upgrade_tmp_t, file, "fpga_upgrade")

# cman_rp needs read access to cpu identity
# /dev/cpu/0/msr
dev_read_cpuid(polaris_cm_rp_t)

# cman_rp needs read/write access to cpu msr
# /dev/cpu/0/msr
# following definition provides that
dev_rw_cpu_microcode(polaris_cm_rp_t)

type polaris_cmrp_nim_xxd_tmp_t;
files_tmp_file(polaris_cmrp_nim_xxd_tmp_t)
files_tmp_filetrans(polaris_cm_rp_t, polaris_cmrp_nim_xxd_tmp_t, file, "nim_xxd")
manage_files_pattern(polaris_cm_rp_t, polaris_cmrp_nim_xxd_tmp_t, polaris_cmrp_nim_xxd_tmp_t)

ifdef(`2kp_platform',`
  # blzi device
  polaris_blzi_dev_use(polaris_cm_rp_t)
')
#tamlib debug file access
polaris_tamlib_dbg_file_manage(polaris_cm_rp_t)

ifdef(`wlc_family',`
# tcpdump access for RP
# packet dump is stored in file /bootflash/haIntCaptureLo.pcap
type polaris_netutils_data_t;
polaris_pfile_type(polaris_netutils_data_t)
gen_require(`
    type polaris_disk_bootflash_t;
type netutils_t;
')
filetrans_pattern(netutils_t, polaris_disk_bootflash_t, polaris_netutils_data_t, file, "haIntCaptureLo.pcap")
manage_files_pattern(netutils_t, polaris_netutils_data_t, polaris_netutils_data_t)

# tcpdump access
netutils_run(polaris_cm_rp_t, system_r)

# pidof access
dev_read_sysfs(polaris_cm_rp_t)
kernel_read_system_state(polaris_cm_rp_t)
domain_read_all_domains_state(polaris_cm_rp_t)

#/usr/sbin/ethtool access for show platform hardware slot x ha_port interface stats command
sysnet_domtrans_ifconfig(polaris_cm_rp_t)
')

optional_policy(`
polaris_ds31408_dev_use(polaris_cm_rp_t)
')
polaris_ddr_dev_use(polaris_cm_rp_t)

# allow /usr/sbin/smartctl to be operated on fsadm_exec_t
fstools_exec(polaris_cm_rp_t)

# allow acces to /tmp/cmlib_eeprom_sim_smartctl.out
files_tmp_filetrans(polaris_cm_rp_t, polaris_cm_rp_tmp_t, file, "cmlib_eeprom_sim_smartctl.out")

# allow access to /dev/nvme*
dev_nvme_chr_files_manage(polaris_cm_rp_t)
dev_nvme_blk_files_manage(polaris_cm_rp_t)

#DB persistence
polaris_tlddbpersist_setup(polaris_cm_rp_t)
polaris_tmp_tlddb_persist_setup(polaris_cm_rp_t)
#code_sign_verify is started by cmand
polaris_code_verify_domtrans(polaris_cm_rp_t)

ifdef(`ngwc_family',`
  # SELINUX Mismatch warning when doing power redundancy configuration commands
  # Allow access /bootflash/nplusm-power
  polaris_nplusm_power_manage(polaris_cm_rp_t)
')

ifdef(`crankshaft_family',`
  # For USB disable feature, /sys/bus/usb/drivers/usb/*/authorized is accessed
  gen_require(`
    type sysfs_t;
  ');
  allow polaris_cm_rp_t sysfs_t:file create;
  dev_manage_sysfs_dirs(polaris_cm_rp_t)
')

ifdef(`petra_platform',`
  #allow access to /dev/petra-fpga
  polaris_iots_fpga_dev_use(polaris_cm_rp_t)
  #allow access to /flash6/moncfg/cfg.dat
  polaris_nvram_read(polaris_cm_rp_t)
')

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmrp.te
No license file was found, but licenses were detected in source scan.

dnl
dnl April 2018, Victor Kamensky
dnl
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dnl
divert(-1)

include(`polaris_process.m4')
dnl Stub out polaris process
define(`polaris_process',``)

dnl Stub out mqipc
define(`polaris_mqipc_service_server',``)
define(`polaris_mqipc_service_client',``)
define(`polaris_mqipc_service_server_elastic_client',``)

dnl Stub out lipc
define(`polaris_lipc_service_server',``)
define(`polaris_lipc_service_client',``)
include(`polaris_ipc_ripc.m4')
include(`polaris_ipc_base_ripc_if.m4')
dnl Stub out non existent one
define(`polaris_websocket_service_server',``)
define(`polaris_cipc_service_server',``)
include(`polaris_max_scope.m4')
divert(0)dnl
#
# This is a generated file! Instead of modifying this file,
# modify proper platform TDL file.
#
## <summary>Polaris Platform Base IPC Policy Rules.</summary>
## <required val="true">
##      Needed for each polaris platform
## </required>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_base_if.m4
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#
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#
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#

policy_module(polarisplogd, 1.0);

gen_require(`
    type polaris_plogd_t;
')

polaris_btrace_data_manage(polaris_plogd_t)
polaris_crf_data_manage(polaris_plogd_t)
polaris_chasfs_manage(polaris_plogd_t)
polaris_tdlresolve_read(polaris_plogd_t)
polaris_tldlb_list_dirs(polaris_plogd_t)
polaris_cpld_read(polaris_plogd_t)
polaris_flashlib_read(polaris_plogd_t)

polaris_ripc_sman_ui_serv_connect(polaris_plogd_t)
# originally when box starts /dev/log is symbolic link to /run/systemd/journal/dev-log
# but latter plogd reset links to its own socket: make sure that we have proper
# transition

gen_require(
    type devlog_t;
    
    type syslogd_t;
]
allow polaris_plogd_t devlog_t:sock_file manage_sock_file_perms;
allow polaris_plogd_t devlog_t:lnk_file manage_lnk_file_perms;
dev_filetrans(polaris_plogd_t, devlog_t, sock_file, "log")
# make sure that unix_dgram_socket got transitioned into syslogd_t
type_transition polaris_plogd_t polaris_plogd_t:unix_dgram_socket syslogd_t;
allow polaris_plogd_t syslogd_t:unix_dgram_socket { bind create read };

# autogen script misses connection between plogd
polaris_rpc_plog_serv_connect(polaris_plogd_t)

# why plogd needs dac_override capability?
allow polaris_plogd_t self:capability { dac_override };
allow polaris_plogd_t self:capability2 block_suspend;

polaris_dyncfg_tmp_read(polaris_plogd_t)

# plogd calls journalctl -f to get system logs including our AVC messages
# plogd also signals running journalctl to manage the buffer queues
gen_require(
    type journalctl_t;
    
    journalctl_domtrans(polaris_plogd_t)
allow polaris_plogd_t journalctl_t:process signal;

# should be moved into contrib journalctl.te? journalctl tries to read
# /proc/1/environ
gen_require(
    type journalctl_t;
    
    init_read_state(journalctl_t)
allow journalctl_t self:capability sys_resource;
allow journalctl_t self:process setrlimit;

# plogd calls stdbuf to set up journalctl buffering
corecmd_exec_bin(polaris_plogd_t)

# writes into pman fifo stdout
polaris_use_btrace_fifo(journalctl_t)

# /dev/log is symbolic link to /run/systemd/journal/dev-log
# need ability to search in init_var_run_t /run/systemd
# some of subjects that use syslog may not have it
gen_require(
    attribute syslog_client_type;
)
init_search_pid_dirs(syslog_client_type)
#plog_d calls journalctl to get system log including AVC message.
allow polaris_plogd_t journalctl_t:process signal;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisplogd.te
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#

# polaristamsrp file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristamsrp.fc
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#

## <summary>Polaris ftm Policy Rules.</summary>

#######################################
## <summary>
##      Write ttm /var/run socket file
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## <//summary>
# interface('polaris_ftm_var_sock_write';
    gen_require(
        type polaris_ftm_t;
        type polaris_ftm_var_run_t;

Open Source Used In BGP TE Controller Version 4.3.0 6345
type var_run_t;

')
write_sock_files_pattern($1, var_run_t, polaris_ftm_var_run_t)
allow $1 polaris_ftm_t:unix_stream_socket { connectto }

')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisftm.if
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#
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#

/usr/bin-os/conf/iptbl.sh -- gen_context(system_u:object_r:polaris_iptbl_exec_t,s0)
/tmp/rp/iptbl           -d gen_context(system_u:object_r:polaris_iptbl_tmp_t,s0)
/tmp/rp/iptbl/inot_fifo -p gen_context(system_u:object_r:polaris_iptbl_tmp_t,s0)

# in polaris we have xtables-multi at wrong location
/usr/bin/xtables-multi -- gen_context(system_u:object_r:iptables_exec_t,s0)

#fman (rp/fp) acl mgmt and iptbl modules dependency
/tmp/iptbl.v4                   gen_context(system_u:object_r:polaris_iptbl_tmp_t,s0)
/tmp/iptbl.v6                   gen_context(system_u:object_r:polaris_iptbl_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisiptbl.fc
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## <summary>Polaris cpp_sp Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppsp.if
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# polarisngwctblmgr file contexts place holder

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#

/tmp/sysctrl_i2c.lck gen_context(system_u:object_r:polaris_cm_rp_tmp_t,s0)
/tmp/pfu_oirtime.lock gen_context(system_u:object_r:polaris_cm_rp_tmp_t,s0)
/tmp/golden_boot gen_context(system_u:object_r:polaris_cm_rp_tmp_t,s0)

# dash_fpga_xaui.py is the backend python code for
# the cli "show platform hardware slot R0 xaui statistics"
/usr/bin/os/conf/dash_fpga_xaui.py -- gen_context(system_u:object_r:polaris_dash_fpga_xaui_exec_t,s0)

/usr/bin/os/bin/cmand_us -- gen_context(system_u:object_r:polaris_cm_rp_exec_t,s0)
# relabel /vol/harddisk/.inv
/vol/harddisk/.inv(/.*)? gen_context(system_u:object_r:polaris_cm_rp_inv_log_file_t,s0)
/vol/harddisk_internal/.inv(/.*)? gen_context(system_u:object_r:polaris_cm_rp_inv_log_file_t,s0)

# .inv dir is in /bootflash in Katar eWLC
/bootflash/.inv(/.*)? gen_context(system_u:object_r:polaris_cm_rp_inv_log_file_t,s0)

/usr/bin/os/conf/mcp_fpga_status_cmd.sh -- gen_context(system_u:object_r:polaris_fpga_status_cmd_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmrp.fc
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## <summary>Polaris rrm_mgr Policy Rules.</summary>
Found in path(s):
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## <summary>Polaris LIPC Policy Rules.</summary>

# LIPC policy

### Manage lipc files

```
interface('polaris_lipc_manage',
  gen_require(
    type polaris_lipc_t;
  ')
  manage_dirs_pattern($1, polaris_lipc_t, polaris_lipc_t)
  manage_files_pattern($1, polaris_lipc_t, polaris_lipc_t)
  manage_link_files_pattern($1, polaris_lipc_t, polaris_lipc_t)
  manage_fifo_files_pattern($1, polaris_lipc_t, polaris_lipc_t)
  manage_sock_files_pattern($1, polaris_lipc_t, polaris_lipc_t)
')
```

### Getattr of lipc files directories

```
interface('polaris_lipc_getattr',
gen_require('type polaris_lipc_t;

getattr_dirs_pattern($1, polaris_lipc_t, polaris_lipc_t)
getattr_files_pattern($1, polaris_lipc_t, polaris_lipc_t)
getattr_lnk_files_pattern($1, polaris_lipc_t, polaris_lipc_t)
getattr_fifo_files_pattern($1, polaris_lipc_t, polaris_lipc_t)
getattr_sock_files_pattern($1, polaris_lipc_t, polaris_lipc_t)

#######################################
## <summary>
##      Create lipc file
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed creating lipc channel.
##      </summary>
## </param>
## <param name="channel_domain">
##      <summary>
##      Domain assigned to lipc channel.
##      </summary>
## </param>
## <param name="channel_name">
##      <summary>
##      File name of lipc channel.
##      </summary>
## </param>
#
interface('polaris_lipc_create_name',
gen_require('type polaris_lipc_t;

type_transition $1 polaris_lipc_t : sock_file $2 $3;
manage_sock_files_pattern($1, polaris_lipc_t, $2)
polaris_socketat_nsfs_read($1)

# not specific enough
# type_transition $1 $1 : unix_stream_socket $2;
# allow $1 $2:unix_stream_socket { listen accept bind create write read };
')
### <summary>
### Write lipc file
### </summary>

### <param name="domain">
### <summary>
### Domain allowed to connect and write into lipc file.
### </summary>
### </param>

### <param name="channel_domain">
### <summary>
### Domain assigned to lipc channel.
### </summary>
### </param>

### <param name="server">
### <summary>
### Domain of owner of lipc channel.
### </summary>
### </param>

```
interface(`polaris_lipc_write',`
   gen_require(`
   type polaris_lipc_t;
   ')
   write_sock_files_pattern($1, polaris_lipc_t, $2)
   allow $1 $3:unix_stream_socket { connectto };

   polaris_socketat_nsfs_read($1)
   ')
```

Found in path(s):
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dnl

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define(`polaris_lipc_service_server_aux',`dnl
type $1;
files_type($1)
polaris_lipc_$2_create_name($3'))

define(`polaris_lipc_service_server_full',`dnl
polaris_lipc_service_server_aux(lipc_label($1), lipc_stem($1), process_label($2))dnl
define('polaris_lipc_service_server', dnl
  ifelse(lipc_type_map($1), ',', 'polaris_lipc_service_server_full($1, $2)')
  lipc_type_map_set(lipc_label($1), process_label($2))
')

define('polaris_lipc_service_client_aux', dnl
  polaris_lipc_$2_write($3, $4))

define('polaris_lipc_service_client', dnl
  polaris_lipc_service_client_aux(lipc_label($1), lipc_stem($1), process_label($2), lipc_type_map(lipc_label($1)))
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_lipc_te.m4
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#
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#

policy_module(polarisbtman, 1.0);

gen_require(
  type polaris_btman_t;
')

  polaris_crft_data_manage(polaris_btman_t)
  polaris_chasfs_manage(polaris_btman_t)
  polaris_tdlresolve_read(polaris_btman_t)
  polaris_tdldb_list_dir(polaris_btman_t)
  polaris_cpld_read(polaris_btman_t)
  polaris_flashlib_read(polaris_btman_t)
  polaris_rirc_sman_ui_serv_connect(polaris_btman_t)
  polaris_db_tdldb_dir_use(polaris_btman_t)
  polaris_bexecute_domtrans(polaris_btman_t)
  polaris_send_signal_to_bexecute(polaris_btman_t)

# script starts rsync with mcp_chrf.sh
  polaris_chrfrf_domtrans(polaris_btman_t)
  polaris_send_signal_to_bexecute(polaris_btman_t)
corecmd_exec_bin(polaris_btman_t)
corecmd_exec_shell(polaris_btman_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_btman_t)

allow polaris_btman_t self:capability { dac_override fsetid };
polaris_cpld_read(polaris_btman_t)

# operate on all btrace files
polaris_btrace_data_manage_all(polaris_btman_t)

# btman operated on /tmp/tmppub files
type polaris_btrace_tmppub_t;
files_tm_file(polaris_btrace_tmppub_t)

polaris_systemd_tmpfiles_tm_filetrans(polaris_btrace_tmppub_t, dir, "tmppub")
filetrans_pattern(polaris_btman_t, polaris_btrace_tmppub_t, polaris_btrace_tmppub_t, { file dir })
manage_files_pattern(polaris_btman_t, polaris_btrace_tmppub_t, polaris_btrace_tmppub_t)
manage_dirs_pattern(polaris_btman_t, polaris_btrace_tmppub_t, polaris_btrace_tmppub_t)
polaris_persistent_read(polaris_btman_t)

# in purge_old_core_files_from_harddisk function of btrace_rotate_util.c
# script removes outdated core files, so it needs read/write permission
# to polaris_core_file_t files.
polaris_core_file_manage(polaris_btman_t)

fs_getattr_xattr_fs(polaris_btman_t)

# btman checks for presence of /tmp/udev/etc/udev/harddisk
# through hwutil_is_harddisk_present function of hwutil-common.sh
polaris_udev_tmp_list_dirs(polaris_btman_t)

# when /bootflash or /harddisk are 100% full
allow polaris_btman_t self:capability sys_resource;

# access to /tmp/sw/boot/dmesg
polaris_boot_tmp_read(polaris_btman_t)
polaris_create_ldb.domtrans(polaris_btman_t)

# btman calls update_resolver_luid_paths which eventually calls open_brand function for
# given polaris executable (build_crdu_luid_file_paths, bcrdu_get_proc_path_internal,
# brand_type_string)
polaris_read_exec_domain(polaris_btman_t)
# btman create transitional files in /tmp directory

type polaris_btman_tmp_t;
files_tmp_file(polaris_btman_tmp_t)
files_tmp_filetrans(polaris_btman_t, polaris_btman_tmp_t, file)
manage_files_pattern(polaris_btman_t, polaris_btman_tmp_t, polaris_btman_tmp_t)

# use syslog
logging_send_syslog_msg(polaris_btman_t)

# btman unlink /tmp/rp/pvp/work/btman_first_inst
polaris_pvp_manage_tmp_files(polaris_btman_t)

# operate on btrace file in /bootflash
polaris_btrace_persistent_data_manage(polaris_btman_t)

gen_require(
  type polaris_btrace_data_t;
)
polaris_bootflash_filetrans(polaris_btman_t, polaris_btrace_data_t, dir, "tracelogs")
polaris_harddisk_filetrans(polaris_btman_t, polaris_btrace_data_t, dir, "tracelogs")
polaris_crashinfo_filetrans(polaris_btman_t, polaris_btrace_data_t, dir, "tracelogs")
polaris_bootflash_filetrans(polaris_btman_t, polaris_btrace_data_t, dir, "tan")
polaris_harddisk_filetrans(polaris_btman_t, polaris_btrace_data_t, dir, "tan")

# btman creates /tmp/rp/pvp/work/btman_first_inst directory in is_first_incarnation
# function called by btrace_rotate_init
polaris_pvp_manage_tmp_files(polaris_btman_t)

############################################################################
# This block is policies for "request platform software system shell" CLI

# /tmp/sw/rp/0/0/rp_security/mount/ust/binos/bin/btman -f rp
#    -s /tmp/rp/trace/stage -w /tmp/rp/trace
# - needs to read/getattr on
#   /tmp/sw/mount/*/universalk9.*.SSA.pkg/usr/binos/sbin/in.telnetd

gen_require(
  type telnetd_exec_t;
)
allow polaris_btman_t telnetd_exec_t:file { getattr open read };

# btman establishes leases for trace files
allow polaris_btman_t self:capability lease:

# dump_btrace_meta walks all files with nftw
files_getattr_all_files(polaris_btman_t)
files_getattr_all_dirs(polaris_btman_t)
files_read_all_symlinks(polaris_btman_t)
files_list_non_security(polaris_btman_t)
files_read_all_files(polaris_btman_t)
files_mmap_all_files(polaris_btman_t)

# btman exports data through http protocol btm_trigger_export and schedule_newfile_export
corenent_tcp_connect_http_port(polaris_btman_t)

# LOOK AT ME: incorrect iosd-tps service_def. It should be renamed
# iosd_tps_socket-b0 in all platform.tdl files. Remove the following
# policy when CSCvp89498 is fixed.
gen_require(`
    type polaris_lipc_t;
    type polaris_pman_t;
`)
polaris_lipc_write(polaris_btman_t, polaris_lipc_t, polaris_pman_t)

# btman manages some persistent crashinfo files
polaris_disk_crashinfo_manage(polaris_btman_t)

#DB persistence
polaris_tdldbpersist_setup(polaris_btman_t)
polaris_tmp_tdldb_persist_setup(polaris_btman_t)
polaris_btrace_data_watch(polaris_btman_t)

# dump_btrace_meta writes to /tmp/binary_trace.1605747053/.pkginfo
polaris_install_tmp_manage(polaris_btman_t)

#allow polaris_btman_t access to polaris_cm_rp semaphore
polaris_cm_rp_sem_use(polaris_btman_t)

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#

policy_module(polarisfmanrp, 1.0);

gen_require(`
    type polaris_fman_rp_t;
`)

# mqipc manual, one that missing in platform tdl file

# mq.-fman-log-bay0-peer0
    type polaris_fman_log_bay0_peer0_mqipc_t;
    polaris_mqipc_type(polaris_fman_log_bay0_peer0_mqipc_t)

# mq.-fman-log-bay0-peer1
    type polaris_fman_log_bay0_peer1_mqipc_t;
    polaris_mqipc_type(polaris_fman_log_bay0_peer1_mqipc_t)

# mq.-fman-log-bay0-peer2
    type polaris_fman_log_bay0_peer2_mqipc_t;
    polaris_mqipc_type(polaris_fman_log_bay0_peer2_mqipc_t)

# mq.-fman-log-bay0-peer3
    type polaris_fman_log_bay0_peer3_mqipc_t;
    polaris_mqipc_type(polaris_fman_log_bay0_peer3_mqipc_t)

# mq.-fman-log-bay0-peer4
    type polaris_fman_log_bay0_peer4_mqipc_t;
    polaris_mqipc_type(polaris_fman_log_bay0_peer4_mqipc_t)

# mq.-fman-log-bay0-peer5
    type polaris_fman_log_bay0_peer5_mqipc_t;
    polaris_mqipc_type(polaris_fman_log_bay0_peer5_mqipc_t)

# mq.-fman-log-bay0-peer6
    type polaris_fman_log_bay0_peer6_mqipc_t;
    polaris_mqipc_type(polaris_fman_log_bay0_peer6_mqipc_t)

# mq.-fman-log-bay0-peer7
    type polaris_fman_log_bay0_peer7_mqipc_t;
    polaris_mqipc_type(polaris_fman_log_bay0_peer7_mqipc_t)

# mq.-fman-log-bay0-peer8
    type polaris_fman_log_bay0_peer8_mqipc_t;
    polaris_mqipc_type(polaris_fman_log_bay0_peer8_mqipc_t)

    polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fman_log_bay0_peer0_mqipc_t, fman-log-bay0-peer0)
    polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fman_log_bay0_peer1_mqipc_t, fman-log-bay0-peer1)
    polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fman_log_bay0_peer2_mqipc_t, fman-log-bay0-peer2)
    polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fman_log_bay0_peer3_mqipc_t, fman-log-bay0-peer3)
    polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fman_log_bay0_peer4_mqipc_t, fman-log-bay0-peer4)
    polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fman_log_bay0_peer5_mqipc_t, fman-log-bay0-peer5)
    polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fman_log_bay0_peer6_mqipc_t, fman-log-bay0-peer6)
polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fman_log_bay0_peer7_mqipc_t, fman-log-bay0-peer7)
polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fman_log_bay0_peer8_mqipc_t, fman-log-bay0-peer8)

polaris_btrace_data_manage(polaris_fman_rp_t)
polaris_crft_data_manage(polaris_fman_rp_t)
polaris_chasfs_manage(polaris_fman_rp_t)
polaris_tldresolve_read(polaris_fman_rp_t)
polaris_tldldb_list_dirs(polaris_fman_rp_t)
polaris_cpld_read(polaris_fman_rp_t)
polaris_flashlib_read(polaris_fman_rp_t)
polaris_lua_read(polaris_fman_rp_t)
polaris_ripc_sman_ui_serv_connect(polaris_fman_rp_t)
polaris_db_tldldb_dir_use(polaris_fman_rp_t)

ifdef('nyquist_platform',
    gen_require(''
        type polaris_bt_logger_fman_rp_mqipc_t;
    ')
    # fman_rp may start first and create this mqipc channel
    polaris_mqipc_create_name(polaris_fman_rp_t, polaris_bt_logger_fman_rp_mqipc_t, bt_logger_fman-rp)
    ')

    allow polaris_fman_rp_t self:udp_socket { create ioctl };
    allow polaris_fman_rp_t self:capability { dac_override };
    allow polaris_fman_rp_t self:capability2 block_suspend;

    # not clear why fman_rp tries to load netdev-mgmtbr kernel module
    # it does not exist on ultra anyway
    # type=AVC msg=audit(1478126742.967:98): avc: denied { module_request } for pid=18020 comm="fman_rp"
    # m=netdev-mgmtbr s=system_u:system_r:polaris_fman_rp_t:s0
    # c=system_u:system_r:kernel_t:s0 t=class=system
    kernel_request_load_module(polaris_fman_rp_t)

    polaris_socketat_nsfs_read(polaris_fman_rp_t)

    polaris_dynconf_tmp_read(polaris_fman_rp_t)

    # socketat usage from fman_punt_port_mapping_init for AF_NETLINK, SOCK_DGRAM
    polaris_lfts_dev_use(polaris_fman_rp_t)
    allow polaris_fman_rp_t self:netlink_tcpdiag_socket { create nlmsg_read };

    # fman_rp tries to write to systemd journal when a peer is stuck
    # introduced by CSCvt19772
    logging_send_syslog_msg(polaris_fman_rp_t)
optional_policy(
  # fman-rp creates tmp files in acl-mgmt workflow.
  polaris_fman_acl_iptbl_tmp_file(polaris_fman_rp_t)
)

# manually create mqipc channel: missing in TDL
  type polaris_fmrp2fpm_mqipc_t;
polaris_mqipc_type(polaris_fmrp2fpm_mqipc_t)
polaris_mqipc_create_name(polaris_fman_rp_t, polaris_fmrp2fpm_mqipc_t, fmrp2fpm_vulcan_mqipc)

optional_policy(
  polaris_fpm2fmrp_mqipc_use(polaris_fman_rp_t)
)
polaris_issu_tmp_files_read(polaris_fman_rp_t)
polaris_install_tmp_read(polaris_fman_rp_t)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfmanrp.te
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#

policy_module(polarisrifmgr, 1.0);

gen_require(
    type polaris_rif_mgr_t;
)
polaris_btrace_data_manage(polaris_rif_mgr_t)
polaris_crft_data_manage(polaris_rif_mgr_t)
polaris_chasfs_manage(polaris_rif_mgr_t)
polaris_tdlresolve_read(polaris_rif_mgr_t)
polaris_tdldb_list_dirs(polaris_rif_mgr_t)
polaris_cpld_read(polaris_rif_mgr_t)
polaris_lua_read(polaris_rif_mgr_t)
polaris_flashlib_read(polaris_rif_mgr_t)
polaris_lfts_dev_use(polaris_rif_mgr_t)
logging_send_syslog_msg(polaris_rif_mgr_t)
polaris_ripc_sman_ui_serv_connect(polaris_rif_mgr_t)
allow polaris_rif_mgr_t self:capability { sys_nice dac_override }
allow polaris_rif_mgr_t self:process { setsched }
# open /dev/ttyS0 console in sco_sys_init_sw_params
term_use_unallocated_tty(polaris_rif_mgr_t)

# work with /dev/hanet device
polaris_hanet_dev_use(polaris_rif_mgr_t)

# update/read chassis serial numer /csl_p_0/vudi.pri
polaris_disk_csl_manage(polaris_rif_mgr_t)

# monitors native interfaces flap over /proc and netlink
kernel_read_network_state(polaris_rif_mgr_t)
allow polaris_rif_mgr_t self:netlink_route_socket rw_netlink_socket_perms;
allow polaris_rif_mgr_t self:unix_dgram_socket create_socket_perms;

# pidof and /proc usage
dev_read_sysfs(polaris_rif_mgr_t)
kernl_read_system_state(polaris_rif_mgr_t)
domain_read_all_domains_state(polaris_rif_mgr_t)
corecmd_exec_bin(polaris_rif_mgr_t)

kernel_dontaudit_request_load_module(polaris_rif_mgr_t)
# rifmgr creates udp socket to get interface flags in rif_rp_init
allow polaris_rif_mgr_t self:udp_socket create_socket_perms;
corenet_tcp_bind_polaris_rif_mgr_port(polaris_rif_mgr_t)
corenet_tcp_connect_polaris_rif_mgr_port(polaris_rif_mgr_t)
corenet_udp_bind_polaris_rif_mgr_port(polaris_rif_mgr_t)
corenet_udp_bind_generic_node(polaris_rif_mgr_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrifmgr.te
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
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#

### <summary>Polaris stack mgr Policy Rules.</summary>

### <summary>Read and write all stack mgr's fifo file, used as
## <summary>
##      standard input/output.
## </summary>
## <param name="domain">
##<summary>
##Domain allowed access.
##</summary>
## </param>
## <rolecap/>

#

#interface('polaris_use_stack_mgr_fifo',
gen_require('type polaris_stack_mgr_t;
  ')

  write_fifo_files_pattern($1, polaris_stack_mgr_t, polaris_stack_mgr_t)
  ')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisstackmgr.if
No license file was found, but licenses were detected in source scan.

#
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#

/tmp/.DMI_FIFO                        gen_context(system_u:object_r:polaris_dmi_vtyserverutild_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmivtyserverutild.fc
No license file was found, but licenses were detected in source scan.

#
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#
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#

## <summary>Polaris cm_cc Policy Rules.</summary>

...........................................................................................................................
## <summary>
## Execute cmcmd_fp in the polaris_cm_fp_t domain.
## </summary>
## <param name="domain">
## <summary>
## Domain allowed to transition.
## </summary>
## </param>
#
interface('polaris_cm_cc_domtrans',
    gen_require(
        type polaris_cm_cc_t, polaris_cm_cc_exec_t;
    ')

corecmd_search_bin($1)
domtrans_pattern($1, polaris_cm_cc_exec_t, polaris_cm_cc_t)
')

#######################################
## <summary>
## Manage cm_cc_tmpfs files.
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
#
interface('polaris_cm_cc_tmpfs_manage',
    gen_require(
        type polaris_cm_cc_tmpfs_t,
    ')

manage_files_pattern($1, polaris_cm_cc_tmpfs_t, polaris_cm_cc_tmpfs_t)
mmap_files_pattern($1, polaris_cm_cc_tmpfs_t, polaris_cm_cc_tmpfs_t)
')

########################################
## <summary>
## Check presence and unlink /tmp/nim_xxd_present file created by cman cc.
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
## <rolecap/>
#
interface('polaris_nim_xxd_tmp_open_unlink',
    gen_require(
        type polaris_nim_xxd_tmp_t;
    ')

Open Source Used In BGP TE Controller Version 4.3.0 6360
allow $1 polaris_nim_xxd_tmp.t:file { open unlink }
}

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmcc.if
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#

## <summary>Polaris LUA Policy Rules.</summary>

# Polaris lfts

### Polaris lfts

### Work (read, write, ioctl) with /dev/dev_lfts device.

#### Domain allowed access.

interface('polaris_lfts_dev_use',
    gen_require(''
        type device_t;
        type polaris_lfts_device_t;
    ')
    write_chr_files_pattern($1, device_t, polaris_lfts_device_t)
    read_chr_files_pattern($1, device_t, polaris_lfts_device_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislfts.if
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#
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#  
### <summary>Polaris ofa Policy Rules.</summary>  

Found in path(s):  
* /opt/cola/permits/1103963160_1615183271.1/0/selinix-tar/selinux/polarisofa.if  
No license file was found, but licenses were detected in source scan.

```
# March 2017, Victor Kamensky  
#  
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#  
/var/virtual-instance(/.*)?  gen_context(system_u:object_r:polaris_var_vman_t,s0)  
/bootflash/virtual-instance(/.*)?  gen_context(system_u:object_r:polaris_disk_vman_t,s0)  
/bootflash/virtual-instance.conf --  gen_context(system_u:object_r:polaris_disk_vman_t,s0)  
/bootflash/vman_fdb(/.*)?  gen_context(system_u:object_r:polaris_disk_vman_t,s0)  
/vol/harddisk/virtual-instance(/.*)?  gen_context(system_u:object_r:polaris_disk_vman_t,s0)  
/vol/harddisk/virtual-instance.conf --  gen_context(system_u:object_r:polaris_disk_vman_t,s0)  
/vol/harddisk/vman_fdb(/.*)?  gen_context(system_u:object_r:polaris_disk_vman_t,s0)  
#sparrow, blackheart  
/flash1/virtual-instance(/.*)?  gen_context(system_u:object_r:polaris_disk_vman_t,s0)  
/flash1/virtual-instance.conf --  gen_context(system_u:object_r:polaris_disk_vman_t,s0)  
/flash1/vman_fdb(/.*)?  gen_context(system_u:object_r:polaris_disk_vman_t,s0)  
/tmp/vman(/.*)?  gen_context(system_u:object_r:polaris_vman_tmp_t,s0)  
/tmp/cgroup.log  gen_context(system_u:object_r:polaris_vman_tmp_t,s0)  
/tmp/vman_lxc_wdt_[0-9]*  gen_context(system_u:object_r:polaris_vman_tmp_t,s0)  
/tmp/trace(/.*)?  gen_context(system_u:object_r:polaris_vman_tmp_t,s0)  
/usr/binos/conf/vman_exec.sh --  gen_context(system_u:object_r:polaris_vman_shell_exec_t,s0)  
/usr/binos/conf/cgroup_reports.sh --  gen_context(system_u:object_r:polaris_cgroup_reports_exec_t,s0)  
/usr/binos/conf/vman_techsupport.sh --  gen_context(system_u:object_r:polaris_vman_tech_exec_t,s0)  
```

Found in path(s):  
* /opt/cola/permits/1103963160_1615183271.1/0/selinix-tar/selinux/polarisvman.fc  
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```
#  
# August 2017, Shawn Lu  
```
policy_module(polarisodmproxy, 1.0);

gen_require(
    type polaris_odm_proxy_t;
    
)
polaris_btrace_data_manage(polaris_odm_proxy_t)
polaris_crft_data_manage(polaris_odm_proxy_t)
polaris_chasfs_manage(polaris_odm_proxy_t)
polaris_tdlresolve_read(polaris_odm_proxy_t)
polaris_tdlldb_list_dirs(polaris_odm_proxy_t)
polaris_cpld_read(polaris_odm_proxy_t)
polaris_lua_read(polaris_odm_proxy_t)
polaris_flashlib_read(polaris_odm_proxy_t)
polaris_ripc_sman_ui_serv_connect(polaris_odm_proxy_t)
polaris_db_tdlldb_dir_use(polaris_odm_proxy_t)

#allow to setrlimit
allow polaris_odm_proxy_t self:capability sys_resource;
allow polaris_odm_proxy_t self:process setrlimit;
allow polaris_odm_proxy_t self:capability dac_override;

polaris_odm_clnt2svr_mqipc_create(polaris_odm_proxy_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisodmproxy.te
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#

### <summary>Polaris issu_monitor Policy Rules.</summary>

### <summary>
## Execute issumonitor in the polaris_issu_monitor domain.
### </summary>
### <param name="domain">
## <summary>
## Domain allowed to transition.
## </summary>
## </param>
#
interface('polaris_issu_monitor_domtrans',
  gen_require(
    type polaris_issu_monitor_t, polaris_issu_monitor_exec_t;
  ')
)
domtrans_pattern($1, polaris_issu_monitor_exec_t, polaris_issu_monitor_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisissumonitor.if
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dnl May 2018, Victor Kamensky
dnl
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dnl
dnl Place holder to let selinux-policy makefile know that this module
dnl is autigenerated, but we have different rules for it

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisplatformipcauto.fc.in
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisplatformdbauto.te.in
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisplatformdbauto.if.in
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/autopolarisplatformipcbase.te.in
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisplatformdbauto.fc.in
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisplatformipcauto.te.in
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisplatformipcauto.if.in
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#
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#
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#

policy_module(polariskeyman, 1.0);

gen_require(''
type polaris_keyman_t;
polaris_btrace_data_manage(polaris_keyman_t)
polaris_crft_data_manage(polaris_keyman_t)
polaris_chasfs_manage(polaris_keyman_t)
polaris_tdlresolve_read(polaris_keyman_t)
polaris_tdldb_list_dirs(polaris_keyman_t)
polaris_flashlib_read(polaris_keyman_t)
polaris_ripc_sman_ui_serv_connect(polaris_keyman_t)

allow polaris_keyman_t self:capability net_admin;
# keyman utilizes secure memory via ciscoss! libcrypto.so (mlock)
allow polaris_keyman_t self:capability ipc_lock;
polaris_cpld_read(polaris_keyman_t)

# __get_nprocs opens /sys/devices/system/cpu/online
ifdef(`quake_platform',`
  dev_read_sysfs(polaris_keyman_t)
')

# __get_nprocs opens /sys/devices/system/cpu/online
ifdef(`supernova_platform',`
  dev_read_sysfs(polaris_keyman_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariskeyman.te
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# polaristamdrp file contexts place holder

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristamdrp.fc
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#
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#
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# /bootflash labels

/bootflash(/.*)?  gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
/bootflash/ssh(/.*)?  gen_context(system_u:object_r:ssh_home_t,s0)
/bootflash/ssh/ssh_host.*_key\_pub  gen_context(system_u:object_r:sshd_key_t,s0)
/bootflash/ssh/ssh_host.*_key  gen_context(system_u:object_r:sshd_key_t,s0)
/bootflash/tracelogs(/.*)?  gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/bootflash/tan(/.*)?  gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/bootflash/core(/.*)?  gen_context(system_u:object_r:polaris_core_file_t,s0)
/bootflash/debug.conf  gen_context(system_u:object_r:polaris_debug_conf_t,s0)
/bootflash/packages.conf  gen_context(system_u:object_r:polaris_packages_conf_t,s0)

# /vol/bootflash4 labels

/vol/bootflash4(/.*)?  gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)
/vol/bootflash4/csl_p_0(/.*)?  gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)
/vol/bootflash4/csl_p_1(/.*)?  gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)
/vol/bootflash4/csl_s_0(/.*)?  gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)
/vol/bootflash4/csl_s_1(/.*)?  gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)
/vol/bootflash4/obfl_.*  gen_context(system_u:object_r:polaris_obfl_data_t,s0)

# /harddisk labels

/vol/harddisk(/.*)?  gen_context(system_u:object_r:polaris_disk_harddisk_t,s0)
/vol/harddisk_internal(/.*)?  gen_context(system_u:object_r:polaris_disk_harddisk_t,s0)
/vol/harddisk/tracelogs(/.*)?  gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/vol/harddisk/tan(/.*)?  gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/vol/harddisk/core(/.*)?  gen_context(system_u:object_r:polaris_core_file_t,s0)
/vol/harddisk/debug.conf  gen_context(system_u:object_r:polaris_debug_conf_t,s0)
/vol/harddisk_internal/tracelogs(/.*)?  gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/vol/harddisk_internal/tan(/.*)?  gen_context(system_u:object_r:polaris_btrace_data_t,s0)
/vol/harddisk_internal/core(/.*)?  gen_context(system_u:object_r:polaris_core_file_t,s0)
/vol/harddisk/packages.conf  gen_context(system_u:object_r:polaris_packages_conf_t,s0)

# on i8ng persistent storage arranged differently

csl_p_0(/.*)?  gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)
/csl_p_1(/.*)?  gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)
/csl_s_0(/.*)?  gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)
/csl_s_1(/.*)?  gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)
/obfl(/.*)?  gen_context(system_u:object_r:polaris_obfl_data_t,s0)

/vol/disk0(/.*)?  gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

# /init is symbolic link to /lib/systemd/systemd

/init  -l  gen_context(system_u:object_r:init_exec_t,s0)
# /disk0 is symbolic link to /vol/disk0

/disk0 -l  gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

# scooby device

/dev/scooby -c  gen_context(system_u:object_r:polaris_scooby_device_t,s0)
# spa devices handled by sys_platform driver
/dev/spa0 -c gen_context(system_u:object_r:polaris_spa_device_t,s0)
/dev/spa1 -c gen_context(system_u:object_r:polaris_spa_device_t,s0)
/dev/spa2 -c gen_context(system_u:object_r:polaris_spa_device_t,s0)
/dev/spa3 -c gen_context(system_u:object_r:polaris_spa_device_t,s0)
/dev/iocp0 -c gen_context(system_u:object_r:polaris_spa_device_t,s0)

# htdp devices
/dev/htdp[0-9]* -c gen_context(system_u:object_r:polaris_htdp_device_t,s0)

# /dev/eap device on asr1k(mcp)
/dev/eap[0-9]* -c gen_context(system_u:object_r:polaris_eap_device_t,s0)
/dev/epactrl[0-9]* -c gen_context(system_u:object_r:polaris_eap_device_t,s0)

# /dev/luna_fpga on asr1k(mcp)
/dev/luna_mbfpga -c gen_context(system_u:object_r:polaris_luna_mbfpga_device_t,s0)

# /dev/dash_fpga device on fugazi(mcp)
/dev/dash_fpga -c gen_context(system_u:object_r:polaris_dash_device_t,s0)
/dev/dash_fpga_cc0 -c gen_context(system_u:object_r:polaris_dash_device_t,s0)

# /dev/astro on asr1k(mcp)
/dev/astro -c gen_context(system_u:object_r:polaris_astro_device_t,s0)

# /dev/oob_evfc on asr1k(mcp)
/dev/oob_evfc -c gen_context(system_u:object_r:polaris_oob_evfc_device_t,s0)

# /dev/cpp_il on asr1k(mcp)
/dev/cpp_il -c gen_context(system_u:object_r:polaris_cpp_il_device_t,s0)

/dev/icp_adf_ctl -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_adf_gige_wd -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev0_csr -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev0_ring -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev_mem -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev_mem_page -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev_processes -c gen_context(system_u:object_r:polaris_icp_device_t,s0)

/dev/ds31408 -c gen_context(system_u:object_r:polaris_ds31408_device_t,s0)
/dev/cbdma -c gen_context(system_u:object_r:polaris_cbdma_device_t,s0)
/dev/cpp_htdp -c gen_context(system_u:object_r:polaris_cpp_htdp_device_t,s0)
/dev/n2_device -c gen_context(system_u:object_r:polaris_n2_device_t,s0)
/dev/cy2213 -c gen_context(system_u:object_r:polaris_cy2213_device_t,s0)
/dev/vega -c gen_context(system_u:object_r:polaris_vega_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismcp.fc
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dnl April 2018, Victor Kamensky

dnl

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dnl

define(`max_bay_map', `defn(format(``max_bay_map[%s-%s]"', `$1', `$2')))
define(`max_bay_map_set', `define(format(``max_bay_map[%s-%s]"', `$1', `$2'), `$3'))

define(`max_elastic_map', `defn(format(``max_elastic_map[%s-%s-%s]"', `$1', `$2', `$3')))
define(`max_elastic_map_set', `define(format(``max_elastic_map[%s-%s-%s]"', `$1', `$2', `$3'), `$4'))

define(`max_scope_map', `ifelse($2, `elastic', `max_elastic_map($1, $2, $3)', `max_bay_map($1, $2)')

dnl RICP scope handling

define(`min_bay_ripc_map', `defn(format(``min_bay_ripc_map[%s-%s]"', `$1', `$2')))
define(`min_bay_ripc_map_set', `define(format(``min_bay_ripc_map[%s-%s]"', `$1', `$2'), `$3'))

define(`min_elastic_ripc_map', `defn(format(``min_elastic_ripc_map[%s-%s-%s]"', `$1', `$2', `$3')))
define(`min_elastic_ripc_map_set', `define(format(``min_elastic_ripc_map[%s-%s-%s]"', `$1', `$2', `$3'), `$4'))

define(`min_scope_ripc_map_aux', `ifelse($2, `elastic', `min_elastic_ripc_map($1, $2, $3)', `min_bay_ripc_map($1, $2)')
define(`min_scope_ripc_map', `ifelse(min_scope_ripc_map_aux($1, $2, $3), `', 0, min_scope_ripc_map_aux($1, $2, $3))')

define(`max_bay_ripc_map', `defn(format(``max_bay_ripc_map[%s-%s]"', `$1', `$2')))
define(`max_bay_ripc_map_set', `define(format(``max_bay_ripc_map[%s-%s]"', `$1', `$2'), `$3'))

define(`max_elastic_ripc_map', `defn(format(``max_elastic_ripc_map[%s-%s-%s]"', `$1', `$2', `$3')))
define(`max_elastic_ripc_map_set', `define(format(``max_elastic_ripc_map[%s-%s-%s]"', `$1', `$2', `$3'), `$4'))

define(`max_scope_ripc_map_aux', `ifelse($2, `elastic', `max_elastic_ripc_map($1, $2, $3)', `max_bay_ripc_map($1, $2)')
define(`max_scope_ripc_map', `ifelse(max_scope_ripc_map_aux($1, $2, $3), `', 0, max_scope_ripc_map_aux($1, $2, $3))')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_max_scope.m4
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#
# March 2017, Victor Kamensky
#
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## <summary>Polaris periodic Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisperiodic.if
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#
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#

## <summary>Polaris service_mgr Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisservicemgr.if
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#
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#
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#

policy_module(polariscommon, 1.0);

########################################################################
# Polaris common
########################################################################

# domain that holds all polaris processes
attribute polaris_domain;

# domain that holds all polaris processes executables
attribute polaris_exec_domain;

# domain that holds all polaris processes plus few base types that operates on
# during system start, like initrc_t and unconfined_service_t. Please remove
# unconfined types latter.
attribute polaris_extended_domain;

gen_require(''
    type unconfined_t;
    type unconfined_service_t;
type initrc_t;
type init_t;


typeattribute unconfined_t polaris_extended_domain;
typeattribute unconfined_service_t polaris_extended_domain;
typeattribute initrc_t polaris_extended_domain;
typeattribute init_t polaris_extended_domain;

# common permissions that are safe to grant and hard to root cause.
# these permissions may need to be turned off during development or tightened
# in future releases

gen_require(
    attribute domain;
)

# sys_resource denial is seen due to disk full issue
# and possibly FD exceeding limit
allow domain self:capability sys_resource;

# When management interface is enabled for development Polaris device can be
# access by telnet, which directly drops into shell. It would be desirreably
# to remove telnet functionality att all. But for now we need transition
# rule to get shell running in unconfined domain.
gen_require(
    type telnetd_t;
)

unconfined_shell_domtrans(telnetd_t)

# This block is policies for "request platform software system shell" CLI.
# Execute bexecute in polaris_bexecute domain.

polaris_bexecute_domtrans(telnetd_t)

# /tmp/sw/rp/0/0/rp_security/mount/usr/binos/sbin/in.telnetd
# -L /usr/binos/conf/brelay.sh
# - this needs read/write/create access to /tmp/rp/trace/in_telnetd_*_.bin.tmp
# which later gets renamed to /tmp/rp/trace/service_sh_.bin
polaris_btrace_data_manage(telnetd_t)

# mcp_telnetd_init through btrace_application_start calls get_chassis_number
# so it needs chasfs access
polaris_chasfs_read(telnetd_t)
polaris_cpld_read(telnetd_t)
polaris_btrace_lvl_config_manage(telnetd_t)

# LOOK AT ME: rsync needs sys_admin capability
# only seen when we boot in enforcing mode, localtime glibc library call
# needs time zone information and through __tz_convert function it eventually
# calls syspage function and that in turns calls Cisco syspage related
# prctl that is protected by CAP_ADMIN now
gen_require(
    type rsync_t;
    type init_t;
    )
allow rsync_t self:capability sys_admin;

gen_require(
    type rsync_t;
    )
allow rsync_t init_t:unix_stream_socket getattr;

# LOOK AT ME: auditd needs sys_admin capability
# only seen when we boot in enforcing mode, denials happens upon exec of
# auditdshp why is not entirely clear
gen_require(
    type auditd_t;
    )
allow auditd_t self:capability sys_admin;

# LOOK AT ME:
# Because Cisco kernel features check for capability sys_admin
# before granting access to it. It turns out to be mistake because
# in SELinux universe beeing root does not mean one have sys_admin
# capability. For now grant sys_admin capability to everyone :(.
gen_require(
    attribute domain;
    )
allow domain self:capability sys_admin;

# LOOK AT ME:
# all polaris SMU system is based on LD_LIBRARY_PATH passing from
# parent to child, but if auxv AT_SECURE would be set to 1, glibc
# will clean LD_LIBRARY_PATH and other environment variables when
# it execve another process. We need to grant noatsecure to all
# processes
gen_require(
    attribute domain;
    )
allow domain domain:process { noatsecure rlimitinh };

# nfs server exporting some directories like /harddisk
gen_require(
    type nfsd_t;
    )
polaris_disk_bootflash_read_lnk(nfsd_t)
polaris_harddisk_read(nfsd_t)

# nfs server check hugetlbfs files system
gen_require(''
    type hugetlbfs_t;
')
list_dirs_pattern(nfsd_t, hugetlbfs_t, hugetlbfs_t)

# temporarily addressing denial,
# preferable to turn on nfs_export_all_rw/ro boolean
gen_require(''
    type removable_t;
')
list_dirs_pattern(nfsd_t, removable_t, removable_t)

# firmware type
type polaris_firmware_t;
files_type(polaris_firmware_t)

# some systemd unit creates /firmware directory in initramfs
gen_require(''
    attribute domain;
    type root_t;
')
filetrans_pattern(domain, root_t, polaris_firmware_t, dir, "firmware")

# handling /tmp/debug.conf, created by systemd unit
gen_require(''
    type polaris_debug_conf_t;
    type unconfined_service_t;
')
files_tmp_filetrans(unconfined_service_t, polaris_debug_conf_t, {file lnk_file}, "debug.conf")

# /tmp/etc files; serving as /etc like but sitting in mutable storage
# (assuming that real /etc would become read-only eventually)
type polaris_etc_t;
files_type(polaris_etc_t);

# /tmp/sv files
type polaris_sv_tmp_t;
files_tmp_file(polaris_sv_tmp_t)

# /dev/i2c-N
type polaris_i2c_device_t;
dev_node(polaris_i2c_device_t)

# remap_mem0 device
type polaris_remap_mem_device_t;
dev_node(polaris_remap_mem_device_t)

type polaris_ebf_t;
files_type(polaris_ebf_t)

# allow all domains map/read ebf files
gen_require(''
    attribute domain;
    ')
polaris_ebf_map(domain)

# btrace files for telnetd, since telnetd is open source label
# and it does not use our domain creation template
gen_require(''
    type telnetd_t;
    ')
type polaris_telnetd_bt_t;
polaris_btrace_data_type(polaris_telnetd_bt_t)
polaris_btrace_data_client(telnetd_t, polaris_telnetd_bt_t)

type polaris_telnetd_maroon_t;
polaris_maroon_data_type(polaris_telnetd_maroon_t)
polaris_maroon_data_client(telnetd_t, polaris_telnetd_maroon_t)

# "install add file" on ULTRA invokes:
# /tmp/sw/rp/0/0/rp_security/mount/usr/binos/sbin/in.telnetd -L /usr/binos/conf/brelay.sh
# That needs getattr on /lib/systemd/system/ksm.service
polaris_ksm_run_check(telnetd_t)

# restorecon needs sys_resource capability
gen_require(''
    type setfiles_t;
    ')
allow setfiles_t self:capability sys_resource;

# accessing /sys/firmware/dmi/tables/DMI
gen_require(''
    type dmidecode_t;
    type sysfs_t;
    ')
mmap_files_pattern(dmidecode_t, sysfs_t, sysfs_t)

allow dmidecode_t memory_device_t:chr_file map;
# called by confd_t label with it is file as stdin
polaris_confd_tmp_use_fifo(dmidecode_t)

# rpcbind binds to port
gen_require(`
    type rpcbind_t;
')
corenet_udp_bind_generic_port(rpcbind_t)

# when polaris_unconfined we need to mark all subject labels except
# iosd lable to run as unconfined
ifdef(`polaris_unconfined',`
    gen_require(`
        type auditd_t;
        type dhcpc_t;
        type getty_t;
        type inetd_t;
        type initrc_t;
        type init_t;
        type journalctl_t;
        type nfsd_t;
        type ntpd_t;
        type rpcbind_t;
        type rpcd_t;
        type rsync_t;
        type setfiles_t;
        type sshd_t;
        type syslogd_t;
        type system_dbusd_t;
        type udev_t;
        type virtid_t;
        type virtlogd_t;
        type ldconfig_t;
        type hostname_t;
    ')
unconfined_domain(auditd_t)
unconfined_domain(dhcpc_t)
unconfined_domain(getty_t)
unconfined_domain(inetd_t)
unconfined_domain(initrc_t)
unconfined_domain(init_t)
unconfined_domain(journalctl_t)
unconfined_domain(nfsd_t)
unconfined_domain(ntpd_t)
unconfined_domain(rpcbind_t)
unconfined_domain(rpcd_t)
unconfined_domain(rsync_t)
unconfined_domain(setfiles_t)
unconfined_domain(sshd_t)
unconfined_domain(syslogd_t)
unconfined_domain(system_dbusd_t)
unconfined_domain(udev_t)
unconfined_domain(virtd_t)
unconfined_domain(virtlogd_t)
unconfined_domain(ldconfig_t)
unconfined_domain(hostname_t)

#endif
optional_policy(

    gen_require(
        type container_runtime_t;
    )
    unconfined_domain(container_runtime_t)
)

#if /tmp/rsync_log_dir files
type polaris_rsync_tmp_t;
files_tmp_file(polaris_rsync_tmp_t)

# activate correct named transition for basic directories
# when code runs under unconfined_service_t, i.e. calls ip
# command that runs under ifconfig_t and creates /run/netns
gen_require(
    type unconfined_service_t;
)
domain_named_filetrans(unconfined_service_t)
gen_require(
    type ifconfig_t;
    type ifconfig_var_run_t;
)
allow ifconfig_t ifconfig_var_run_t:dir mounton;

# earlier invocation of ifconfig complains about tmp_t mounton
# on /sys directory
gen_require(
    type tmp_t;
)
allow ifconfig_t tmp_t:dir mounton;

#SERDES library stores info in /tmp/serdes_asic_key_dir/*
type polaris_serdes_asic_key_tmp_t;
files_tmp_file(polaris_serdes_asic_key_tmp_t)

# /dev/shm/vrf_shm access
type polaris_vrf_shm_t:
files_type(polaris_vrf_shm_t)

# /dev/shm/cerrno_dll access
type polaris_cerrno_shm_t;
files_tmpfs_file(polaris_cerrno_shm_t)

# for /sbin/ip: /dev/shm/vrf_shm access in netns creation
.gen_require(
    type ifconfig_t;
)
.polaris_vrf_shm_manage(ifconfig_t)

# for /sbin/ip: adds lfts device in netns creation
.polaris_lfts_dev_use(ifconfig_t)

# new systemd-tmpfiles needs this permissions
.gen_require(
    type systemd_tmpfiles_t;
)
.allow systemd_tmpfiles_t self:capability sys_resource;
.allow systemd_tmpfiles_t self:process setrlimit;

.gen_require(
    type unconfined_service_t;
)
.ssh_inittre_domtrans(unconfined_service_t)

#wlc awips
type polaris_awips_signature_file_t;
polaris_pfile_type(polaris_awips_signature_file_t)

# /usr/bin/curl
type polaris_curl_t;
type polaris_curl_exec_t;
.init_system_domain(polaris_curl_t, polaris_curl_exec_t)
corenat_udp_bind_generic_node(polaris_curl_t)
auth_use_nsswitch(polaris_curl_t)
polaris_crft_data_read(polaris_curl_t)

# for ip netns exec X curl
optional_policy(
    polaris_curl_domtrans(ifconfig_t)
)

# /etc/init.d/sshd that runs under initre_t through ssh-keygen
# creates /config/.ssh directory if does not exist: /config
# directory is typically symlink to /bootflash
.gen.require("
type initrc_t;
type ssh_home_t;
}
polaris_bootflash_filetrans(initrc_t, ssh_home_t, dir, ".ssh")

# /tmp/ldwm_envelope file
type polaris_ldwm_envelope_tmp_t;
files_tmp_file(polaris_ldwm_envelope_tmp_t)
gen_require(
  type initrc_t;
type init_t;
')
files_tmp_filetrans({ initrc_t init_t }, polaris_ldwm_envelope_tmp_t, file, "ldwm_envelope")

# CLI: show platform software tech-support
polaris_utility_domain_template(tech_support)
polaris_bexecute_domain(polaris_tech_support_t, polaris_tech_support_exec_t)
polaris_bexecute_domtrans(polaris_tech_support_t)

# allow to run readlink -f /usr/binos/conf/psimple.sh
corecmd_exec_bin(polaris_tech_support_t)

# Additional policies needed for workflow
auth_use_nsswitch(polaris_tech_support_t)
dev_list_sysfs(polaris_tech_support_t)
polaris_chasfs_read(polaris_tech_support_t)
polaris_cpld_read(polaris_tech_support_t)
# scripts stdin is set by hman and needs access to pipes like pipe:[271524]
polaris_hman_use_fifo(polaris_tech_support_t)
# Allow ls to /tmp/ufs/crashinfo
optional_policy(
  polaris_ncd_tmp_read(polaris_tech_support_t)
')

# Allow readlink to /usb0 and /usb1
optional_policy(
  fs_read_removable_symlinks(polaris_tech_support_t)
')

gen_require(
  type polaris_btrace_tmppub_t;
type polaris_disk_bootflash_t;
type polaris_disk_crashinfo_t;
')

# platform_tech_support.sh creates misc files/dirs under /tmp/tmppub
type polaris_tech_support_tmp_t;
files_tmp_file(polaris_tech_support_tmp_t)
filetrans_pattern(polaris_tech_support_t, polaris_btrace_tmppub_t, polaris_tech_support_tmp_t, file, ["esg_tech_support_command_file_out.txt"], ["sdwan_tech_support_command_file_out.txt"])
manage_files_pattern(polaris_tech_support_t, polaris_tech_support_tmp_t, polaris_tech_support_tmp_t)
manage_dirs_pattern(polaris_tech_support_t, polaris_tech_support_tmp_t, polaris_tech_support_tmp_t)

# /bootflash/certs
type polaris_ap_cert_file_t;
files_type(polaris_ap_cert_file_t)
polaris_pfile_type(polaris_ap_cert_file_t)

# Additional policies needed for workflow when file option is used
# show platform software tech-support file bootflash:show_tech_file
polaris_bootflash_manage(polaris_tech_support_t)
polaris_disk_crashinfo_manage(polaris_tech_support_t)
fs_getattr_tmfs(polaris_tech_support_t)
polaris_btrace_persistent_data_read(polaris_tech_support_t)

# /bootflash/certs
polaris_rommon_info_tmp_t;
files_tmp_filetrans(initrc_t, polaris_rommon_info_tmp_t, file, "existing_rommon_info")
manage_files_pattern(initrc_t, polaris_rommon_info_tmp_t, polaris_rommon_info_tmp_t)
fs_associate_tmfs(polaris_rommon_info_tmp_t)

# tamlib debug file
type polaris_tamlib_dbg_file_t;
polaris_pfile_type(polaris_tamlib dbg_file_t)

#/proc/cmdline
kernel_read_system_state(polaris_tech_support_t)
# read rmbonbifo files such as env_var.sh
polaris_rmonbifo_tmp_read(polaris_tech_support_t)
# read /tmp/sw/boot/base_pkg
polaris_boot_tmp_read(polaris_tech_support_t)

#/dev/ddr
type polaris_ddr_device_t;
dev_node(polaris_ddr_device_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscommon.te
No license file was found, but licenses were detected in source scan.

dnl
define(`ripc_base_type_map', `defn(format(``ripc_base_type_map[%s]'', `$1'))')
define(`ripc_base_type_map_set', `define(format(``ripc_base_type_map[%s]'', `$1'), `$2')')
define(`ripc_base_port_map', `defn(format(``ripc_base_port_map[%s]'', `$1'))')
define(`ripc_base_port_map_set', `define(format(``ripc_base_port_map[%s]'', `$1'), `$2')')
define(`polaris_ripc_portcon', `portcon tcp $1 gen_context(system_u:object_r:$2,s0))
define(`polaris_ripc_portcon_aux', `dnl
ifelse(ripc_base_port_map($1), `', `polaris_ripc_portcon($1, $2))
ripc_base_port_map_set($1, $2)
')
define(`polaris_ripc_portcon_many',
`polaris_ripc_portcon_aux(eval($2 + $3), $1)
ifelse($4, $3, `', `polaris_ripc_portcon_many($1, $2, eval($3 + 1), $4)'))
define(`polaris_ripc_service_server_aux', `dnl
type $1, port_type, defined_port_type;
$4
')
define(`polaris_ripc_service_server_full', `dnl
polaris_ripc_service_server_aux(ripc_label($1), ripc_stem($1), process_label($2),
polaris_ripc_portcon_many(ripc_label($1), $5, min_scope_ripc_map($3, $4, $2),
max_scope_ripc_map($3, $4, $2)))
')
define(`polaris_ripc_service_server', `dnl
ifelse(ripc_base_type_map($1), `', `polaris_ripc_service_server_full($1, $2, $3, $4, $5))
ripc_base_type_map_set($1, 1)
')
define(`polaris_ripc_service_client', `dnl
ifelse(ripc_base_type_map($1), `', `polaris_ripc_service_server_full($1, $2, $3, $4, $5))
ripc_base_type_map_set($1, 1)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_base_ripc_te.m4
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### <summary>Polaris ngwc_plfm_mgr Policy Rules.</summary>

###############################################################
### <summary>
###       Read /tmp/installer files and directories
### </summary>
### <param name="domain">
###       <summary>
###       Domain allowed access.
### </summary>
### </param>
#

interface(`polaris_ngwc_plfm_mgt_tmp_manage',
gen_require(`
type polaris_ngwc_plfm_mgr_tmp_t;
`)
manage_dirs_pattern($1, polaris_ngwc_plfm_mgr_tmp_t, polaris_ngwc_plfm_mgr_tmp_t)
manage_files_pattern($1, polaris_ngwc_plfm_mgr_tmp_t, polaris_ngwc_plfm_mgr_tmp_t)
`)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwcplfmmgr.if

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### <summary>Polaris dmi_dmiauthd Policy Rules.</summary>

###############################################################
### <summary>
###       Connect to and send messages to dmiauthd.
### tmp/.DmiAuth.sock unix datagram sockets.
### </summary>
### <param name="domain">

## Domain allowed access.

```c
interface("polaris_dmi_dmiauthd_dgram_send",
    gen_require(
        type polaris_dmi_dmiauthd_tmp_t;
        type polaris_dmi_dmiauthd_t;
    )
) allow $1 self:unix_stream_socket {create_socket_perms};
allow $1 polaris_dmi_dmiauthd_t:unix_stream_socket { connectto };
write_sock_files_pattern($1, polaris_dmi_dmiauthd_tmp_t,polaris_dmi_dmiauthd_tmp_t)
)
```

## Manage dmiauthd fifo files

```c
interface("polaris_dmiauthd_tmp_manage",
    gen_require(
        type polaris_dmi_dmiauthd_tmp_t;
        type tmp_t;
    )
) manage_fifo_files_pattern($1, tmp_t, polaris_dmi_dmiauthd_tmp_t)
)
```

## Write into fifo file created by dmiauthd, typical case when dmiauthd starts script under popen.

```c
interface("polaris_dmiauthd_use_fifo",
    gen_require(
        type polaris_dmi_dmiauthd_t;
    )
)
write_fifo_files_pattern($1, polaris_dmi_dmiauthd_t, polaris_dmi_dmiauthd_t)
')

#######################################
## <summary>
## Manage /tmp/netconf-yang-diag/ files
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
## <rolebase/>
#
# interface('polaris_dmiauthd_tmp_diags_manage',`
  gen_require(
    type polaris_dmi_dmiauthd_tmp_diags_t;
  )
  manage_files_pattern($1, polaris_dmi_dmiauthd_tmp_diags_t, polaris_dmi_dmiauthd_tmp_diags_t)
  manage_dirs_pattern($1, polaris_dmi_dmiauthd_tmp_diags_t, polaris_dmi_dmiauthd_tmp_diags_t)
  manage_lnk_files_pattern($1, polaris_dmi_dmiauthd_tmp_diags_t, polaris_dmi_dmiauthd_tmp_diags_t)
')

#######################################
## <summary>
## Read /tmp/netconf-yang-diag/ files
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
## <rolebase/>
#
# interface('polaris_dmiauthd_tmp_diags_read',`
  gen_require(
    type polaris_dmi_dmiauthd_tmp_diags_t;
  )
  read_files_pattern($1, polaris_dmi_dmiauthd_tmp_diags_t, polaris_dmi_dmiauthd_tmp_diags_t)
  list_dirs_pattern($1, polaris_dmi_dmiauthd_tmp_diags_t, polaris_dmi_dmiauthd_tmp_diags_t)
  read_lnk_files_pattern($1, polaris_dmi_dmiauthd_tmp_diags_t, polaris_dmi_dmiauthd_tmp_diags_t)
')

Found in path(s):
  */opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmidmiauthd.if
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#

# polarisfmancc file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfmancc.fc
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dnl
dnl April 2018, Victor Kamensky
dnl
dnl Copyright (c) 2018-2019 by Cisco Systems, Inc.
dnl All rights reserved
dnl
define(`lipc_stem', `translit(patsubst($1, `-lipc$', `'), `-', `_'))
define(`lipc_label', `format(`polaris_%s_lipc_t', lipc_stem($1))')

dnl Lipc Type Map: track that type declations unique
define(`lipc_type_map', `defn(format(``lipc_type_map[%s]','$1'))')
define(`lipc_type_map_set', `define(format(``lipc_type_map[%s]'', `$1', `$2'))')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_lipc.m4
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#
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#
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#

policy_module(polarisefgmgr, 1.0);

gen_require(`
    type polaris_cfgmgr_t;
')
polaris_chasfs_manage(polaris_cfgmgr_t)
# read day0.oper.xml and write local.data.tmp
polaris_bootflash_manage(polaris_cfgmgr_t)
polaris_boot_tmp_read(polaris_cfgmgr_t)
polaris_cpld_read(polaris_cfgmgr_t)
polaris_tdlresolve_read(polaris_cfgmgr_t)
polaris_flashlib_read(polaris_cfgmgr_t)
polaris_ripc_sman_ui_serv_connect(polaris_cfgmgr_t)

disable_db_tldb_dir_use(polaris_cfgmgr_t)

logging_send_syslog_msg(polaris_cfgmgr_t)

# vconfd_load_shared_schemas
polaris_conf_conf_schema_read(polaris_cfgmgr_t)

polaris_cedge_reset_ns(polaris_cfgmgr_t)

polaris_cedge_etc_manage(polaris_cfgmgr_t)

# /etc/version is opened via "show sdwan version"
polaris_conf_etc_read(polaris_cfgmgr_t)

# /var/run/cfgmgr socket and pid
type polaris_cfgmgr_var_run_t;
files_pid_file(polaris_cfgmgr_var_run_t)
manage_files_pattern(polaris_cfgmgr_var_run_t, polaris_cfgmgr_var_run_t, polaris_cfgmgr_var_run_t)
manage_sock_files_pattern(polaris_cfgmgr_var_run_t, polaris_cfgmgr_var_run_t, polaris_cfgmgr_var_run_t)
files_pid_filetrans(polaris_cfgmgr_var_run_t, polaris_cfgmgr_var_run_t, { file sock_file })

# sets up symbloc link /var/run/netns/default to pid 1 netns
sysnetmanage_ifconfig_run(polaris_cfgmgr_t)

# PLEASE LOOK AT ME create_syslog_conf_file function in
# viptela/cfgmgr/cfgmgr_logging.c creates /etc/syslog.conf.sysklogd file
# that nobody uses in polaris
files_manage_etc_files(polaris_cfgmgr_t)

# in cfgmgr_vpn_namespace_add creates udp socket
allow polaris_cfgmgr_t self:udp_socket create_socket_perms;

# watch /bootflash/sdwan/day0_oper.xml
polaris_persistent_watch(polaris_cfgmgr_t)

# compute_available_memory executes '/bin/df /dev/shm'
corecmd_exec_bin(polaris_cfgmgr_t)
# vip_binos_cpuinfo calls sysconf
dev_read_sysfs(polaris_cfgmgr_t)
# cfgmgr_show_system_get_elem collects SDWAN_DISK_MOUNT (/bootflash) fs info
fs_getattr_xattr_fs(polaris_cfgmgr_t)
# crashlist_refresh collects info about corefiles
polaris_core_file_read(polaris_cfgmgr_t)
# cfgmgr_show_system_get_elem collects info about /bootflash/installer fs
polaris_disk_install_read(polaris_cfgmgr_t)
# cfgmgr_show_system_get_elem() collects available mem info by executing
# '/bin/df /tmp/rp/tcdb'
polaris_tldlb_list_dirs(polaris_cfgmgr_t)

# vip_binos_cpuinfo() performs file operations on PROC_CPUSTAT_FILE (/proc/stat)
polaris_disk_install_fs_getattr(polaris_cfgmgr_t)
# vip_binos_meminfo() reads PROC_MEMINFO_PATH (/proc/meminfo)
kernl_read_system_state(polaris_cfgmgr_t)

# configure ip address on system interface on vrf 1
sysnet_domtrans_ifconfig(polaris_cfgmgr_t)

# create tunnel interface in cfgmgr_tun_alloc function
corenet_rw_tun_tap_dev(polaris_cfgmgr_t)
allow polaris_cfgmgr_t self:tun_socket create;

# works if /proc accept_source_route file of system interface
kernel_rw_net_sysctls(polaris_cfgmgr_t)

# work with /tmp/xml/geostats
polaris_cedge_xml_tmp_manage(polaris_cfgmgr_t)

# work with /tmp/tmp/geostats
polaris_cedge_tmp_manage(polaris_cfgmgr_t)
allow polaris_cfgmgr_t self:process setpgid;

# map on /etc/passwd
auth_map_passwd(polaris_cfgmgr_t)

# give read permissions for /tmp/GPS_supported file created by iosd
polaris_iosd2iox_tmp_read(polaris_cfgmgr_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscfgmgr.te
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dnl May 2018, Manohar Hungund
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dnl

dnl Starfleet Platform Max Bay Limits
max_bay_map_set(`rp', `per_bay', 0)
max_bay_map_set(`bp', `per_bay', 0)
max_bay_map_set(`cc', `per_bay', 1)
max_bay_map_set(`fp', `per_bay', 1)
min_bay_ripc_map_set('rp', 'per_bay', 0)
min_bay_ripc_map_set('bp', 'per_bay', 0)
min_bay_ripc_map_set('cc', 'per_bay', 1)
min_bay_ripc_map_set('fp', 'per_bay', 0)

max_bay_ripc_map_set('rp', 'per_bay', 1)
max_bay_ripc_map_set('bp', 'per_bay', 1)
max_bay_ripc_map_set('cc', 'per_bay', 1)
max_bay_ripc_map_set('fp', 'per_bay', 1)

min_bay_ripc_map_set('rp', 'global', 0)
min_bay_ripc_map_set('bp', 'global', 0)
min_bay_ripc_map_set('cc', 'global', 1)
min_bay_ripc_map_set('fp', 'global', 0)

max_bay_ripc_map_set('rp', 'global', 1)
max_bay_ripc_map_set('bp', 'global', 1)
max_bay_ripc_map_set('cc', 'global', 1)
max_bay_ripc_map_set('fp', 'global', 1)

dnl in elastic scope each process has its own value
max_elastic_map_set('rp', 'elastic', BPROC_ODM, 0)
max_elastic_map_set('cc', 'elastic', BPROC_ODM, 0)
max_elastic_map_set('fp', 'elastic', BPROC_ODM, 0)

max_elastic_map_set('rp', 'elastic', BPROC_WNCD, 0)
max_elastic_map_set('cc', 'elastic', BPROC_WNCD, 0)
max_elastic_map_set('fp', 'elastic', BPROC_WNCD, 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/bigbangmaps.m4
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dnl
dnl Nyquist Platform Max Bay Limits
max_bay_map_set('rp', 'per_bay', 0)
max_bay_map_set('cc', 'per_bay', 0)
max_bay_map_set('fp', 'per_bay', 0)

dnl in elastic scope each process has its own value
max_elastic_map_set('rp', 'elastic', BPROC_ODM, 0)
max_elastic_map_set('cc', 'elastic', BPROC_ODM, 0)
max_elastic_map_set('fp', 'elastic', BPROC_ODM, 0)

max_elastic_map_set('rp', 'elastic', BPROC_WNCD, 0)
max_elastic_map_set("cc", "elastic", BPROC_WNCD, 0)
max_elastic_map_set("fp", "elastic", BPROC_WNCD, 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/quake2maps.m4
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#
# August 2017, Shawn Lu
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#

# polarisodmproxy file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisodmproxy.fc
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## <summary>Polaris rif_mgr Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrifmgr.if
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#
# August 2018 Man-Yee Hau
#
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/usr/cpp/bin/qfp-ucode-csr -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-csr-us -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
Open Source Used In BGP TE Controller Version 4.3.0

/usr/cpp/bin/qfp-ucode-csx -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-c8kv -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-wlc -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-utah -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-utah -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-tns -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-tns-le -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-supernova -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-blackheart -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-sparrow -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-aventus -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-cabo -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-goldbeach -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-radium -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-fugazi -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-sumatra -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/usr/cpp/bin/qfp-ucode-nanook -- gen_context(system_u:object_r:polaris_qfp_exec_t,s0)
/var/run/.rte_config -- gen_context(system_u:object_r:polaris_qfp_var_run_t,s0)
/dev/netmap -c gen_context(system_u:object_r:polaris_netmap_device_t,s0)
/dev/svc_eng_punt[0-9]* -c gen_context(system_u:object_r:polaris_sep_device_t,s0)

# qfp memif interfaces
/bootflash/SHARED-IOX/memif(/*) gen_context(system_u:object_r:polaris_qfp_memif_t,s0)
/tmp/memif(/.*)? gen_context(system_u:object_r:polaris_qfp_memif_t,s0)

# CSR & C8KV infiniband devices for Azure
/dev/infiniband/uverbs[0-9]* -c gen_context(system_u:object_r:polaris_infiniband_device_t,s0)

/etc/rc.d/init.d/iodbd.sh -- gen_context(system_u:object_r:polaris_iodbd_exec_t,s0)

# For Intel quickassist (qat) v1.5 - Note that mcp_family also includes this.
#endif('mcp_family',"
/dev/icp_adf_ctl -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/icp_dev_processes -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
')

# For platforms which use Intel quickassist (qat) v1.7
/dev/usdm_drv -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/qat_adf_ctl -c gen_context(system_u:object_r:polaris_icp_device_t,s0)
/dev/qat_dev_processes -c gen_context(system_u:object_r:polaris_icp_device_t,s0)

# For platforms which use the musdk from the Marvell 10.3.x.x SDK
/dev/musdk-cma -c gen_context(system_u:object_r:polaris_icp_device_t,s0)

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#

/usr/bin/osal/conf/telnetd_service.sh -- gen_context(system_u:object_r:polaris_tservice_telnet_exec_t,s0)
/usr/bin/osal/conf/sshd_service.sh -- gen_context(system_u:object_r:polaris_tservice_ssh_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisqfp.fc
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/usr/bin/osal/conf/rollback_timer.sh -- gen_context(system_u:object_r:polaris_rbtimer_exec_t,s0)

/boosflash/osal/rollback_timer(/.*)?        gen_context(system_u:object_r:polaris_rbtimer_bootflash_t,s0)
/tmp/rp/rollback_timer(/.*)?            gen_context(system_u:object_r:polaris_rbtimer_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrollbacktimer.fc
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dnl
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dnl
dnl Katar WLC Platform Max Bay Limits
max_bay_map_set(`rp', `per_bay', 0)
max_bay_map_set(`cc', `per_bay', 3)
max_bay_map_set(`fp', `per_bay', 0)

max_bay_ripc_map_set(`rp', `per_bay', 0)
max_bay_ripc_map_set(`cc', `per_bay', 3)
max_bay_ripc_map_set(`fp', `per_bay', 0)

max_bay_ripc_map_set(`rp', `global', 0)
max_bay_ripc_map_set(`cc', `global', 3)
max_bay_rpc_map_set("fp", 'global', 0)

dnl in elastic scope each process has its own value
max_elastic_map_set("rp", 'elastic', BPROC_ODM, 1)
max_elastic_map_set("cc", 'elastic', BPROC_ODM, 1)
max_elastic_map_set("fp", 'elastic', BPROC_ODM, 1)

max_elastic_map_set("rp", 'elastic', BPROC_WNCD, 7)
max_elastic_map_set("cc", 'elastic', BPROC_WNCD, 7)
max_elastic_map_set("fp", 'elastic', BPROC_WNCD, 7)

max_elastic_rpc_map_set("rp", 'elastic', BPROC_ODM, 1)
max_elastic_rpc_map_set("cc", 'elastic', BPROC_ODM, 1)
max_elastic_rpc_map_set("fp", 'elastic', BPROC_ODM, 1)

max_elastic_rpc_map_set("rp", 'elastic', BPROC_WNCD, 7)
max_elastic_rpc_map_set("cc", 'elastic', BPROC_WNCD, 7)
max_elastic_rpc_map_set("fp", 'elastic', BPROC_WNCD, 7)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/katarmaps.m4
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#

# polariscontainer file contexts place holder

# All the possible IOX flash_dir/harddisk_dir from iox_polaris.conf for docker
# Expected labels for docker as per container.fc
/bootflash/docker(/.*)?   gen_context(system_u:object_r:container_var_lib_t,s0)
/bootflash/docker/.*/.env   gen_context(system_u:object_r:container_share_t,s0)
/bootflash/docker/.*/.containers/.*/.*log   gen_context(system_u:object_r:container_log_t,s0)
/bootflash/docker/.*/.containers/.*/hostname   gen_context(system_u:object_r:container_share_t,s0)
/bootflash/docker/.*/.containers/.*/hosts   gen_context(system_u:object_r:container_share_t,s0)
/login/docker/.*/init(/.*)?   gen_context(system_u:object_r:container_share_t,s0)
/login/docker/.*/overlay(/.*)?   gen_context(system_u:object_r:container_share_t,s0)
/login/docker/.*/overlay2(/.*)?   gen_context(system_u:object_r:container_share_t,s0)
/login/iox_alt_hdd_mount_dir/docker(/.*)?   gen_context(system_u:object_r:container_var_lib_t,s0)
/login/iox_alt_hdd_mount_dir/docker/.*/.env   gen_context(system_u:object_r:container_share_t,s0)
/login/iox_alt_hdd_mount_dir/docker/.*/.containers/.*/.*.log
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscontainer.fc
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policy_module(polarissortfiles, 1.0);

generate_policy(
polaris_sort_files_t;

corecmd_exec_bin(polaris_sort_files_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_sort_files_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_sort_files_t)

polaris_btrace_data_manage(polaris_sort_files_t)
polaris_chasfs_manage(polaris_sort_files_t)
polaris_rmonbifo_tmp_read(polaris_sort_files_t)
polaris_read_debug_conf(polaris_sort_files_t)
polaris_persistent_getattr(polaris_sort_files_t)
polaris_persistent_list_dirs(polaris_sort_files_t)
polaris_cpld_read(polaris_sort_files_t)
polaris_capsule_upgrade_log_use(polaris_sort_files_t)
optional_policy(
  polaris_gnmib_gnoi_images_read(polaris_sort_files_t)
)

# Dontaudit /bootflash/#lost+found avc denials
dontaudit polaris_sort_files_t polaris_disk:chr_file { getattr }
dontaudit polaris_sort_files_t polaris_disk:blk_file { getattr }

#allow polaris_sort_files_t polaris_udev_tmp_files_t:dir { getattr search }
polaris_udev_tmp_list_dirs(polaris_sort_files_t)

optional_policy(
  polaris_iox_dir_list(polaris_sort_files_t)
)

polaris_sandbox_file_dir_list(polaris_sort_files_t)
polaris_disk_bootflash_read_lnk(polaris_sort_files_t)
polaris_disk_bootflash_fifo_file_getattr(polaris_sort_files_t)
polaris_disk_bootflash_sock_file_getattr(polaris_sort_files_t)

# allow search and read under /tmp/boot directory
polaris_boot_tmp_read(polaris_sort_files_t)

#allow manage the files under /tmp/sort
type polaris_sort_files_tmp_t;
files_tmp_file(polaris_sort_files_tmp_t)
files_tmp_filetrans(polaris_sort_files_t, polaris_sort_files_tmp_t, file)
manage_files_pattern(polaris_sort_files_t, polaris_sort_files_tmp_t, polaris_sort_files_tmp_t)

# for pluggable FS, allow sort to access files on them.
polaris_getattr_removable(polaris_sort_files_t)
polaris_removable_manage(polaris_sort_files_t)
fs_read_removable_symlinks(polaris_sort_files_t)

# to look at files sort_file sometime needs to violate DAC permissions
allow polaris_sort_files_t self:capability dac_read_search;

optional_policy(
  # LOOK AT ME memif sock_file interface present in /bootflash as
  # /bootflash/SHARED-IOX/memif/memif-dp-svr, since class of the
  # object is sock_file adding it to polaris_disk does not make much
  # sense
  gen_require(
    type polaris_qfp_memif_t;
  )
)
getattr_sock_files_pattern(polaris_sort_files_t, polaris_qfp_memif_t, polaris_qfp_memif_t)

# find runs fstatfs
fs_getattr_xattr_fs(polaris_sort_files_t)

# allow polaris_sort_files_t fs_t:filesystem getattr
fs_getattr_all_fs(polaris_sort_files_t)

# with "/bootflash"...this needs attr to access for logfile
polaris_user_file_getattr(polaris_sort_files_t)

optional_policy(
    gen_require(
        type polaris_efi_files_t;
    )
    #find /bootflash/ -printf %i %p
    allow polaris_sort_files_t polaris_efi_files_t:dir { getattr open read search };

    #stat -c %i %f %s %n /bootflash/EFI/UpdateCapsule/UpdateCapsuleFile.bin
    allow polaris_sort_files_t polaris_efi_files_t:file getattr;
)

Found in path(s):
  */opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissortfiles.te
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#
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#

policy_module(polarisioxman, 1.0);

gen_require(
    type polaris_ioxman_t;
)

polaris_btrace_data_manage(polaris_ioxman_t)
polaris_chasfs_manage(polaris_ioxman_t)
polaris_tdlresolve_read(polaris_ioxman_t)
polaris_tdddb_list_dirspolaris_ioxman_t)
polaris_cpld_read(polaris_ioxman_t)
polaris_lua_read(polaris_ioxman_t)
polaris_flashlib_read(polaris_ioxman_t)


polaris_ripc_sman_ui_serv_connect(polaris_ioxman_t)

polaris_db_tdl_db_dir_use(polaris_ioxman_t)

#allow access to /bootflash/iox/ files
polaris_iox_dir_search(polaris_ioxman_t)

corenec_tcp_connect_polaris_caf_api_port(polaris_ioxman_t)

# allow read permissions for /etc/hosts file
sysnet_read_config(polaris_ioxman_t)

# ioxman interacting with caf through api http interface and
# is uses curl library to send requests to caf. curl wants
# to do getsockopt with SOL_SOCKET.
allow polaris_ioxman_t self:tcp_socket getopt;

# allow to get getattr of /proc file system
domain_read_all_domains_state(polaris_ioxman_t)

corecmd_exec_bin(polaris_ioxman_t)
corecmd_exec_shell(polaris_ioxman_t)

# allow to run mount in its own domain; guestshell_set_netns.sh
# needs it; also, read and exec the set_netns script.
# ioxman_setup_guestshell_namespace invokes the script
# using NAMESPACE_COMMAND
mount_domtrans(polaris_ioxman_t)
polaris_guestshell_files_read(polaris_ioxman_t)
polaris_guestshell_exec_files_exec(polaris_ioxman_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_ioxman_t)

# guestshell_set_netns.sh calls ps command
# ps needs access to /sys/devices/system/cpu/online
dev_read_sysfs(polaris_ioxman_t)
# ps needs access to proc_t
kernel_read_system_state(polaris_ioxman_t)

# modifies /bootflash/iox/iox_app/guestshell_iox.json
polaris_iox_files_manage(polaris_ioxman_t)

# guestshell_set_netns.sh touches /var/run/netns/guestshell
files_pid_filetrans(polaris_ioxman_t, polaris_guestshell_var_run_t, file, "guestshell")
polaris_guestshell_var_run_files_manage(polaris_ioxman_t)

# Read and write the all pty
term_use_generic_ptys(polaris_ioxman_t)

# allow ioxman_syslib.sh to set uid/gid for screen
allow polaris_ioxman_t self:capability { dac_override setgid setuid }

# ioxman execve virsh
gen_require(‘
    type virsh_t;
    type virsh_exec_t;
’)
domtrans_pattern(polaris_ioxman_t, virsh_exec_t, virsh_t)
# virsh needs to write into /tmp/rp/trace/iox_guestshell.log
polaris_btrace_data_manage(virsh_t)

# ioxman is vman client over @vman_domain_socket socket
optional_policy(‘
    polaris_vman_use_client_socket(polaris_ioxman_t)
’)

# ioxman uses VS_OPER_DB from virtual_services_tbl_init
polaris_tdldbpersist_setup(polaris_ioxman_t)
polaris_tmp_tdldb_persist_setup(polaris_ioxman_t)

# ioxman through libcurl library hit c-ares DNS code needs
# udp sockets access
allow polaris_ioxman_t self:udp_socket connect;
logging_send_syslog_msg(polaris_ioxman_t)

# read /opt/cisco/caf/config/system-config.ini
polaris_caf_files_read(polaris_ioxman_t)
virt_manage_sandbox_files(polaris_ioxman_t)

# handle ioxman /tmp files like /tmp/iox_xml.dat
type polaris_iox_tmp_t;
files_tmp_file(polaris_iox_tmp_t)
polaris_iox_manage_tmp_files(polaris_ioxman_t)

# by some strange reason ioxman munges files in /bootflash/tracelogs
# please see iox_tracefile_restore in ioxman/src/im_serial.c
polaris_btrace_persistent_data_manage(polaris_ioxman_t)

# virsh execved from ioxman inherits stdout from ioxman
gen_require(‘
    type polaris_ioxman_bt_t;
    type virsh_t;
’
)
allow virsh_t polaris_ioxman_bt_t:file write;

optional_policy('gen_require('attribute polaris_domain;
    attribute polaris_extended_domain;
    type container_runtime_t;
')
    type attribute container_runtime_t polaris_domain;
type attribute container_runtime_t polaris_extended_domain;
')

# /usr/binos/conf/shell_exec.sh policy

polaris_utility_domain_template(iox_shell)

polaris_bexecute_domain(polaris_iox_shell_t, polaris_iox_shell_exec_t)
# shell_exec call bexec.sh
polaris_bexecute_domtrans(polaris_iox_shell_t)
corecmd_exec_bin(polaris_iox_shell_t)
polaris_chasfs_read(polaris_iox_shell_t)
auth_use_nsswitch(polaris_iox_shell_t)
fs_getattr_tmpfs(polaris_iox_shell_t)

mount_domtrans(polaris_iox_shell_t)

# inherit stdin from telnetd
telnet_use_ptys(polaris_iox_shell_t)

# create files under /bootflash/iox
polaris_iox_files_manage(polaris_iox_shell_t)

# executing guestshell.sh
polaris_guestshell_exec_files_exec(polaris_iox_shell_t)
polaris_guestshell_files_read(polaris_iox_shell_t)

# executing "ip netns exec guestshell /usr/bin/ssh ..."
sysnet_exec_ifconfig(polaris_iox_shell_t)
fs_read_nfs_files(polaris_iox_shell_t)
files_mounton_rootfs(polaris_iox_shell_t)
dev_mounton_sysfs(polaris_iox_shell_t)
allow polaris_iox_shell_t self:netlink_route_socket rw_netlink_socket_perms;
dev_mount_sysfs_fs(polaris_iox_shell_t)
dev_unmount_sysfs_fs(polaris_iox_shell_t)

# executing ssh
corenets_tcp_connect_ssh_port(polaris_iox_shell_t)
ssh_exec(polaris_iox_shell_t)
allow polaris_iox_shell_t self:tcp_socket { connect create getattr getopt setopt shutdown }

# ssh creates /root/.ssh directory
userdom_create_user_home_dirs(polaris_iox_shell_t)

# read /etc/guestshell_rsa_key
polaris_guestshell_key_read(polaris_iox_shell_t)

# work with sandbox files
polaris_sandbox_file_dir_list(polaris_iox_shell_t)

polaris_caf_var_run_files_manage(polaris_iox_shell_t)

# shell_exec.sh invokes:
#   mkdir /tmp/shell_exec
#   create /tmp/shell_exec/*
type polaris_iox2iosd_tmp_t;
files_tmp_file(polaris_iox2iosd_tmp_t)
files_tmp_filetrans(polaris_iox_shell_t, polaris_iox2iosd_tmp_t, dir, ".shell_exec")
files_tmp_filetrans(polaris_iox_shell_t, polaris_iox2iosd_tmp_t, file)

#allow shell_exec to manage /tmp/ncsshd_authorized_keys
polaris_ncsshd_keys_manage(polaris_iox_shell_t)
# allow shell_exec to manage /tmp/shell_exec/* files
polaris_iox2iosd_tmp_manage(polaris_iox_shell_t)
# allow shell_exec to work with files created by iosd
polaris_iosd2iox_tmp_manage(polaris_iox_shell_t)
ifdef(`nyquist_platform',`
# Manage alternate hdd files
polaris_iox_alt_hdd_manage(polaris_iox_shell_t)
')
ifdef(`passport_platform',`
# Manage alternate hdd files
polaris_iox_alt_hddManage(polaris_iox_shell_t)
')

allow polaris_iox_shell_t self:capability { chown dac_override fowner fsetid setgid setuid dac_read_search };
allow polaris_iox_shell_t self:cap_users sys_admin;
allow polaris_iox_shell_t self:process setfscreate;

# LOOK AT ME very fishy iox_shell executes
#/bootflash/iox/repo-lxc/guestshell/rootfs_mnt/cisco/shell_exec.sh that
# actually can be modified from container itself. File is recreated
# each guestshell activation and it seems not executed afterwards.
# Grant access for now. Need to look closely whether it could be exploited
# in some way
virt_exec_sandbox_files(polaris_iox_shell_t)
# ip command called from iox_shell, running it under
# iox_shell domain, add required mounton on unlabled_t
files_mounton_isid(polaris_iox_shell_t)

# read guestshell net namespace file
fs_read_nfs_files(polaris_ioxman_t)

# need to create /bootflash/gs_script/db.ini file
polaris_bootflash_manage(polaris_ioxman_t)
polaris_harrdisk_manage(polaris_ioxman_t)

# run_ioxn_secure_dir.sh policy
gen_require('
    type polaris_iox_secure_dir_t;
')
corecmd_exec_bin(polaris_iox_secure_dir_t)
auth_use_nsswitch(polaris_iox_secure_dir_t)
polaris_caf_files_read(polaris_iox_secure_dir_t)
polaris_chasfs_manage(polaris_iox_secure_dir_t)
polaris_bootflash_manage(polaris_iox_secure_dir_t)
polaris_harrdisk_manage(polaris_iox_secure_dir_t)
polaris_iox_files_manage(polaris_iox_secure_dir_t)

# /bin/cat9k_ssd_auth_cmds.sh
polaris_utility_domain_template(ssd_auth)

corecmd_exec_bin(polaris_ssd_auth_t)
storage_getattr_fixed_disk_dev(polaris_ssd_auth_t)

#allow to read /etc/passwd
auth_use_nsswitch(polaris_ssd_auth_t)

fs_getattr_tmpfs(polaris_ssd_auth_t)

# execute hdparam in its own domain
fstools_domtrans(polaris_ssd_auth_t)

polaris_use_btrace_fifo(polaris_ssd_auth_t)

type polaris_ssd_auth_tmp_t;
files_tmp_file(polaris_ssd_auth_tmp_t)

# bash tmp files like /tmp/sh-thd.kxX3sc
files_tmp_filetrans(polaris_ssd_auth_t, polaris_ssd_auth_tmp_t, file)
manage_files_pattern(polaris_ssd_auth_t, polaris_ssd_auth_tmp_t, polaris_ssd_auth_tmp_t)

# /tmp/ssl_blk_device created by udev
gen_require('
    type udev_t;
type tmpfs_t;
  type tmp_t;
')
filetrans_pattern(udev_t, {tmpfs_t tmp_t}, polaris_ssd_auth_tmp_t, file, "ssd_blk_device")
polaris_getattr_harddisk(polaris_ssd_auth_t)

fs_read_cgroup_files(polaris_ioxman_t)

# Allow ioxman to download package files using url
polaris_caf_tmp_files_manage(polaris_ioxman_t)
polaris_cli_fs_cmds_domtrans(polaris_ioxman_t)
# ufs information captured by the chasfs utils
optional_policy(')
polaris_ncd_tmp_read(polaris_ioxman_t)
')
gen_require(')
    type polaris_fts_client_tmp_t;
')

manage_files_pattern(polaris_ioxman_t, polaris_fts_client_tmp_t, polaris_fts_client_tmp_t)
manage_dirs_pattern(polaris_ioxman_t, polaris_fts_client_tmp_t, polaris_fts_client_tmp_t)
allow polaris_ioxman_t tmp_t:file { create open unlink write };

# get_orchestration_template in cgroup_init_common.sh reads
# ovf-env.xml file from removable and varied
fs_read_removable_files(polaris_ioxman_t)
polaris_disk_varied_read(polaris_ioxman_t)

# writes into /tmp/trace/resource.log
optional_policy(')
polaris_vman_tmp_manage(polaris_ioxman_t)
')

# watch over /tmp/udev/etc/udev/usbflash1 in iox_media_chasfs_watch
polaris_udev_tmp_read(polaris_ioxman_t)
polaris_udev_tmp_watch(polaris_ioxman_t)

ifdef('nyquist_platform','
# Manage alternate hdd files
polaris_iox_alt_hdd_manage(polaris_ioxman_t)
')

dev_getattr_fs(polaris_iox_shell_t)
kernell_read_system_state(polaris_iox_shell_t)

gen_require(')
    type virt_lxc_var_run_t;
')
read_files_pattern(polaris_ioxman_t, virt_lxc_var_run_t, virt_lxc_var_run_t)

# sys_resource denial is seen even on factory reset
allow polaris_ioxman_t self:capability sys_resource;

ifdef(’passport_platform’,
    # Manage alternate hdd files
    polaris_iox_alt_hdd_manage(polaris_ioxman_t)
)

polaris_iosd_vcpu_read(polaris_ioxman_t)

# work with files like /tmp/guestinfo_status.txt
polaris_iosd2iox_tmp_manage(polaris_ioxman_t)

gen_require(
    type screen_var_run_t;
    type screen_exec_t;
    
)

# allow ioxman to set up ttys for screen
polaris_caf_tty_lnk_manage(polaris_ioxman_t)

# allow ioxman_syslib.sh to invoke screen
screen_exec(polaris_ioxman_t)

# add entrypoint to screen_exec/can_exec permissions
allow polaris_ioxman_t screen_exec_t:file entrypoint;

# make sure /tmp/screens is labeled correctly
files_tmp_filetrans(polaris_ioxman_t, screen_var_run_t, dir, "screens")

# allow ioxman to manage /tmp/screens/<appname>_con/aux.sid
manage_files_pattern(polaris_ioxman_t, screen_var_run_t, screen_var_run_t)

# allow ioxman to manage sock_files and unix_stream_socket on screen
allow polaris_ioxman_t self:unix_stream_socket { create_socket_perms connectto };
manage_dirs_pattern(polaris_ioxman_t, screen_var_run_t, screen_var_run_t)
manage_sock_files_pattern(polaris_ioxman_t, screen_var_run_t, screen_var_run_t)

# allow ioxman to transition into bexecute domain
polaris_bexecute_domtrans(polaris_ioxman_t)
polaris_bexecute_domain(polaris_ioxman_t, screen_exec_t)
# allow bexecute to access the /tmp/screens/*.sid files
gen_require(
    type polaris_bexecute_t;
    
)
manage_files_pattern(polaris_bexecute_t, screen_var_run_t, screen_var_run_t)
# allow shell_exec to manage /tmp/.ncsshd_authorized_keys
polaris_ncsshd_keys_manage(polaris_iox_shell_t)
polaris_iox2iosd_tmp_manage(polaris_iox_shell_t)

# allow shell_exec to manage guestshell files
gen_require(
    type container_file_t;
')
manage_files_pattern(polaris_iox_shell_t, container_file_t, container_file_t)

# allow ioxman to setattr for /dev/pts relating to screen
gen_require(
    type telnetd_devpts_t;
')
allow polaris_ioxman_t telnetd_devpts_t:chr_file setattr_chr_file_perms;

# allow ioxman to access the /tmp/ttyF*. files
gen_require(
    type fifo_var_run_t;
')
files_tmp_filetrans(polaris_ioxman_t, fifo_var_run_t, fifo_file)
manage_fifo_files_pattern(polaris_ioxman_t, fifo_var_run_t, fifo_var_run_t)

# allow ioxman to access rootfs and sysfs
# The same is needed when guestshell uses a passwordless SSH, when users do
# like "guestshell run bash" from IOS and it provides a bash shell screen
# in IOS.

gen_require(
    type ssh_home_t;
')

ssh_filetrans_admin_home_content(polaris_iox_shell_t)
allow polaris_iox_shell_t ssh_home_t:dir {create search getattr};
devel_getattr_sysfs_fs(polaris_iox_shell_t)

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#
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#
policy_module(polarismqipc, 1.0);

attribute polaris_mqipc;

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#

/var/run/cli_agent.pid --gen_context(system_u:object_r:polaris_cli_agent_var_run_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscliagent.fc
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#
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#
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#

policy_module(polarisvxe, 1.0);

# hanet driver used by vpcgw platform of VXI family
ifdef(`vpcgw_platform',`
  type polaris_hanet_device_t;
  dev_node(polaris_hanet_device_t)
')

# on ultra in some cloud configuration runs dhcp client utility
# receive meta information from cloud provider, /var/lib/dhcp
# directory is created by initrc_t
gen_require(`
    type dhcpc_t;
    type initrc_t;
    type dhcp_state_t;
')
files_var_lib_filetrans({ dhcpc_t initrc_t }, dhcp_state_t, dir, "dhcp")

# during boot on misc cloud environment ultra image creates directory
# in /tmp to keep information received from cloud provider. Since latter
# it is copied into /varied directory let's assign polaris_disk_varied_t to them

gen_require(
    type initrc_t;
    type polaris_disk_varied_t;
    type unconfined_service_t;
)
files_tmp_filetrans({ unconfined_service_t initrc_t }, polaris_disk_varied_t, dir, "ami")
files_tmp_filetrans({ unconfined_service_t initrc_t }, polaris_disk_varied_t, dir, "azure")
files_tmp_filetrans({ unconfined_service_t initrc_t }, polaris_disk_varied_t, dir, "gcp")

# park policy for small polaris process umbrella_init.sh here

gen_require(
    type polaris_umbrella_init_t;
)
polaris_bootflash_manage(polaris_umbrella_init_t)
corecmd_exec_bin(polaris_umbrella_init_t)
auth_use_nsswitch(polaris_umbrella_init_t)

# define added to address issues related to dependency
# on mcp-platform-tdl for db defines
# Skip for vpcgw platform
ifndef(`vpcgw_platform`,
    type polaris_gnmib_t;
)

type polaris_objstore_sem_t;
files_tmpfs_file(polaris_objstore_sem_t)

# semaphore created by systemd-tmpfiles needs map permission

gen_require(
    type systemd_tmpfiles_t;
)
mmap_files_pattern(systemd_tmpfiles_t, polaris_objstore_sem_t, polaris_objstore_sem_t)

# on vxe all processes read grub_cisco_version in polaris_disk_varied_t

gen_require(
    attribute polaris_domain;
)
polaris_disk_varied_search(polaris_domain)

type polaris_grub_bios_t;
polaris_pfile_type(polaris_grub_bios_t)

type polaris_grubver_t;
polaris_pfile_type(polaris_grubver_t)

type polaris_vxeinstall_info_t;
polaris_pfile_type(polaris_vxeinstall_info_t)
gen_require('  
    type unconfined_service_t;
    type polaris_disk_varied_t;
')

# unconfined service create /boot/.install_info if does not exist yet
firetrans_pattern(unconfined_service_t, polaris_disk_varied_t, polaris_vxeinstall_info_t, file, ".install_info")

# on C8KV all processes read grubenv in EFI disk partition
gen_require('  
    attribute polaris_domain;
')
polaris_grub_efi_search(polaris_domain)

gen_require('  
    type unconfined_service_t;
    type polaris_disk_varied_t;
    type polaris_obfl_data_t;
')

# unconfined service create /boot/obfl_temp_k1/2/3 if does not exist yet
filetrans_pattern(unconfined_service_t, polaris_disk_varied_t, polaris_obfl_data_t, file, "obfl_temp_k1")
filetrans_pattern(unconfined_service_t, polaris_disk_varied_t, polaris_obfl_data_t, file, "obfl_temp_k2")
filetrans_pattern(unconfined_service_t, polaris_disk_varied_t, polaris_obfl_data_t, file, "obfl_temp_k3")

# handle /tmp/vxe_disk_XXX_YYY files
gen_require('  
    type unconfined_service_t;
')
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_mbr_v1")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_mbr_v2")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_mbr_v3")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_mbr_v4")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_gpt_v1")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_gpt_v2")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_gpt_v3")
polaris_boot_tmp_manage(unconfined_service_t)

# /etc/init.d/sshd that runs under initrc_t through ssh-keygen
# creates /config/.ssh directory if does not exist; /config
# directory is typically bootflash, but on MBRv2/MBRv4/GPTv1/GPTv3
# partition layouts it could be separate /config partition that is
# under polaris_disk_config_t label

gen_require('  
    type initrc_t;
    type ssh_home_t;
')
polaris_disk_config_filetrans(initrc_t, ssh_home_t, dir, ".ssh")
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisvxe.te
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#

policy_module(polarisissumonitor, 1.0);

####################################################################
# install_issu_monitor
####################################################################

polaris_process_domain_template(issu_monitor)

corecmd_exec_bin(polaris_issu_monitor_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_issu_monitor_t)

polaris_btrace_data_manage(polaris_issu_monitor_t)
polaris_chasfs_manager(polaris_issu_monitor_t)
polaris_cpld_read(polaris_issu_monitor_t)
polaris_proc_monbifo_read(polaris_issu_monitor_t)
polaris_boot_tmp_read(polaris_issu_monitor_t)
polaris_read_debug_conf(polaris_issu_monitor_t)

# read and possibly create /bootflash/installer/issu_crash dir
polaris_bootflash_manager(polaris_issu_monitor_t)

allow polaris_issu_monitor_t self:capability sys_resource;
allow polaris_issu_monitor_t self:process setpgid;

type polaris_issu_monitor_tmp_t;
files_tmp_file(polaris_issu_monitor_tmp_t)
files_tmp_filetrans(polaris_issu_monitor_t, polaris_issu_monitor_tmp_t, dir, "issu_mon_dir")
manage_files_pattern(polaris_issu_monitor_t, polaris_issu_monitor_tmp_t, polaris_issu_monitor_tmp_t)
manage_dirs_pattern(polaris_issu_monitor_t, polaris_issu_monitor_tmp_t, polaris_issu_monitor_tmp_t)
manage_fifo_files_pattern(polaris_issu_monitor_t, polaris_issu_monitor_tmp_t, polaris_issu_monitor_tmp_t)

# access to /tmp/ufs/harddisk
optional_policy(`
polaris_ncd_tmp_read(polaris_issu_monitor_t)
`)
# access to /bootflash/installer/issu_crash
polaris_disk_install_read(polaris_issu_monitor_t)

# access to /tmp/sw/boots/monitorbifo/env_var.sh
polaris_monitorbifo_tmp_read(polaris_issu_monitor_t)

# read /proc/cmdline
kernel_read_system_state(polaris_issu_monitor_t)

# rm -rf /tmp/rp/issu_mon_dir
fs_getattr_tmpfs(polaris_issu_monitor_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisissumonitor.te
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#
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#

policy_module(polarisact2, 1.0);

********************************************************************************
# ACT2 Chip Driver policy
********************************************************************************

type polaris_act2_device_t;
dev_node(polaris_act2_device_t)

********************************************************************************
# /tmp/hw_entropy file.
# Certain platforms save entropy from main board ACT-2 chip in this file.

type polaris_hw_entropy_t;
files_tmp_file(polaris_hw_entropy_t)

********************************************************************************

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisact2.te
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#
# March 2017, Victor Kamensky
#
policy_module(polariscppha, 1.0);

gen_require(
    type polaris_cpp_ha_t;
')

polaris_btrace_data_manage(polaris_cpp_ha_t)
polaris_crf_data_manage(polaris_cpp_ha_t)
polaris_chasfs_manage(polaris_cpp_ha_t)
polaris_tdlresolve_read(polaris_cpp_ha_t)
polaris_tdlldb_list_dirs(polaris_cpp_ha_t)
polaris_cpld_read(polaris_cpp_ha_t)
polaris_flashlib_read(polaris_cpp_ha_t)
polaris_ripc_sman_ui_serv_connect(polaris_cpp_ha_t)
polaris_db_tdlldb_dir_use(polaris_cpp_ha_t)
polaris_cpp_process(polaris_cpp_ha_t)
polaris_cpp_dev_use(polaris_cpp_ha_t)
polaris_icc_broken_relocations(polaris_cpp_ha_t)
polaris_cpp_cavium_sdk_ipc_use(polaris_cpp_ha_t)

# allow objstore access
polaris_disk_objstore_read(polaris_cpp_ha_t)

# LOOK AT ME: raw memory access in cavium vendor SDK
# related to octeon driver (BUG CSCvh58515)
ifdef('crankshaft_family','
polaris_dev_mem_use(polaris_cpp_ha_t)
')

# allow syslogging
logging_send_syslog_msg(polaris_cpp_ha_t)

optional_policy(
    polaris_cbdma_dev_use(polaris_cpp_ha_t)
')
polaris_cpld_dev_use(polaris_cpp_ha_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppha.te
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#

policy_module(polariscppsp, 1.0);

gen_require(
    type polaris_cpp_sp_t;
)

polaris_btrace_data_manage(polaris_cpp_sp_t)
polaris_crft_data_manage(polaris_cpp_sp_t)
polaris_chasfs_manage(polaris_cpp_sp_t)
polaris_tlresolve_read(polaris_cpp_sp_t)
polaris_tlldb_list_dirs(polaris_cpp_sp_t)
polaris_cpld_read(polaris_cpp_sp_t)
polaris_flashlib_read(polaris_cpp_sp_t)
polaris_ripc_sman_ui_serv_connect(polaris_cpp_sp_t)
polaris_db_tlldb_dir_use(polaris_cpp_sp_t)
polaris_cpp_process(polaris_cpp_sp_t)
polaris_cpp_dev_use(polaris_cpp_sp_t)
polaris_icc_broken_relocations(polaris_cpp_sp_t)
polaris_cpp_cavium_sdk_ipc_use(polaris_cpp_sp_t)

# LOOK AT ME: raw memory access in cavium vendor SDK
# related to octeon driver (BUG CSCVh58515)
ifdef(`crankshaft_family',
    polaris_dev_mem_use(polaris_cpp_sp_t)
)

# allow syslogging
logging_send_syslog_msg(polaris_cpp_sp_t)

optional_policy(
    polaris_ebdma_dev_use(polaris_cpp_sp_t)
)
    polaris_cpld_dev_use(polaris_cpp_sp_t)
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppsp.te
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#

/usr/binos/conf/reflector.sh -- gen_context(system_u:object_r:polaris_reflector_exec_t,s0)
/tmp/rp/reflector(\./.*)? gen_context(system_u:object_r:polaris_reflector_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisreflector.fc
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#

policy_module(polarissifmgr, 1.0);

gen_require(`
  type polaris_sif_mgr_t;
`)

polaris_btrace_data_manage(polaris_sif_mgr_t)
polaris_crft_data_manage(polaris_sif_mgr_t)
polaris_chasfs_manage(polaris_sif_mgr_t)
polaris_tdlresolve_read(polaris_sif_mgr_t)
polaris_tdldb_list_dirs(polaris_sif_mgr_t)
polaris_cpld_read(polaris_sif_mgr_t)
polaris_lua_read(polaris_sif_mgr_t)
polaris_flashlib_read(polaris_sif_mgr_t)

#If romvar is not set, Set Rommon env varaible needs write permission
polaris_flashlib_write(polaris_sif_mgr_t)

polaris_ripc_sman_ui_serv_connect(polaris_sif_mgr_t)

corecmd_exec_bin(polaris_sif_mgr_t)
corecmd_exec_shell(polaris_sif_mgr_t)
# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_sif_mgr_t)

# allow to read /proc/mtd
kernel_read_system_state(polaris_sif_mgr_t)

# allow write /proc/dplr_sesa
optional_policy(
    polaris_proc_sesa_create_write(polaris_sif_mgr_t)
)

# access SERDES /tmp/serdes_asic_key_dir/*
polaris_serdes_asic_key_tmp_manage(polaris_sif_mgr_t)

# allow read/write to /proc/irq/N/irq files
kernel_rw_irq_sysctls(polaris_sif_mgr_t)

# work with /tmp files (/tmp/sm_post_result)
type polaris_sif_mgr_tmp_t;
files_tmp_file(polaris_sif_mgr_tmp_t)
files_tmp_filenetrans(polaris_sif_mgr_t, polaris_sif_mgr_tmp_t, file, "sm_post_result")
files_tmp_filenetrans(polaris_sif_mgr_t, polaris_sif_mgr_tmp_t, file, "fips_status")
files_tmp_filenetrans(polaris_sif_mgr_t, polaris_sif_mgr_tmp_t, file, "sif_regdump_0")
files_tmp_filenetrans(polaris_sif_mgr_t, polaris_sif_mgr_tmp_t, file, "sif_regdump_1")
manage_files_pattern(polaris_sif_mgr_t, tmp_t, polaris_sif_mgr_tmp_t)
polaris_cm_rp_tmp_manage(polaris_sif_mgr_t)

# allow ipc_lock when mmap64(..) a shared memory with MAP_LOCKED in dplr_pkt_drv_oob.c
allow polaris_sif_mgr_t self:capability { ipc_owner dac_override ipc_lock };

# allow read from /tmp/hw_entropy
polaris_hw_entropy_read(polaris_sif_mgr_t)

polaris_obfl_data_manage(polaris_sif_mgr_t)

# /dev/dplr_intrpt usage
polaris_dplr_dev_use(polaris_sif_mgr_t)

# /dev/dmammap usage
polaris_dmammap_dev_use(polaris_sif_mgr_t)

# /dev/remap_mem0 usage
polaris_remap_mem_dev_use(polaris_sif_mgr_t)

polaris_lsmpi_dev_use(polaris_sif_mgr_t)
# open /dev/ttyS0 console in sco_sys_init_sw_params
term_use_unallocated_ttys(polaris_sif_mgr_t)

polaris_socketat_nsfs_read(polaris_sif_mgr_t)

allow polaris_sif_mgr_t self:process setsched;

# work with /dev/msi/Slot0/Doppler0/GroupN files
dev_rw_generic_chr_files(polaris_sif_mgr_t)
# /dev/msi/Slot0/Doppler0/GroupN gets polaris_dplr_device_t label
# at some point, but need above generic chr permission by some
# reason, not clear need to look a bit more
polaris_dplr_dev_use(polaris_sif_mgr_t)

# set out of band interface mac set_oobndif_mac
allow polaris_sif_mgr_t self:tcp_socket ioctl;

# LOOK AT ME: raw memory write access
polaris_dev_mem_use(polaris_sif_mgr_t)

#/dev/shm/sdm access
optional_policy(
    polaris_sdm_shm_manage(polaris_sif_mgr_t)
)

# LOOK AT ME: unsolicited creation of file in /bootflash
# by CSCvm43512. Backout when CSCvm99282 is fixed
polaris_bootflash_manage(polaris_sif_mgr_t)
polaris_disk_bootflash_read_lnk(polaris_sif_mgr_t)

optional_policy(
    polaris_quake_i2c_manage(polaris_sif_mgr_t)
)

# __get_nprocs opens /sys/devices/system/cpu/online
ifdef(`quake_platform',`
dev_read_sysfs(polaris_sif_mgr_t)
')

optional_policy(
    polaris_ngwc_scc_shm_manage(polaris_sif_mgr_t)
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissifmgr.te
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#
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#

# polariswncmgrd file contexts place holder

# gRPC certificate for ICap, written and read by wncmgrd
/bootflash/NACert.pem gen_context(system_u:object_r:polaris_icap_cert_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswncmgrd.fc
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dnl
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dnl
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dnl
dnl ISRV Platform Max Bay Limits
max_bay_map_set(`rp', `per_bay', 0)
max_bay_map_set(`cc', `per_bay', 3)
max_bay_map_set(`fp', `per_bay', 0)

max_bay_ripc_map_set(`rp', `per_bay', 0)
max_bay_ripc_map_set(`cc', `per_bay', 3)
max_bay_ripc_map_set(`fp', `per_bay', 0)

max_bay_ripc_map_set(`rp', `global', 0)
max_bay_ripc_map_set(`cc', `global', 3)
max_bay_ripc_map_set(`fp', `global', 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/isrvmaps.m4
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#
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#

policy_module(polarismcp, 1.0);

# scooby device
type polaris_scooby_device_t;
dev_node(polaris_scooby_device_t)

# spa devices i.e sys_platform_module_1ng
type polaris_spa_device_t;
dev_node(polaris_spa_device_t)

# htdp device
type polaris_htdp_device_t;
dev_node(polaris_htdp_device_t)

# epaN and epactrlN devices
type polaris.epa_device_t;
dev_node(polaris.epa_device_t)

# luna.fpgs device
type polaris.luna.mbfpga_device_t;
dev_node(polaris.luna.mbfpga_device_t)

# dash fpga device (/dev/dash_fpga)
type polaris_dash_device_t;
dev_node(polaris_dash_device_t)

# astro device
type polaris.astro_device_t;
dev_node(polaris.astro_device_t)

# cpp_il device
type polaris.cpp_il_device_t;
dev_node(polaris.cpp_il_device_t)

# blzi_fpga device
type polaris.blzi_device_t;
dev_node(polaris.blzi_device_t)

# oob_evfc device
type polaris.oob_evfc_device_t;
dev_node(polaris.oob_evfc_device_t)

# ds31408 device
type polaris.ds31408_device_t;
dev_node(polaris.ds31408_device_t)

# icp_ads_ctl device
# Note that fugazi gets this from polarisqfp module
ifndef(`fugazi_platform`,
type polaris.icp_device_t;
dev_node(polaris.icp_device_t)
type polaris_cpp_hdp_device_t;
dev_node(polaris_cpp_hdp_device_t)

type polaris_cbdma_device_t;
dev_node(polaris_cbdma_device_t)

type polaris_n2_device_t;
dev_node(polaris_n2_device_t)

type polaris_cy2213_device_t;
dev_node(polaris_cy2213_device_t)

type polaris_vega_device_t;
dev_node(polaris_vega_device_t)

#ifdef(`fugazi_platform',`
  type polaris_fnf_agg_t;
')

optional_policy(`
# access to /dev/icp_XXX device on asr1k platforms
  gen_require(`
    type polaris_cck_qat_t;
  ')
  polaris_icp_dev_use(polaris_cck_qat_t)
  dev_list_sysfs(polaris_cck_qat_t)
  polaris_chasfs_read(polaris_cck_qat_t)
  polaris_cpld_read(polaris_cck_qat_t)
  polaris_tdlresolve_read(polaris_cck_qat_t)
')

# Handling denial for rsync_t for socket -
# comm="rsync" path="socket:[16784]" dev="sockfs" ino=16784
# scontext=system_u:system_r:rsync_t:s0 tcontext=system_u:system_r:init_t:s0
  gen_require(`
    type rsync_t;
  ')
  init_rw_stream_sockets(rsync_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismcp.te
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#  
# polarisioxman file contexts place holder  
/usr/bin/os/conf/shell_exec.sh -- gen_context(system_u:object_r:polaris_iox_shell_exec_t,s0)  
/usr/bin/os/conf/run_ioxn_secure_dir.sh -- gen_context(system_u:object_r:polaris_iox_secure_dir_exec_t,s0)  
/bin/cat9k_ssd_auth_cmds.sh -- gen_context(system_u:object_r:polaris_ssd_auth_exec_t,s0)  
/tmp/trace/resource.log -- gen_context(system_u:object_r:polaris_iox_tmp_t,s0)  
/tmp/screens(/.*) -- gen_context(system_u:object_r:screen_var_run_t,s0)  
/tmp/.shell_exec(/.*) -- gen_context(system_u:object_r:polaris_iox2iosd_tmp_t,s0)  

Found in path(s):  
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisioxman.fc  

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#  
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#  
policy_module(polarisbsm, 1.0);  

    gen_require(`  
        type polaris_bsm_t;  
    `)

polaris_btrace_data_manage(polaris_bsm_t)  
polaris_chasfs_manage(polaris_bsm_t)  
polaris_tdlresolve_read(polaris_bsm_t)  
polaris_tlddb_list_dirs(polaris_bsm_t)  
polaris_cpld_read(polaris_bsm_t)  
polaris_flashlib_read(polaris_bsm_t)  

polaris_ripc_sman_ui_serv_connect(polaris_bsm_t)
optional_policy(
    polaris_bde_dev_use(polaris_bsm_t)
 )

allow polaris_bsm_t self:capability sys.nice;
allow polaris_bsm_t self:process setsched;

# need access to /sys/devices/system/cpu/online
dev_read_sysfs(polaris_bsm_t)

# handling /var/tmp/bsm_bcm_shell
type polaris_bsm_bcm_shell_t;
files_type(polaris_bsm_bcm_shell_t)
gen_require('   type tmp_t;
')
filetrans_pattern(polaris_bsm_t, tmp_t, polaris_bsm_bcm_shell_t, fifo_file, "bsm_bcm_shell")
manage_fifo_files_pattern(polaris_bsm_t, tmp_t, polaris_bsm_bcm_shell_t)

ifdef('vxe_family',
    # bind to BSM_AGENT_CLIENT_PORT port from bsm_tlv_init
corenet_tcp_bind_polaris_bsm_agent_client_port(polaris_bsm_t)
 )

# LOOK AT ME: raw memory write access
polaris_dev_mem_use(polaris_bsm_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbsm.te
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#
/tmp/sm_post_result -- gen_context(system_u:object_r:polaris_sif_mgr_tmp_t,s0)
/tmp/fips_status -- gen_context(system_u:object_r:polaris_sif_mgr_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissifmgr.fc
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#
# June 2020, Cuiyan Ma
#
## <summary>Polaris polarisissucompcheck Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisissucompcheck.if

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#

policy_module(polarisngwcplfmgr, 1.0);

    gen_require(
        type polaris_ngwc_plfm_mgr_t;
    )

polaris_btrace_data_manage(polaris_ngwc_plfm_mgr_t)
polaris_crft_data_manage(polaris_ngwc_plfm_mgr_t)
polaris_chasfs_manage(polaris_ngwc_plfm_mgr_t)
polaris_tdlresolve_read(polaris_ngwc_plfm_mgr_t)
polaris_tlddb_list_dirs(polaris_ngwc_plfm_mgr_t)
polaris_cp.ld_read(polaris_ngwc_plfm_mgr_t)
polaris_lua_read(polaris_ngwc_plfm_mgr_t)
polaris_flashlib_read(polaris_ngwc_plfm_mgr_t)
polaris_ripc_sman_ui_serv_connect(polaris_ngwc_plfm_mgr_t)

corecmd_exec_bin(polaris_ngwc_plfm_mgr_t)
corecmd_exec_shell(polaris_ngwc_plfm_mgr_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_ngwc_plfm_mgr_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_ngwc_plfm_mgr_t)

allow polaris_ngwc_plfm_mgr_t self:capability { sys_rawio ipc_owner dac_override };
allow polaris_ngwc_plfm_mgr_t self:capability2 block_suspend;

polaris_obfl_data_manage(polaris_ngwc_plfm_mgr_t)
polaris_dyncfg_tmp_read(polaris_ngwc_plfm_mgr_t)

polaris_ngwc_shm_manage(polaris_ngwc_plfm_mgr_t)

# /dev/dmammap usage
polaris_dmammap_dev_use(polaris_ngwc_plfm_mgr_t)

# /dev/remap_mem0 usage
polaris_remap_mem_dev_use(polaris_ngwc_plfm_mgr_t)

# open /dev/ttyS0 console in edison_platform_init
term_use_unallocated_tty$s(polaris_ngwc_plfm_mgr_t)

polaris_disk_license_read(polaris_ngwc_plfm_mgr_t)

allow polaris_ngwc_plfm_mgr_t self:capability { chown fowner fsetid };

type polaris_ngwc_plfm_mgr_tmp_t;
files_tmp_file(polaris_ngwc_plfm_mgr_tmp_t)
files_tmp_filetrans(polaris_ngwc_plfm_mgr_t, polaris_ngwc_plfm_mgr_tmp_t, file, "pm_post_result")
files_tmp_filetrans(polaris_ngwc_plfm_mgr_t, polaris_ngwc_plfm_mgr_tmp_t, dir, "microcode_update")
files_tmp_filetrans(polaris_ngwc_plfm_mgr_t, polaris_ngwc_plfm_mgr_tmp_t, dir, "mcu_upgrading")
manage_files_pattern(polaris_ngwc_plfm_mgr_t, polaris_ngwc_plfm_mgr_tmp_t, polaris_ngwc_plfm_mgr_tmp_t)
manage_dirs_pattern(polaris_ngwc_plfm_mgr_t, polaris_ngwc_plfm_mgr_tmp_t, polaris_ngwc_plfm_mgr_tmp_t)

# LOOK AT ME: raw memory write access
polaris_dev_mem_use(polaris_ngwc_plfm_mgr_t)

# create /tmp/hw_entropy file anf fill with info from act2
polaris_hw_entropy_create(polaris_ngwc_plfm_mgr_t)

polaris_boot_tmp_read(polaris_ngwc_plfm_mgr_t)

polaris_flashlib_write(polaris_ngwc_plfm_mgr_t)

# check existence of /tmp/tam_cfg_done
polaris_tam_getattrs_tmp_dirs(polaris_ngwc_plfm_mgr_t)

# LOOK AT ME: Allow access to bootflash /flash/tam_client_app.log. file access
# remove after CSCvh66533 fixed
polaris_bootflash_manage(polaris_ngwc_plfm_mgr_t)

# scans /sys/devices/pci0000:00/0000:00:00.0
dev_read_sysfs(polaris_ngwc_plfm_mgr_t)

# rsync nvram config file accross stack
#rsync_exec(polaris_ngwc_plfm_mgr_t)
gen_require('
type rsync_t;
')

rsync_entry_domintrans(polaris_ngwc_plfm_mgr_t, rsync_t)
allow rsync_t polaris_ngwc_plfm_mgr_t:process sigchld;
# write access to /dev/ttyS0
term_write_unallocated_ttys(rsync_t)

# reads from, populates chasfs with values and deletes /tmp/package_biv_sums
polaris_kgv_data Manage(polaris_ngwc_plfm_mgr_t)

# /dev/shm/sdm access
optional_policy('polaris_sdm_shm Manage(polaris_ngwc_plfm_mgr_t)
')

# platform manager moves 00001.nvram_config file to /bootflash/nvram_config
polaris_nvram_manage(polaris_ngwc_plfm_mgr_t)
allow polaris_ngwc_plfm_mgr_t self:process setfscreate;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwcplfmmgr.te
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#
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#
policy_module(polarisgrmgr, 1.0);

gen_require('type polaris_gr_mgr_t;
')

polaris_crft_data_manage(polaris_gr_mgr_t)
polaris_chasfs_manage(polaris_gr_mgr_t)
polaris_tdlresolve_read(polaris_gr_mgr_t)
polaris_cpld_read(polaris_gr_mgr_t)
polaris_lua_read(polaris_gr_mgr_t)
polaris_ripc_sman_ui_serv_connect(polaris_gr_mgr_t)

allow polaris_gr_mgr_t self:capability { dac_override dac_read_search };#DB persistence
polaris_tdldbpersist_setup(polaris_gr_mgr_t)
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisgrmgr.te
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#

# ngio devices
/dev/ngio[0-9]* -c gen_context(system_u:object_r:polaris_ngio_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisiomd.fc
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/tmp/idope_svr  gen_context(system_u:object_r:polaris_fed_debug_sock_t,s0)
/tmp/shfwd_svr  gen_context(system_u:object_r:polaris_fed_debug_sock_t,s0)

/tmp/pktgen.txt gen_context(system_u:object_r:polaris_fed_debug_tmp_t,s0)
/tmp/MemDumpElam.sh gen_context(system_u:object_r:polaris_fed_debug_tmp_t,s0)

/dcmlog.txt  -- gen_context(system_u:object_r:polaris_fed_debug_dcmlog_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwcfeddebug.fc
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#

policy_module(polarisclp1, 1.0);

################################################################################
# CPLD Driver policy

# note polaris_sysfs_cpld_t is defined in kernel/devices.te, since genfscon statements
# could be only in base policy

type polaris_cpld_device_t;
dev_node(polaris_cpld_device_t)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscpld.te
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#

policy_module(polarisrogued, 1.0);

generatorRequire(
    type polaris_rogued_t;
)

polaris_btrace_data_manage(polaris_rogued_t)
polaris_chasfs_manage(polaris_rogued_t)
polaris_tdlresolve_read(polaris_rogued_t)
polaris_tdldb_list_dirs(polaris_rogued_t)
polaris_cpld_read(polaris_rogued_t)
polaris_lua_read(polaris_rogued_t)
polaris_flashlib_read(polaris_rogued_t)

polaris_ripc_sman_ui_serv_connect(polaris_rogued_t)
polaris_db_tdldb_dir_use(polaris_rogued_t)

# allow to use setrlimit
allow polaris_rogued_t self:process setrlimit;
allow polaris_rogued_t self:capability sys_resource;
allow polaris_rogued_t self:capability dac_override;

# stuff related to vrf support of the socket
polaris_lfts_dev_use(polaris_rogued_t)
polaris_socketat_nsfs_read(polaris_rogued_t)
# allow to open udp socket on RDLP port 6532
corenet_udp_bind_polaris_rdpl_port(polaris_rogued_t)
corenet_udp_bind_generic_node(polaris_rogued_t)
allow polaris_rogued_t self:udp_socket { create_socket_perms recv_msg send_msg };

# reading images/ap_capabilities.xml
polaris_wlc_ap_images_read(polaris_rogued_t)

# syslogs in RLDP
logging_send_syslog_msg(polaris_rogued_t)

# DB persistence
polaris_tdldbpersist_setup(polaris_rogued_t)
polaris_tmp_tdldb_persist_setups(polaris_rogued_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrogued.te
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policy_module(polariscmm, 1.0);

gen_require(
    type polaris_cmm_t;
)

polaris_btrace_data_manage(polaris_cmm_t)
polaris_crft_data_manage(polaris_cmm_t)
polaris_chasfs_manage(polaris_cmm_t)
polaris_tdlresolve_read(polaris_cmm_t)
polaris_tdldb_list_dirs(polaris_cmm_t)
polaris_cpld_read(polaris_cmm_t)
polaris_flashlib_read(polaris_cmm_t)
polaris_ripc_sman_ui_serv_connect(polaris_cmm_t)

allow polaris_cmm_t self:capability dac_override;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmm.te
No license file was found, but licenses were detected in source scan.
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#
#
# polarisofa file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisofa.fc

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#
## <summary>Polaris emd Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisemd.if

No license file was found, but licenses were detected in source scan.

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#

policy_module(polariscaf, 1.0);

gen_require(
    type polaris_caf_t;
    type polaris_caf_exec_t;
    type usr_t;
)

ifdef(`nyquist_platform',
    gen_require(
        type polaris_sioxcd_rp_t;
    )
    # Allow read of /etc/passwd
    auth_map_passwd(polaris_sioxcd_rp_t)
    # Allow usage of ls in helper script
    corecmd_exec_bin(polaris_sioxcd_rp_t)
    # Allow sysfs read
    dev_list_sysfs(polaris_sioxcd_rp_t)
    # Allow create/write/open of files under tmp
    type polaris_sioxcd_rp_tmp_t;
    files_tmp_file(polaris_sioxcd_rp_tmp_t)
    files_tmp_filetrans(polaris_sioxcd_rp_t, polaris_sioxcd_rp_tmp_t, { dir file })
    manage_dirs_pattern(polaris_sioxcd_rp_t, polaris_sioxcd_rp_tmp_t, polaris_sioxcd_rp_tmp_t)
    manage_files_pattern(polaris_sioxcd_rp_t, polaris_sioxcd_rp_tmp_t, polaris_sioxcd_rp_tmp_t)
    manage_fifo_files_pattern(polaris_sioxcd_rp_t, polaris_sioxcd_rp_tmp_t, polaris_sioxcd_rp_tmp_t)
    # Allow losetup in helper script to run in its own domain
    fstools_domtrans(polaris_sioxcd_rp_t)
    # Allow mount/umount in its own domain
    mount_domtrans(polaris_sioxcd_rp_t)
    # Allow /tmp/sw/boot read
    polaris_boot_tmp_read(polaris_sioxcd_rp_t)
    # Allow /tmp/tmppub read
    polaris_btrace_tmppub_read(polaris_sioxcd_rp_t)
    # Allow iox_polaris.conf read
    polaris_caf_files_read(polaris_sioxcd_rp_t)
    # Allow chasfs access
    polaris_chasfs_manage(polaris_sioxcd_rp_t)
    # Allow /sys/devices/platform/cpld/board_vtype read
    polaris_cpld_read(polaris_sioxcd_rp_t)
    # Allow debug.conf access
    polaris_read_debug_conf(polaris_sioxcd_rp_t)
    # Allow cats /tmp/sw/boot/rmonbifo/boardsubtype
    polaris_rmonbifo_tmp_read(polaris_sioxcd_rp_t)
# Allow console logging
term_open_unallocated_ttys(polaris_sioxcd_rp_t)

# Allow capability 1/24 access
allow polaris_sioxcd_rp_t self:capability { dac_override sys_resource };

# Transition to chvrf domain needed by push_using_rsync
polaris_chvrf_domtrans(polaris_sioxcd_rp_t)

# Allow flashutil
polaris_flashlib_read(polaris_sioxcd_rp_t)

# logger needs to run pidof
dev_read_sysfs(polaris_sioxcd_rp_t)
kernl_read_system_state(polaris_sioxcd_rp_t)
domain_read_all_domains_state(polaris_sioxcd_rp_t)

# Manage alternate hdd files
polaris_iox_alt_hdd_manage(polaris_sioxcd_rp_t)

# Allow ls /tmp/ufs/crashinfo
optional_policy(
    polaris_ncd_tmp_read(polaris_sioxcd_rp_t)
')

# Allow logger which is used for syslog messages
allow polaris_sioxcd_rp_t self:unix_dgram_socket { connect create };
logging_send_syslog_msg(polaris_sioxcd_rp_t)

# Allow standby to access /dev/sda3
fs_getattr_stat_file(polaris_sioxcd_rp_t)

# Allow getattr under iox_alt_hdd_dir
polaris_iox_alt_hdd_getattr(polaris_sioxcd_rp_t)

polaris_chasfs_manage(polaris_caf_t)
polaris_btrace_data_manage(polaris_caf_t)
polaris_cpld_read(polaris_caf_t)
polaris_boot_tmp_read(polaris_caf_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_caf_t)
corecmd_exec_bin(polaris_caf_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_caf_t)

# run-caf.sh invokes startup.py. This leads to node_t:tcp_socket node_bind
corenet_tcp_bind_generic_node(polaris_caf_t)

allow polaris_caf_t self:capability { net_admin sys_resource }
allow polaris_caf_t self:tcp_socket { accept listen create_socket_perms }
allow polaris_caf_t self:udp_socket create_socket_perms;
allow polaris_caf_t self:unix_dgram_socket { create_socket_perms sendto }
allow polaris_caf_t self:cap_userns { sys_admin sys_ptrace setgid setuid sys_chroot }

# df needs to have getattr on many file/dir/fs
fs_getattr_all_fs(polaris_caf_t)
fs_getattr_all_files(polaris_caf_t)
files_getattr_all_dirs(polaris_caf_t)
dev_getattr_all_chr_files(polaris_caf_t)
files_getattr_all_mountpoints(polaris_caf_t)

# df on "/" needs fs_t:filesystem getattr
fs_getattr_xattr_fs(polaris_caf_t)

# allow execution of /usr/sbin/brctl
brctl_domtrans(polaris_caf_t)

# allow open/read/search cgroup files like /sys/fs/cgroup/cpuset/cpuset/cpuset
fs_read_cgroup_files(polaris_caf_t)
fs_list_cgroup_dirs(polaris_caf_t)

# add new type for /guestshell files and allow CAF to manage them
type polaris_guestshell_t;
files_type(polaris_guestshell_t)
manage_files_pattern(polaris_caf_t, polaris_guestshell_t, polaris_guestshell_t)
manage_lnk_files_pattern(polaris_caf_t, polaris_guestshell_t, polaris_guestshell_t)
manage_dirs_pattern(polaris_caf_t, polaris_guestshell_t, polaris_guestshell_t)

# required to support, guestshell enable, which creates <iox-storage>/iox/repo/guestshell
relabelto_files_pattern(polaris_caf_t, polaris_guestshell_t, polaris_guestshell_t)

# run_ioxn_caf.sh invokes run-caf.sh which executes "ip"
sysnet_domtrans_ifconfig(polaris_caf_t)

# allow netns operations
sysnet_manage_ifconfig_run(polaris_caf_t)

libs_domtrans_ldconfig(polaris_caf_t)

# add new type for /bootflash/iox files and allow CAF to manage them
type polaris_iox_files_t;
polaris_disk_type(polaris_iox_files_t)
polaris_iox_files_manage(polaris_caf_t)

# need open, read, ioctl, getattr on /bootflash/debug.conf
polaris_read_debug_conf(polaris_caf_t)

# run_ioxn_caf.sh cats /tmp/sw/boot/romhifo/boards subtype
polaris_romhifo_tmp_read(polaris_caf_t)

# pvsm_cpu.sh reads /tmp/cgroup.log
optional_policy('polaris_vman_tmp_manager(polaris_caf_t)')

# allow to read /proc/cpuinfo
kernel_read_system_state(polaris_caf_t)

optional_policy('container_runtime_domtrans(polaris_caf_t)')

# add new type for /opt/cisco/caf files and allow CAF to manage them
type polaris_caf_files_t;
files_type(polaris_caf_files_t)
files_root_filetrans(polaris_caf_t, polaris_caf_files_t, dir)
files_root_filetrans(polaris_caf_t, polaris_caf_exec_t, dir, "scripts")
manage_dirs_pattern(polaris_caf_t, polaris_caf_files_t, polaris_caf_files_t)
manage_files_pattern(polaris_caf_t, polaris_caf_files_t, polaris_caf_files_t)
manage_lnk_files_pattern(polaris_caf_t, polaris_caf_files_t, polaris_caf_files_t)

gen_require('polaris_caf_files_read(polaris_hm_t)'

# this label is created for sharing of core file dirs between host and containers
type polaris_caf_core_files_t;
polaris_disk_type(polaris_caf_core_files_t)
# transition /local files and dirs
files_root_filetrans(polaris_caf_t, polaris_caf_core_files_t, dir, "local")
polaris_btrace_data_manage(polaris_caf_core_files_t)
manage_files_pattern(polaris_caf_core_files_t, usr_t, usr_t)

# manage local core files between host and container
polaris_caf_local_core_files_manager(polaris_caf_t)
polaris_caf_local_core_files_manager(brctl_t)

# run_ioxn_caf.sh invokes startup.py that eventually through resourcemanager.py
# calls cpu_count_logical function in order to get number of cores and which
# needs read access to /sys/devices/system/cpu/online
dev_read_sysfs(polaris_caf_t)

# run-caf.sh modifies iox_polaris.conf; backup is saved due to "sed-i.bak".
# in order to preserve security context, setfscreate is invoked
allow polaris_caf_t self:process setfscreate;

# work with /var/log/caf/ files
type polaris_caf_log_t;
logging_log_file(polaris_caf_log_t)
manage_files_pattern(polaris_caf_t, polaris_caf_log_t, polaris_caf_log_t)
manage_dirs_pattern(polaris_caf_t, polaris_caf_log_t, polaris_caf_log_t)
logging_log_filetrans(polaris_caf_t, polaris_caf_log_t, dir, "caf")
logging_log_filetrans(polaris_caf_t, polaris_caf_log_t, dir, "docker")
corenet_tcp_bind_polaris_caf_api_port(polaris_caf_t)

virt_stream_connect(polaris_caf_t)
virt_read_config(polaris_caf_t)

# allow to get getattr of /proc file system
domain_read_all_domains_state(polaris_caf_t)

# allow access to /etc/guestshell_rsa_key* files
type polaris_guestshell_ssh_key_t;
files_type(polaris_guestshell_ssh_key_t)
files_etc_filetrans(polaris_caf_t, polaris_guestshell_ssh_key_t, file, "guestshell_rsa_key")
files_etc_filetrans(polaris_caf_t, polaris_guestshell_ssh_key_t, file, "guestshell_rsa_key.pub")
manage_files_pattern(polaris_caf_t, polaris_guestshell_ssh_key_t, polaris_guestshell_ssh_key_t)

# add new type for "internal" temp files created by underlying python modules when
# user-level python scripts (e.g., run_ioxn_caf.sh, run-caf.sh, etc) performs init;
# we are now creating them using TMPDIR=/tmp/caf; and, allow CAF to manage these
# internal temp files; in addition, underlying python-infra invokes __mmap() that
# somehow translates to.... execute stuff like "/tmp/caf/#97893 (deleted)"
type polaris_caf_tmp_files_t;
files_tmp_file(polaris_caf_tmp_files_t)
files_tmp_filetrans(polaris_caf_t, polaris_caf_tmp_files_t, dir)
files_tmp_filetrans(polaris_caf_t, polaris_caf_tmp_files_t, file)
manage_files_pattern(polaris_caf_t, polaris_caf_tmp_files_t, polaris_caf_tmp_files_t)
manage_dirs_pattern(polaris_caf_t, polaris_caf_tmp_files_t, polaris_caf_tmp_files_t)
# python through libffi tries to mmap open file with PROT_EXEC, it triggers need
# for execute permission
allow polaris_caf_t polaris_caf_tmp_files_t:file execute;
allow polaris_caf_t polaris_caf_tmp_files_t:file map;

# python3 seems to do a setxattr syscall
# A folder like /bootflash/iox/repo/guestshell/extract_archive
# contains files that are extracted from a tarball and are
# made polaris_caf_tmp_files_t because of the files_tmp_filetrans rule
relabel_files_pattern(polaris_caf_t, polaris_iox_files_t, polaris_iox_files_t)
relabel_files_pattern(polaris_caf_t, polaris_caf_tmp_files_t, polaris_caf_tmp_files_t)

# allow to run e2fsck in its own domain
fstools_domtrans(polaris_caf_t)

# allow to run mount in its own domain
mount_domtrans(polaris_caf_t)

# add new type for /guestshell/*.sh files
type polaris_guestshell_exec_t;
files_type(polaris_guestshell_exec_t)

# add new type for /var/run/netns/guestshell
type polaris_guestshell_var_run_t;
files_type(polaris_guestshell_var_run_t)

# add new type for /var/run/cisco_cli
type polaris_caf_var_run_t;
files_pid_file(polaris_caf_var_run_t)
manage_dirs_pattern(polaris_caf_t, polaris_caf_var_run_t, polaris_caf_var_run_t)
manage_files_pattern(polaris_caf_t, polaris_caf_var_run_t, polaris_caf_var_run_t)
files_pid_filetrans(polaris_caf_t, polaris_caf_var_run_t, { file dir })

# Intermediate step: When CAF unpacks the contents of the application
# you upload, it will stage the contents somewhere and verify some checks
# (filesystem check on the disk image, existence of several folders, etc.). Disk
# images are mounted without any label since CAF has not generated security
# labels yet for the app at this point. The disk gets unmounted and eventually
# gets mounted again with the proper context/label.
type polaris_disk_caf_t;
setcap;
list_dirs_pattern(polaris_caf_t, polaris_disk_caf_t, polaris_disk_caf_t)

allow polaris_caf_t self:capability { chown dac_overrid fowner fsetid setfcap sys_chroot sys_ptrace };
allow polaris_caf_t self:process setcap;
fs_read_nsfs_files(polaris_caf_t)

# caf to manage loop device: finding free /dev/loopN device
dev_rw_loop_control(polaris_caf_t)

# PLEASE LOOK AT ME
# allow caf to read, write /dev/loopN devices that are
# under fixed_disk_device_t label. It is pretty strong premission
# and at this point it is only done for /dev/loopN devices.
# Can we do better? i.e move /dev/loopN to some other label?
storage_manage_fixed_disk(polaris_caf_t)

# caf executing chroot via bash
gen_require('  
  type svirt_sandbox_file_t;
')
allow polaris_caf_t svirt_sandbox_file_t:file { execute execute_no_trans };

gen_require('  
  type polaris_disk_bootflash_t;
    type polaris_disk_harddisk_t;
')
setattr_dirs_pattern(polaris_caf_t, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
# replicating policy done for polaris_disk_bootflash_t
setattr_dirs_pattern(polaris_caf_t, polaris_disk_harddisk_t, polaris_disk_harddisk_t)

# caf connects to its own port 8098
corenet_tcp_connect_polaris_caf_api_port(polaris_caf_t)

virt_manage_sandbox_files(polaris_caf_t)

kernel_read_network_state(polaris_caf_t)

polaris_bootflash_manage(polaris_caf_t)
polaris_bootflash_files_mmap(polaris_caf_t)
#allow polaris_disk_harddisk_t manage like polaris_disk_bootflash_t
polaris_harddisk_manage(polaris_caf_t)

# caf execve virsh
gen_require('  
  type virsh_t;
    type virsh_exec_t;
')
domtrans_pattern(polaris_caf_t, virsh_exec_t, virsh_t)
# virsh needs to read /opt/cisco/caf/scripts/ieobcbr.xml
polaris_caf_files_read(virsh_t)

# caf calls tipc-config that works with tipc sockets
allow polaris_caf_t self:socket create_socket_perms;
allow polaris_caf_t self:netlink_generic_socket { create_socket_perms sendto recvfrom };

# get and set attrs on httpd_var_run_t under /bootflash/iox
gen_require('  
  type httpd_var_run_t;
')
getattr_sock_files_pattern(polaris_caf_t, httpd_var_run_t, httpd_var_run_t)
setattr_sock_files_pattern(polaris_caf_t, httpd_var_run_t, httpd_var_run_t)
manage_dirs_pattern(polaris_caf_t, httpd_var_run_t, httpd_var_run_t)
# allow TCP connection for http port e.g. Local Manager
corenet_tcp_connect_http_port(polaris_caf_t)

# execute lvm commands, like lvs
lvm_domtrans(polaris_caf_t)

polaris_disk_crashinfo_getattr(polaris_caf_t)
optional_policy('polaris_ncl_tmp_read(polaris_caf_t)
')

logging_send_syslog_msg(polaris_caf_t)

# tries to load KLM like cuse, fuse, overlay
modutils_domtrans_insmod(polaris_caf_t)

# modifies files under /var/www/features/iox
apache_manage_sys_content(polaris_caf_t)

# caf reads version of ioxman from its executable
polaris_ioxman_exec_read(polaris_caf_t)

polaris_ioxman_show_version(polaris_caf_t)

type polaris_iox_alt_hdd_files_t;
files_type(polaris_iox_alt_hdd_files_t)
polaris_pfile_type(polaris_iox_alt_hdd_files_t)
polaris_iox_alt_hdd_manage(polaris_caf_t)

# On stargazer platform /vol/disk0 is used by iox to create below dirs.
# On nyquist platform /vol/usb1 with polaris_disk_harddisk_t is used
# Transition them to appropriate labels.
gen_require('type container_var_lib_t;
')

filetrans_pattern(polaris_caf_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_alt_hdd_files_t },
polaris_iox_files_t, dir, "iox")
filetrans_pattern(polaris_caf_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_alt_hdd_files_t },
polaris_caf_tmp_files_t, dir, "caf")
filetrans_pattern(polaris_caf_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_alt_hdd_files_t },
polaris_iox_files_t, dir, "docker")
filetrans_pattern(polaris_caf_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_alt_hdd_files_t },
polaris_iox_files_t, dir, "iox_data_share")
filetrans_pattern(polaris_caf_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_alt_hdd_files_t },
polaris_iox_files_t, dir, "iox_host_data_share")

# Allow files under guest-share directory which is shared between ios
# and container

type polaris_iox_shared_files_t;
files_type(polaris_iox_shared_files_t)
polaris_pfile_type(polaris_iox_shared_files_t)
manage_dirs_pattern(polaris_caf_t, polaris_iox_shared_files_t, polaris_iox_shared_files_t)
filetrans_pattern(polaris_caf_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_alt_hdd_files_t }, polaris_iox_shared_files_t, dir, "guest-share")

# Allow signature verification of applications

gen_require('
    type polaris_code_verify_t;
    )
polaris_iox_files_manage(polaris_code_verify_t)

# allow caf to control /tmp/tracetrace/resource.log
polaris_iox_manage_tmp_files(polaris_caf_t)

# some utility running under caf needs access to /varied/ovf-env.xml
polaris_disk_varied_read(polaris_caf_t)

# caf reads the udev information

gen_require('
    type udev_var_run_t;
    )
manage_files_pattern(polaris_caf_t, udev_var_run_t, udev_var_run_t)

gen_require('
    type virtd_lxc_t;
    )
allow polaris_caf_t virtd_lxc_t:process signull;

polaris_removable_manage(polaris_caf_t)
polaris_lm_tmp_read(polaris_caf_t)

# caf modifies /etc/cgroup_params.txt
files_manage_etc_files(polaris_caf_t)

# read /tmp/iox_override.conf created by ioxman
polaris_iox_read_tmp_files(polaris_caf_t)

# python udev library used by caf
allow polaris_caf_t self:netlink_kobject_uevent_socket { bind create getattr setopt);

#need access to rawip socket by pd_iox.sh
allow polaris_caf_t self:capability { net_raw setgid };
allow polaris_caf_t self:rawip_socket { create getopt setopt };
# LOOK AT ME caf leaks fifo file descriptors need permissions for
# domains that started by it
gen_require(
    type iptables_t;
')
allow iptables_t polaris_caf_t:fifo_file { read write append getattr };

# allow iptables_t usersns permissions for IP accessed by the script guestshell_setup.sh
allow iptables_t self:cap_usersns { net_admin net_raw };

container_stream_connect(polaris_caf_t)

gen_require(
    type pki_ca_port_t;
')
allow polaris_caf_t pki_ca_port_t:tcp_socket name_connect;

polaris_flashlib_read(polaris_caf_t)
polaris_flashlib_write(polaris_caf_t)
polaris_contdev_dev_read(polaris_caf_t)

gen_require(
    type rsync_exec_t;
    type rsync_port_t;
')
allow polaris_caf_t rsync_exec_t:file { execute execute_no_trans getattr map open read };
allow polaris_caf_t rsync_port_t:tcp_socket name_connect;

# IOX uses rsync to sync the data
gen_require(
    type rsync_t;
')
rsync_entry_domtrans(polaris_caf_t, rsync_t)
polaris_manage_rsync_tmplog_dir(polaris_caf_t)
allow rsync_t polaris_caf_t:fifo_file { getattr write };

kernel_search_network_sysctl(polaris_caf_t)
kernerl_rw_net_sysctls(polaris_caf_t)
dev_rw_sysfs(polaris_caf_t)

# Allow run-caf.sh to configure byte_queue_limits/limit_min for KR port
gen_require(
    type sysfs_t;
')
allow polaris_caf_t sysfs_t:file create;
dev_manage_sysfs_dirs(polaris_caf_t)

# CAF needs access to setup for containers
manage_dirs_pattern(polaris_caf_t, self, self)
fs_associate_proc(polaris_caf_t)
# guestshell_setup.sh reads /proc/sys/kernel/core_pattern
kernel_read_usermodehelper_state(polaris_caf_t)
# and then guestshell_setup.sh reads /tmp/corelink

gen_require(`
    type initrctmp_t;
`)
allow polaris_caf_t initrctmp_t:lnk_file read;

# Beluga/Meraki container
ifdef(`ms_platform',`
polaris_iox_container_domtrans(polaris_caf_t)
`)
# Bottlenose/Meraki container
ifdef(`bottlenose_platform',`
polaris_iox_container_domtrans(polaris_caf_t)
`)

#allow run_ioxn_caf.sh to modify /etc/docker/daemon.json, etc.
container_manage_config_files(polaris_caf_t)

# Manage IOx Secure storage CC files
type polaris_iox.ss_disk_t;
files_type(polaris_iox.ss_disk_t)
polaris_pfile_type(polaris_iox.ss_disk_t)

#Guestshell management
virt_signull(polaris_caf_t)

gen_require(`
    type ifconfig_t;
`)
# allow ifconfit_t userns permissions for IP
allow ifconfig_t self:cap_userns [ net_admin sys_admin sys_ptrace ];
# allow ifconfig_t to transition into dhcpc domain
sysnet_domtrans_dhcpc(ifconfig_t)

# Being an IOSP client does not allow for setattr permissions

gen_require(`
    type polaris_iosd_portal_app_lipc_t;
`)
setattr_sock_files_pattern(polaris_caf_t, polaris_iosd_portal_app_lipc_t, polaris_iosd_portal_app_lipc_t)

ifdef(`passport_platform',`

gen_require(`
    type polaris_sioxcd_rp_t;
`)}


`)

# Allow read of /etc/passwd
auth_map_passwd(polaris_sioxcd_rp_t)
#
# Allow usage of ls in helper script
corecmd_exec_bin(polaris_sioxcd_rp_t)

# Allow sysfs read
dev_list_sysfs(polaris_sioxcd_rp_t)

# Allow create/write/open of files under tmp
type polaris_sioxcd_rp_tmp_t;
files_tmp_file(polaris_sioxcd_rp_tmp_t)
files_tmp_filetrans(polaris_sioxcd_rp_t, polaris_sioxcd_rp_tmp_t, { dir file } )
manage_dirs_pattern(polaris_sioxcd_rp_t, polaris_sioxcd_rp_tmp_t, polaris_sioxcd_rp_tmp_t)
manage_files_pattern(polaris_sioxcd_rp_t, polaris_sioxcd_rp_tmp_t, polaris_sioxcd_rp_tmp_t)
manage_fifo_files_pattern(polaris_sioxcd_rp_t, polaris_sioxcd rp_tmp_t, polaris_sioxcd_rp_tmp_t, polaris_sioxcd_rp_tmp_t)

# Allow losetup in helper script to run in its own domain
fstools_domtrans(polaris_sioxcd_rp_t)
#
## Allow mount/umount in its own domain
mount_domtrans(polaris_sioxcd_rp_t)
#
## Allow /tmp/sw/boot read
polaris_boot_tmp_read(polaris_sioxcd_rp_t)

## Allow /tmp/tmppub read
polaris_btrace_tmppub_read(polaris_sioxcd_rp_t)

## Allow iox_polaris.conf read
polaris_caf_files_read(polaris_sioxcd_rp_t)
#
## Allow chasfs access
polaris_chasfs_manage(polaris_sioxcd_rp_t)

## Allow /sys/devices/platform/cpld/board_vtype read
polaris_cpld_read(polaris_sioxcd_rp_t)

## Allow debug.conf access
polaris_read_debug_conf(polaris_sioxcd_rp_t)

## Allow cats /tmp/sw/boot/rmonbifo/boardssubtype
polaris_rmonbifo_tmp_read(polaris_sioxcd_rp_t)

## Allow console logging
term_open_unallocated_ttys(polaris_sioxcd_rp_t)

# Allow capability 1/24 access
allow polaris_sioxcd_rp_t self:capability { dac_overide sys_resource };#

# Transition to chvrf domain needed by push_using_rsync
polaris_chvrf_domtrans(polaris_sioxcd_rp_t)

# Allow flashutil
polaris_flashlib_read(polaris_sioxcd_rp_t)

# iptables execute in its own domain
iptables_domtrans(polaris_caf_t)

# logger needs to run pidof
dev_read_sysfs(polaris_sioxcd_rp_t)
kernell_read_system_state(polaris_sioxcd_rp_t)
domain_read_all_domains_state(polaris_sioxcd_rp_t)

# Manage alternate hdd files
polaris_iox_alt_hdd_manage(polaris_sioxcd_rp_t)

# Allow ls /tmp/ufs/crashinfo
optional_policy('polaris_ncd_tmp_read(polaris_sioxcd_rp_t)
')

# Allow logger which is used for syslog messages
allow polaris_sioxcd_rp_t self:unix_dgram_socket { connect create };logging_send_syslog_msg(polaris_sioxcd_rp_t)

# Allow standby to access /dev/sda3
fs_getattr_xattr_fs(polaris_sioxcd_rp_t)

# Allow getattr under iox_alt_hdd_mount_dir
polaris_iox_alt_hdd_getattr(polaris_sioxcd_rp_t)
')

# Allow sync_data to use chvrf
polaris_chvrf_domtrans(polaris_caf_t)

#tty device and link files under /dev
type polaris_caf_tty_file_t;
dev_node(polaris_caf_tty_file_t)
dev_filenetrans(polaris_caf_t, polaris_caf_tty_file_t, lnk_file)
term_use_ptmx(polaris_caf_t)
polaris_caf_tty_lnk_manage(polaris_caf_t)
polaris_caf_chr_file_read(polaris_caf_t)
polaris_iosd_vcpu_read(polaris_caf_t)

# Allow access starting/stopping iox
polaris_chasfs_read(iptables_t)
polaris_chasfs_read(ifconfig_t)
polaris_hman_use_fifo(polaris_caf_t)
iptables_domtrans(polaris_caf_t)

# Allow application signature verification
polaris_code_verify_domtrans(polaris_caf_t)

#access /proc/rmbonbifo file cat9k-ioxhelper.sh
polaris_proc_rmonbifo_read(polaris_caf_t)

gen_require(
    type dhcpc_t;

)
# allow these usersns capabilities for dhcpc
allow dhcpc_t self:cap_usersns { net_raw net_bind_service };
# allow CAF to transition to dhcpc e.g. dhclient_custom.sh
sysnet_domtrans_dhcpc(polaris_caf_t)
# allow reading of dhcp configuration files e.g.
#/vol/usb1/iox/repo-docker/perfsonar1/dhcp/dhcp_eth0.conf
polaris_caf_files_read(dhcpc_t)
# allow writing of dhcp lease files e.g. eth0ipv4.lease
polaris_iox_files_manage(dhcpc_t)
# allow dhcpc domain to transition back into CAF e.g. dhclient_custom.sh
polaris_caf_domtrans(dhcpc_t)

# Allow read container share files
container_read_share_files(polaris_caf_t)

# Allow manage container files
gen_require(
    type container_file_t;
    type container_share_t;
    type container_log_t;

)
mmap_files_pattern(polaris_caf_t, container_file_t, container_file_t)
manage_files_pattern(polaris_caf_t, container_file_t, container_file_t)

manage_chr_files_pattern(polaris_caf_t, container_share_t, container_share_t)
manage_fifo_files_pattern(polaris_caf_t, container_share_t, container_share_t)
manage_sock_files_pattern(polaris_caf_t, container_share_t, container_share_t)

manage_files_pattern(polaris_caf_t, container_log_t, container_log_t)
# Allow polaris caf to set attributes of device nodes of fuse devices

gen_require('  
    type fuse_device_t;
')  
allow polaris_caf_t fuse_device_t:chr_file setattr;

# Allow polaris caf to set attributes of TUN/TAP virtual network device

gen_require('  
    type tun_tap_device_t;
')  
allow polaris_caf_t tun_tap_device_t:chr_file setattr;

# Allow operations on fifo file

type fifo_var_run_t;  
# make sure /tmp/ttyF0 is labeled correctly

files_tmp_file(fifo_var_run_t)  
files_tmp_filetrans(polaris_caf_t, fifo_var_run_t, fifo_file)  
manage_fifo_files_pattern(polaris_caf_t, fifo_var_run_t, fifo_var_run_t)

# allow udev read operations

polaris_udev_tmp_read(polaris_caf_t)

# allow link file for tmpfs_t

allow polaris_caf_t tmpfs_t:lnk_file create;

####################
# IOx Secure storage service policies
####################
optional_policy('  
    gen_require('  
        type polaris_ioxss_rp_t;  
        type polaris_sort_files_t;  
        type polaris_iosd_t;
    ')  
    type polaris_ioxss_rp_tmp_t;

    files_tmp_file(polaris_ioxss_rp_tmp_t)  
    files_tmp_filetrans(polaris_ioxss_rp_t, polaris_ioxss_rp_tmp_t, file, "ioxss_up")  
    polaris_ioxss_rp_tmp_manage(polaris_ioxss_rp_t)  
    polaris_chasfs_read(polaris_ioxss_rp_t)  
    polaris_lua_read(polaris_ioxss_rp_t)

    manage_files_pattern(polaris_ioxss_rp_t, polaris_ioxss_ss_disk_t, polaris_ioxss_ss_disk_t)  
    allow polaris_sort_files_t polaris_ioxss_ss_disk_t:dir list_dir_perms;  
    allow polaris_iosd_t polaris_ioxss_ss_disk_t:dir list_dir_perms;

    # Allow polaris_sort_files_tgetattr of iosd_portal_app_lipc socket file

    polaris_iosd_portal_app_lipc_getattr(polaris_sort_files_t)
# allow secure storage server to connect through tcp_socket on port 9000 from system-config.ini

gen_require(
  type http_port_t;
  )

allow polaris_ioxss_rp_t self:tcp_socket { bind create listen setopt };
corenet_tcp_bind_http_port(polaris_ioxss_rp_t);
allow polaris_ioxss_rp_t node_t:tcp_socket node_bind;

# allow polaris caf to process signal of dhcpc client
allow polaris_caf_t dhcpc_t:process signal;

# allow secure storage server to connect through socket
allow polaris_ioxss_rp_t self:socket create_socket_perms;

)

optional_policy(
# Allow polaris_sort_files_t getattr of container fifo file
gen_require(
  type polaris_sort_files_t;
  type container_file_t;
  )
getattr_fifo_files_pattern(polaris_sort_files_t, container_file_t, container_file_t)
  )

# Clear iox handling
container_manage_lib_files(polaris_caf_t)
container_manage_lib_dirs(polaris_caf_t)
container_manage_share_files(polaris_caf_t)
container_manage_share_dirs(polaris_caf_t)

gen_require(
  type polaris_vs_oper_db_tlldb_t;
  type polaris_tlldb_t;
  )
manage_files_pattern(polaris_caf_t, polaris_tlldb_t, polaris_vs_oper_db_tlldb_t)

# allow caf to read systemd unit files
systemd_read_unit_files(polaris_caf_t)

# allow restorecon on iox_alt_hdd_mount_dir
seutil_domtrans_setfiles(polaris_caf_t)

filetrans_pattern(polaris_caf_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t }, polaris_iox_alt_hdd_files_t,
  file, "iox_alt_hdd.dsk")
filetrans_pattern(polaris_caf_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t }, polaris_iox_alt_hdd_files_t,
  dir, "iox_alt_hdd_mount_dir")
allow ifconfig_t polaris_iox_files_t:file { read };

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscaf.te
No license file was found, but licenses were detected in source scan.

#
# May 2017, Victor Kamensky
#
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#
## <summary>Polaris confd Policy Rules.</summary>

######################################################################
## <summary>
##      Setup /dev/shm/confd directory and file, pid and shared memory.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_confd_shm_setup',
    gen_require(
        type polaris_confd_shm_t;
        type tmpfs_t;
    )
    fs_tmpfs_filetrans($1, polaris_confd_shm_t, dir, "confd")
    manage_dirs_pattern($1, tmpfs_t, polaris_confd_shm_t)
    manage_files_pattern($1, { tmpfs_t polaris_confd_shm_t }, polaris_confd_shm_t)
    allow $1 polaris_confd_shm_t:file map;
 )

######################################################################
## <summary>
##      Read /dev/shm/confd_shared_schema shared memory.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_confd_shared_schema_read',

gen_require(
    type polaris_confd_shm_t;
    type tmpfs_t;
)
read_files_pattern($1, [ tmpfs_t polaris_confd_shm_t ] , polaris_confd_shm_t)
allow $1 polaris_confd_shm_t:file map;
)

########################################################################
## <summary>
## Watch confd_shm directories
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <rolebase/>
#
interface(`polaris_confd_shared_schema_watch',`
   gen_require(`
    type polaris_confd_shm_t;
   `)
   allow $1 polaris_confd_shm_t:dir watch;
   `)

########################################################################
## <summary>
## Read /proc/cond_pid/exe file. Few dmi utilities do that by
## some reason. Look at handle_confd_pid_available.
## Read files and symlinks under /dev/shm/confd.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <rolebase/>
#
interface(`polaris_confd_read',`
   gen_require(`
    type polaris_confd_t;
   `)
   read_files_pattern($1, polaris_confd_t, polaris_confd_t)
   read_lnk_files_pattern($1, polaris_confd_t, polaris_confd_t)
   `)
## <summary>
## Create /var/log/ndbutil directory
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_confd_ndbutil_create',
    gen_require('type polaris_confd_ndbutil_lock_t;')
    files_lock_filetrans($1, polaris_confd_ndbutil_lock_t, dir, "ndbutil")
    files_create_lock_dirs($1)
    manage_dirs_pattern($1, polaris_confd_ndbutil_lock_t, polaris_confd_ndbutil_lock_t)
    manage_files_pattern($1, polaris_confd_ndbutil_lock_t, polaris_confd_ndbutil_lock_t)
    create_dirs_pattern($1, polaris_confd_ndbutil_lock_t, polaris_confd_ndbutil_lock_t)
)

#################################################
## <summary>
## Creates types for and rules for ndbutils files under /var/lock/ndbutil
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <param name="stem">
## Stem for the domain. Name is constructed as polaris_stem_ndbutil_t
## </param>
## <param name="name" optional="true">
## The name of the object being created.
## </param>
#
template('polaris_ndbutil_lock_template',
    gen_require('type polaris_confd_ndbutil_lock_t;')
    type polaris_$2_ndbutil_t;
    files_type(polaris_$2_ndbutil_t)
)
    filetrans_pattern($1, polaris_confd_ndbutil_lock_t, polaris_$2_ndbutil_t, file, $3)
manage_files_pattern($1, polaris_confd_ndbutil_lock_t, polaris_$2_ndbutil_t)

allow $1 polaris_$2_ndbutil_t:file { watch watch_reads };
')

########################################################################
## <summary>
##      Execute a domain transition to run mmap_schema polaris process.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed to transition.
##      </summary>
## </param>
#
interface(`polaris_mmap_schema_domtrans',
   gen_require(
      type polaris_mmap_schema_t, polaris_mmap_schema_exec_t;
   ')
)

domtrans_pattern($1, polaris_mmap_schema_exec_t, polaris_mmap_schema_t)
')

########################################################################
## <summary>
##      Execute a domain transition to run confd polaris process.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed to transition.
##      </summary>
## </param>
#
interface(`polaris_confd_domtrans',
   gen_require(
      type polaris_confd_t, polaris_confd_exec_t;
   ')
)

domtrans_pattern($1, polaris_confd_exec_t, polaris_confd_t)
')

########################################################################
## <summary>
##      Read confd log file (i.e /var/confd0/log/cia-confd.log). Used
## by dmiaudthd to convert confd logs to btrace.
## </summary>
## <param name="domain">
##      <summary>
Domain allowed access.

Manage confd log file (i.e. /var/confd0/log/cia-confd.log). Used by pman to rotate logs into /bootflash/tracelogs.

Execute dmi_ports_fetch in the caller domain.

corecmd_search_bin($1)
can_exec($1, polaris_dmi_ports_fetch_exec_t)
### <summary>
### Manage confd /var/log files (i.e /var/log/confd)
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>

# interface('polaris_confd_var_log_manage',
    gen_require('  
      type polaris_confd_var_log_t;
    ')  
logging_log_filetrans($1, polaris_confd_var_log_t, dir, "confd")  
manage_dirs_pattern($1, var_log_t, polaris_confd_var_log_t)  
manage_files_pattern($1, polaris_confd_var_log_t, polaris_confd_var_log_t)
')

### <summary>
### Read confd /var/log files (i.e /var/log/confd)
### /bootflash/tracelogs/cia-netconf-trace* also has polaris_confd_var_log_t
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>

# interface('polaris_confd_var_log_read',
    gen_require('  
      type polaris_confd_var_log_t;
    ')  
list_dirs_pattern($1, polaris_confd_var_log_t, polaris_confd_var_log_t)  
read_files_pattern($1, polaris_confd_var_log_t, polaris_confd_var_log_t)
')

### Write into fifo file created by confd, typical case when
### confd starts script under popen in different domain.
### <param name="domain">
### Domain allowed access.
### </param>
interface('polaris_confd_tmp_use_fifo',
gen_require('type polaris_confd_tmp_t;')
read_fifo_files_pattern($1, polaris_confd_tmp_t, polaris_confd_tmp_t)
write_fifo_files_pattern($1, polaris_confd_tmp_t, polaris_confd_tmp_t)
')

interface('polaris_confd_tmp_use',
gen_require('type polaris_confd_tmp_t;')
read_files_pattern($1, polaris_confd_tmp_t, polaris_confd_tmp_t)
write_files_pattern($1, polaris_confd_tmp_t, polaris_confd_tmp_t)
')

interface('polaris_confd_etc_read',
gen_require('type polaris_confd_etc_t;')
read_files_pattern($1, polaris_confd_etc_t, polaris_confd_etc_t)
write_files_pattern($1, polaris_confd_etc_t, polaris_confd_etc_t)
')
read_files_pattern($1, polaris_confd_etc_t, polaris_confd_etc_t)
')

##############################################################################
## <summary>
## Create an object in the /var directory under polaris_confd_var_t label.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <param name="object">
## The object class of the object being created.
## </param>
## <param name="name" optional="true">
## The name of the object being created.
## </param>
#
# interface('polaris_confd_var_filetrans',
  gen_require(
    type polaris_confd_var_t;
  )
)
  files_var_filetrans($1, polaris_confd_var_t, $2, $3)
')

##############################################################################
## <summary>
## Make the specified domain able to work with /var/confd0
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
# interface('polaris_confd_var_dir_manage',
  gen_require(
    type polaris_confd_var_t;
  )
)
manage_dirs_pattern($1, polaris_conf_var_t, polaris_conf_var_t);
')

########################################
## <summary>
##      Execute a domain transition to run admin_tech scripts of sdwan
## </summary>
## <param name="domain">
##      Domain allowed to transition.
## </param>
#
interface('polaris_admin_tech_domtrans',
    gen_require(
        type polaris_admin_tech_t, polaris_admin_tech_exec_t;
    ))

domtrans_pattern($1, polaris_admin_tech_exec_t, polaris_admin_tech_t)
')

########################################
## <summary>
##      Read admin_tech files created under bootflash
## </summary>
## <param name="domain">
##      Domain allowed access.
## </param>
#
interface('polaris_admin_tech_data_read',
    gen_require(
        type polaris_admin_tech_data_t;
    ))

read_files_pattern($1, polaris_admin_tech_data_t, polaris_admin_tech_data_t)
')

########################################
## <summary>
##      Manage admin_tech files created under bootflash
## </summary>
## <param name="domain">
##      Domain allowed access.
## </param>
#
interface('polaris_admin_tech_data_manage',
    gen_require(
        type polaris_admin_tech_data_t;
    )
) manage_files_pattern($1, polaris_admin_tech_data_t, polaris_admin_tech_data_t) manage_link_files_pattern($1, polaris_admin_tech_data_t, polaris_admin_tech_data_t) manage_dirs_pattern($1, polaris_admin_tech_data_t, polaris_admin_tech_data_t)

    allow $1 polaris_admin_tech_data_t:file watch;
)

########################################
## <summary>
## Allow domain to be started by confd with
## transition into specific service domain.
## </summary>
## <param name="domain">
## <summary>
## Type to be used to run utility.
## </summary>
## </param>
## <param name="entry_point">
## <summary>
## Type of the program to be used as an entry point to this domain.
## </summary>
## </param>
interface('polaris_confd_domain',
    gen_require(
        type polaris_confd_t;
    )
) domtrans_pattern(polaris_confd_t, $2, $1)
)

########################################
## Manage confd_cli files under /tmp/confd_cli.
## <param name="domain">
## Domain allowed access.
## </param>
# interface('polaris_confd_cli_tmp_manage',
#     gen_require(
#         type polaris_confd_cli_tmp_t;
#     )
#)
manage_files_pattern($1, polaris_confd_cli_tmp_t, polaris_confd_cli_tmp_t)
')

##################################################################
## <summary>
## Manage vconfd files under /tmp/vconfd.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_vconfd_tmp_manage`,
   gen_require(`
      type polaris_vconfd_tmp_t;
   `)
   manage_dirs_pattern($1, polaris_vconfd_tmp_t, polaris_vconfd_tmp_t)
   manage_files_pattern($1, polaris_vconfd_tmp_t, polaris_vconfd_tmp_t)
')

##################################################################
## <summary>
## Connect to confd port. Should be used only by utility
domains that do not have TDL entry. Processes with TDL entries
just need to register as confd pseudo service clients.
</summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_confd_connect`,
polaris_ripc_confd_ipc_connect($1)
')

##################################################################
## <summary>
## Use unix stream socket created by confd as standard I/O
descriptors. Need to look more, because so far it triggers only
getattr, append and ioctl permissions. If it would be real standard I/O
it would need read and write as well.
</summary>
## <param name="domain">
## Domain allowed access.
## </summary>
### <summary>
## Creates types and rules for a script that is started by confd process.
## </summary>
## <param name="stem">
## Stem for the domain. Name is constructed as polaris_stem_t
## </param>
#
# template('polaris_vconfd_domain_template',
  polaris_utility_domain_template($1)

  polaris_confd_domain(polaris_$1_t, polaris_$1_exec_t)

  # access /etc/passwd
  auth_use_nsswitch(polaris_$1_t)

  # inherit unix stream as script stdio
  polaris_confd_unix_stream_stdio_use(polaris_$1_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisconfd.if
No license file was found, but licenses were detected in source scan.

dnl
dnl April 2018, Victor Kamensky
dnl
dnl Copyright (c) 2018-2019 by Cisco Systems, Inc.
dnl All rights reserved
dnl
dnl divert(-1)

include('polaris_process.m4')

include('polaris_database_db.m4')
include('polaris_database_db_fc.m4')

include('polaris_max_scope.m4')

divert(0)dnl
#
# This is a generated file! Instead of modifying this file,
# modify proper platform TDL file.
#

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_database_fc.m4
No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#

policy_module(polarisinstallmgr, 1.0);

gen_require('
    type polaris_install_mgr_t;
')
polaris_chasfs_manage(polaris_install_mgr_t)
polaris_tdlresolve_read(polaris_install_mgr_t)
polaris_cpld_read(polaris_install_mgr_t)
polaris_flashlib_read(polaris_install_mgr_t)
polaris_lua_read(polaris_install_mgr_t)

logging_send_syslog_msg(polaris_install_mgr_t)
polaris_ripc_sman_ui_serv_connect(polaris_install_mgr_t)
polaris_db_tdlldb_dir_use(polaris_install_mgr_t)

# read all files in persistent storage
polaris_persistent_read(polaris_install_mgr_t)

# calls code_verify
polaris_code_verify_domtrans(polaris_install_mgr_t)
# calls mount command
mount_domtrans(polaris_install_mgr_t)

# allow access to gnmib image files
optional_policy('
polaris_gnmib_gnoi_images_read(polaris_install_mgr_t)
')

# LOOK AT ME: /dev/mem access restriction will be removed after
# CSCvu32649 is fixed using CSCvu32742.
# code_sign_verify accesses /dev/mem: class=chr_file, {read, open, map}
# to read the codesign key in storage
# side effects: execute is also allowed
gen_require('  type polaris_code_verify_t;
  type polaris_nvram_file_t;
')
dev_rx_raw_memory(polaris_code_verify_t)

# read access to /bootflash/nvram_config on CLI "install remove inactivate"
read_files_pattern(polaris_code_verify_t, polaris_disk_bootflash_t, polaris_nvram_file_t)
getattr_files_pattern(polaris_code_verify_t, polaris_disk_bootflash_t, polaris_nvram_file_t)

# open, read, map and getattr access of capsule-upgrade.log file
polaris_capsule_upgrade_log_use(polaris_code_verify_t)

# calls install_mgr_helper_api.sh
corecmd_exec_bin(polaris_install_mgr_t)
corecmd_exec_shell(polaris_install_mgr_t)
auth_use_nsswitch(polaris_install_mgr_t)

# /tmp/sw/inst_tmp_x handling
type polaris_install_mgr_tmp_t;
files_tmp_file(polaris_install_mgr_tmp_t)
gen_require('  type tmp_t;
')
manage_dirs_pattern(polaris_install_mgr_t, tmp_t, polaris_install_mgr_tmp_t)
manage_dirs_pattern(polaris_install_mgr_t, polaris_install_mgr_tmp_t, polaris_install_mgr_tmp_t)
files_tmp_filetrans(polaris_install_mgr_t, polaris_install_mgr_tmp_t, dir, "inst_tmp_1")
files_tmp_filetrans(polaris_install_mgr_t, polaris_install_mgr_tmp_t, dir, "inst_tmp_2")

# writes into /bootflash/.installer/watchlist
polaris_disk_install_manage(polaris_install_mgr_t)

# install_mgr_monitor.c:add_prior_watches
polaris_persistent_watch(polaris_install_mgr_t)

# watch over /tmp/patch
polaris_patch_data_watch(polaris_install_mgr_t)

polaris_repm_peer_mqipc_manage(polaris_install_mgr_t)
# watches over /tmp for /tmp/booted appearence in
# init_operation_mgmt_watches function
gen_require(
    type tmp_t;
')
allow polaris_install_mgr_t tmp_t:dir watch;

allow polaris_install_mgr_t self:capability sys_resource;

# install_mgr writes into /bootflash/installer/watchlist and watches /bootflash/inot_fifo
polaris_install_disk_manage(polaris_install_mgr_t)

# install_mgr does search and get attribute operation on /tftp directory
gen_require(
    type tftpdir_rw_t;
')
allow polaris_install_mgr_t tftpdir_rw_t:dir { getattr search };

# allow read access to iso9600
fs_read_iso9660_files(polaris_install_mgr_t)

# accesses /proc/sys/vm/drop_caches
kernel_rw_vm_sysctls(polaris_install_mgr_t)

# creates files under /tmp/pkg_cs_debug through install_helper
# and verify_pkg shell function from common
polaris_pkg_cs_debug_manage(polaris_install_mgr_t)

# for pluggable FS, allow the install manager to access files on them (it needs read and
# write access).
gen_require(
    type removable_t;
')
allow polaris_install_mgr_t removable_t:dir { getattr open read search watch };
allow polaris_install_mgr_t removable_t:file { getattr open read };
allow polaris_install_mgr_t removable_t:lnk_file read;

#allow install_mgr to stat caf files in /vol/harddisk/caf, /bootflash/caf, etc.
polaris_caf_tmp_files_read(polaris_install_mgr_t)

# install manager Cleanup related to inotify watches, Basically frees malloced memory
gen_require(
    type root_t;
')
allow polaris_install_mgr_t root_t:dir watch;

# install manager access to /guestshell
polaris_guestshell_files_read(polaris_install_mgr_t)
# install manager access to /lib/systemd/systemd
polaris_init_access_check(polaris_install_mgr_t)

# install manager reads dcmlog.txt
optional_policy(
    gen_require(
        type polaris_fed_debug_dcmlog_t;
    
    read_files_pattern(polaris_install_mgr_t, polaris_fed_debug_dcmlog_t, polaris_fed_debug_dcmlog_t)
    
    )
)

# install manager reads /firmware
polaris_firmware_read(polaris_install_mgr_t)

# install manager reads /guestshell
gen_require(
    type polaris_guestshell_t;
)
getattr_dirs_pattern(polaris_install_mgr_t, polaris_guestshell_t, polaris_guestshell_t)

# install_manager reads /tmp/sw/boot during auto_upgrade
polaris_boot_tmp_read(polaris_install_mgr_t)

# install_manager writes /tmp/sw/boot during auto_upgrade
polaris_boot_tmp_write(polaris_install_mgr_t)

# install_manager reads /tmp/sw/boot/rmonbifo during auto_upgrade
polaris_rmonbifo_tmp_read(polaris_install_mgr_t)

# install_manager reads /tmp/tmppub during auto_upgrade
polaris_btrace_tmppub_read(polaris_install_mgr_t)

# install manager accesses /tmp/rsync_log_dir during auto_upgrade
polaris_manage_rsync_tmplog_dir(polaris_install_mgr_t)

# install manager invokes mcp_chvrf.sh for rsync operations during auto_upgrade
polaris_chvrf_domtrans(polaris_install_mgr_t)

polaris_bexecute_domtrans(polaris_install_mgr_t)

ifdef(`ngwc_family`;

# install_mgr needs to be able to execute the auto_upgrade_client_helper scripts
polaris_autoupgrade_domtrans(polaris_install_mgr_t)

# read /tmp/etc/installer
polaris_autoupgrade_tmp_manage(polaris_install_mgr_t)
')
ifdef(`mcp_family',
    # install_mgr needs to be able to execute the auto_upgrade_client_helper scripts
    polaris_autoupgrade_domtrans(polaris_install_mgr_t)
)

# read /tmp/etc/installer
polaris_autoupgrade_tmp_manage(polaris_install_mgr_t)
')

ifdef(`wlc_family',
    # install_mgr needs to be able to execute the auto_upgrade_client_helper scripts
    polaris_autoupgrade_domtrans(polaris_install_mgr_t)
)

# read /tmp/etc/installer
polaris_autoupgrade_tmp_manage(polaris_install_mgr_t)
')

# with "/bootflash"...this needs read and attr to access for logfile
polaris_read_user_file(polaris_install_mgr_t)
polaris_user_file_getattr(polaris_install_mgr_t)

# auto upgrade server bind operation when install manager initialize auto upgrade server
corenent_tcp_bind_polaris_autoupgrade_port(polaris_install_mgr_t)

# access to /tmp/ect
polaris_etc_list(polaris_install_mgr_t)

# read access to /tmp/etc/installer
polaris_install_tmp_read(polaris_install_mgr_t)
polaris_script_errmsg_use(polaris_install_mgr_t)

# install mgr calls install_abort.sh on rollback timer expiry
polaris_install_engine_domtrans(polaris_install_mgr_t)

# /tmp/ufs/crashinfo access
optional_policy('polaris_ncd_tmp_read(polaris_install_mgr_t)
')

# read/write to /bootflash/.rollback_timer/install_abort_time
polaris_rbtimer_bootflash_manage(polaris_install_mgr_t)

allow polaris_install_mgr_t self:process setpgid;

optional_policy('polaris_efi_files_list_dirs(polaris_install_mgr_t)
')
# walk all files on "install issu activate" and "install remove inactivate" CLI
files_read_all_files(polaris_install_mgr_t)

# install mgr file descriptor leaks into mcp_chvrf.sh for rsync operation
gen_require(
    type polaris_chvrf_t;
')
allow polaris_chvrf_t polaris_install_mgr_t:file read;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisinstallmgr.te
No license file was found, but licenses were detected in source scan.

# # May 2017, Victor Kamensky
#
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#

policy_module(polarisconfd, 1.0);

gen_require(
    type polaris_confTd_t;
')

# confd-startup.sh calls confd_cmd to get_phase and other cases
# that utilities under confd label connects to confd
polaris_ripc_confd_ipc_connect(polaris_confTd_t)

# confd needs communicate over HTTP
corenet_tcp_bind_http_port(polaris_confTd_t)

# commplex_main (port 5000) is used by apache
corenet_udp_bind_commplex_main_port(polaris_confTd_t)

corenet_tcp_bind_generic_node(polaris_confTd_t)
allow polaris_confTd_t self:tcp_socket { getattr getopt setopt bind create listen accept connect read write };

corenet_udp_bind_generic_node(polaris_confTd_t)
allow polaris_confTd_t self:udp_socket { bind connect create getattrib getopt setopt };
corenet_udp_bind_polaris_confTd_snmp_traps_port(polaris_confTd_t)

logging_send_syslog_msg(polaris_confTd_t)

polaris_chasfs_manage(polaris_confTd_t)
polaris_btrace_data_manage(polaris_confTd_t)
polaris_cpld_read(polaris_confTd_t)
polaris_boot_tmp_read(polaris_confd_t)
polaris_rmonbifo_tmp_read(polaris_confd_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_confd_t)

# confd-startup.sh process is shell script need permission to execute shell
# and variety of small util commands under bin_t
corecmd_exec_shell(polaris_confd_t)
corecmd_exec_bin(polaris_confd_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_confd_t)

# confdexec needs access to /sys/devices/system/cpu/online
dev_read_sysfs(polaris_confd_t)

allow polaris_confd_t self:capability { net_admin sys_resource };

# allow read permissions for /etc/hosts file
sysnet_read_config(polaris_confd_t)

# allow read permissions for /var/run/netns/8
fs_read_nfs_files(polaris_confd_t)

# work with /var/confd0/ files
type polaris_confd_var_t;
files_tmp_file(polaris_confd_var_t)
polaris_confd_var_filetrans(polaris_confd_t, dir, "confd0")
manage_files_pattern(polaris_confd_t, polaris_confd_var_t, polaris_confd_var_t)
manage_link_files_pattern(polaris_confd_t, polaris_confd_var_t, polaris_confd_var_t)
manage_dirs_pattern(polaris_confd_t, polaris_confd_var_t, polaris_confd_var_t)

# erlang calls efile_fileinfo function (./erts/emulator/drivers/unix/unix_efile.c)
# root directory. Inside of the function code calls 'access' function that check
# access permission for R_OK and W_OK. W_OK triggers denial warning. Instead of
# granting access let's mark it as dontaudit. Erlang will be fine with this
files_dontaudit_write_root_dirs(polaris_confd_t)

# deals with /dev/shm/confd files (shared memory and pid)
type polaris_confd_shm_t;
files_tmpfs_file(polaris_confd_shm_t)

# confd-startup.sh modifies confd.conf which is under polaris_confd_var_t label
# sed -i /CONFD_FXS_CISCO_AUTOGEN_EWLC/d /var/confd0/confd.conf
allow polaris_confd_t self:process setfscreate;

type polaris_confd_ndbutil_lock_t;
files_lock_file(polaris_confd_ndbutil_lock_t)

******************************************************************************
# confd mmap_schema utility runs from systemd unit under polaris_confd_t label
******************************************************************************
polaris_confd_shm_setup(polaris_confd_t)
# create ndbutil directory under /var/lock
polaris_confd_ndbutil_create(polaris_confd_t)

# Allow access to /crashinfo
polaris_disk_crashinfo_getattr(polaris_confd_t)

optional_policy(
# confd-startup.sh on nyquist makes ls /tmp/ufs/crashinfo
polaris_ncd_tmp_read(polaris_confd_t)
)

# confd-startup.sh reads /proc/cmdline
kernel_read_system_state(polaris_confd_t)

# LOOK AT ME allow mapping of low addresses, that could be exploited
# need to understand why; unfortunately confd symbols are not decodable
# need to ask tail-f guys
ifdef(`tsn_platform',`
  domain_mmap_low_uncond(polaris_confd_t)
gen_require(`
    type polaris_confd_cli_t;
  `)
  domain_mmap_low_uncond(polaris_confd_cli_t)
  `)
ifdef(`quake_platform',`
  domain_mmap_low_uncond(polaris_confd_t)
  `)
polaris_mmap_schema_domtrans(polaris_confd_t)

# mmap_schema process policy
gen_require(`
  type polaris_mmap_schema_t;
  `)
polaris_btrace_data_manage(polaris_mmap_schema_t)
polaris_chasfs_read(polaris_mmap_schema_t)
polaris_cpld_read(polaris_mmap_schema_t)
polaris_flashlib_read(polaris_mmap_schema_t)
polaris_db_tdlldb_dir_use(polaris_mmap_schema_t)
polaris_confd_ndbutil_create(polaris_mmap_schema_t)
polaris_confmed_shm_setup(polaris_mmap_schema_t)

# connects to confg mmap_schema is not TDL process, let
# grant explicit permission to access corresponding port
polaris_ripd_confmed_ipc_connect(polaris_mmap_schema_t)
allow polaris_mmap_schema_t self:tcp_socket { connect create setopt }
polaris_socketat_nsfs_read(polaris_mmap_schema_t)

allow polaris_mmap_schema_t self:capability dac_override;

polaris_tdlresolve_read(polaris_mmap_schema_t)
polaris_confmed_read(polaris_mmap_schema_t)

polaris_ndbmand_ndbutil_manage(polaris_mmap_schema_t)

optional_policy(
  polaris_gnmib_ndbutil_lock(polaris_mmap_schema_t, ".l.schema_use.gnmib")
)

type polaris_confmed_tmp_t;
files_tmp_file(polaris_confmed_tmp_t)
polaris_systemd_tmpfiles_tmp_filetrans(polaris_confmed_tmp_t, dir, "confd")
files_tmp_filetrans(polaris_confmed_t, polaris_confmed_tmp_t, dir, "confd")
manage_files_pattern(polaris_confmed_t, tmp_t, polaris_confmed_tmp_t)
manage_fifo_files_pattern(polaris_confmed_t, tmp_t, polaris_confmed_tmp_t)
manage_dirs_pattern(polaris_confmed_t, tmp_t, polaris_confmed_tmp_t)

# posix_pathconf called from get_tmpdir calls starvfs over /tmp
fs_getattr_tmpfs(polaris_confmed_t)

# dmi_ports_fetch that runs under confd_t reads global.service.conf
polaris_tdlresolve_read(polaris_confmed_t)
cnfdf_exec_dmi_ports_fetch(polaris_confmed_t)

# confd-startup script reads /tmp/dmi.ds_config if it exists
polaris_psd_tmp_read(polaris_confmed_t)

# vip-confd-startup.sh related
# figure out BOOT_ROLE in install_util.sh
polaris_read_packages_conf(polaris_confmed_t)
# touch /bootflash/sdwan/day0_oper.xml
allow polaris_confmed_t self:capability dac_override;
polaris_bootflash_manage(polaris_confmed_t)
# /usr/bin/sw syncdb call uuidgen
develop_random(polaris_confmed_t)

polaris_dmialauthd_tmp_manage(polaris_confmed_t)
PLEASE LOOK AT ME: overloaded use of /bootflash/.installer and /bootflash/.sdwaninstaller directories. In controller mode cedge code loopback mounts /bootflash/.sdwaninstallerfs file onto /bootflash/.sdwaninstaller and creates /bootflash/.installer symbolic link to it. As result effective /bootflash/.installer carries two meaning: used by polaris install infra for regular install operations, and keep persistent state in controller mode. For now /bootflash/.sdwaninstallerfs was forced to be mounted with polaris_disk_install_t label, so installer policy would be happy, but confd writes into it through /var/confd0 which is symbolic link to /bootflash/.installer/images/pkg_boot_17.3.01/confd0 that means we need to grant polaris_disk_install_manage to confd which is not good thing. It would be much better if two different directories would be used.

polaris_disk_install_manage(polaris_confd_t)

/var/log/confd handling
type polaris_confd_var_log_t;
logging_log_file(polaris_confd_var_log_t)
polaris_confd_var_log_manage(polaris_confd_t)

/etc/version handling
type polaris_confd_etc_t;
files_config_file(polaris_confd_etc_t)
files_etc_filetrans(polaris_confd_t, polaris_confd_etc_t, file, "version")
gen_require(
    type etc_t;
    )
manage_files_pattern(polaris_confd_t, etc_t, polaris_confd_etc_t)

"/usr/bin/sw synccdb" calls "confd_cmd -p 3010 -o -c "delete /software"
that invokes /usr/binos/conf/install_assist.sh polaris_install_engine.domtrans(polaris_confd_t)

confd calls /usr/bin/sw that creates temp files in /tmp/cedge_sw_log
since it runs under same domain make sure that cedge_sw_log gets right label
files_tmp_filetrans(polaris_confd_t, polaris_confd_tmp_t, dir, "cedge_sw_log")

/tmp/confd_booted created by vip-confd-start
files_tmp_filetrans(polaris_confd_t, polaris_confd_tmp_t, file, "cedge_booted")

runs flashutils to read rommon variables
polaris_flashlib_read(polaris_confd_t)

allow polaris_confd_t self:capability fowner;

optional_policy("# work with /tmp/econfd2sysmgr-ipc
Open Source Used In BGP TE Controller Version 4.3.0 6463")
```c
polaris_econfd2sysmgr_tmp_manage(polaris_confd_t)

# confdexec calls dmidecode to get bios-vendor
dmidecode_domtrans(polaris_confd_t)

optional_policy(
    # polaris_sw.sh called in confd context accesses
    # /etc/viptela/controller_version
    polaris_cedge_etc_manage(polaris_confd_t)
)

# PLEASE LOOK AT ME confd tcp ports are supposed to be handle
# through TDL pseudo services, that one it not
corennet_tcp_connect_polaris_confd_maapi_port(polaris_confd_t)

# confd starts cmdptywrapper utility through erl_child_setup
# that allocates free pty device using operations on /dev/ptms
allow polaris_confd_t self:capability { fsetid setgid };
term_getattr_pty_fs(polaris_confd_t)
term_setattr_generic_ptys(polaris_confd_t)
term_use_generic_ptys(polaris_confd_t)
term_use_ptmx(polaris_confd_t)

# uses nice utility to start misc scripts
allow polaris_confd_t self:process setsched;

# allow netconf_callhome to execute ncsshd under ncsshd domain
polaris_ncsshd_mgmt_domtrans(polaris_confd_t)

# allow DmiAuth spawned by confd to access /tmp/.DmiAuth.socket
polaris_dmi_dmiauthd_dgram_send(polaris_confd_t)

# the default port for NETCONF Call Home (SSH) is 4334,
# and it is configurable by users
corennet_tcp_connect_all_ports(polaris_confd_t)
# by default the port is selected by system, and it is configurable by users
corennet_tcp_bind_generic_port(polaris_confd_t)
# netconf_callhome may create vrf-based netns on demand
polaris_vrf_netns_manage(polaris_confd_t)

# cmdwrapper utility that started by confd calls xstat
allow polaris_confd_t self:capability setuid;

# label for /tmp/vconfd temporary files created by binos/viptela/vconfd/*.sh
# scripts created from viptela/vconfd/vconfd_script_cli_session.sh
files_tmp_file(polaris_vconfd_tmp_t);

Open Source Used In BGP TE Controller Version 4.3.0  6464
```
# confd writes /tmp/vconfd/USID.XXX and /tmp/vconfd/THANDLE.YYY files
polaris_vconfd_tmp_manage(polaris_confd_t)

# label for /tmp/confd_cli temporary files created by execute_confcli.sh
type polaris_confd_cli_tmp_t;
files_tmp_file(polaris_confd_cli_tmp_t)

# execute_confcli creates /tmp/sh-thd moved to /tmp/confd_cli
files_tmp_filetrans({ polaris_confd_t polaris_confd_cli_t}, polaris_confd_cli_tmp_t, dir, "confd_cli")

# execute_confcli.sh script policy
polaris_utility_domain_template(confd_cli)
polaris_bexecute_domain(polaris_confd_cli_t, polaris_confd_cli_exec_t)

polaris_chasfs_read(polaris_confd_cli_t)
corecmd_exec_shell(polaris_confd_t)
corecmd_exec_bin(polaris_confd_cli_t)
auth_use_nsswitch(polaris_confd_cli_t)
# bash get_tmpdir statfs /tmp directory
fs_getattr_tmpfs(polaris_confd_cli_t)

polaris_confd_cli_tmp_manage(polaris_confd_cli_t)
polaris_vconfd_tmp_manage(polaris_confd_cli_t)
telnet_use_ptys(polaris_confd_cli_t)

polaris_ripc_confd_ipc_connect(polaris_confd_cli_t)

# execute_confcli.sh -a -g PRIV00 runs grep over /bootflash/sdwan/.init_stage
polaris_bootflash_read(polaris_confd_cli_t)

# execute_confcli.sh writes to "pipe:[24719894]"
polaris_dmi_ncsshd_fwd_use_fifo(polaris_confd_cli_t)
# allow /usr/binos/conf/bexecute.sh for tcp_socket access
# due to "/bin/sh /usr/binos/conf/mcp_chvrf.sh eobc
#/usr/binos/conf/bexecute.sh -c /bin/mcp_pkg_wrap rp_daemons
#/usr/binos/conf/execute_co"
allow polaris_confd_cli_t polaris_dmi_ncsshd_fwd_t:tcp_socket ioctl;

#===========================================================================
# admin-tech : scripts in binos/viptela/vconfd/*admin_tech*.sh
# Invocation triggered here:
#  viptela/vconfd/viptela-actions.yang: tailf:exec "vconfd_script_admin_tech.sh"
#===========================================================================
polaris_vconfd_domain_template(admin_tech)

# /bin/bash /usr/binos/conf/bshell.sh -S -c
# show platform hardware qfp active infrastructure shared-memory
# process cpp-control-pro.....
polaris_bexecute_domtrans(polaris_admin_tech_t)
# admin-tech launches "ps" via scripts
domain_read_all_domains_state(polaris_admin_tech_t)

# See tracelogs accessed by vconfd_script_polaris_admin_tech_child.sh
polaris_btrace_data_manage_all(polaris_admin_tech_t)

# various utilities like "find", "memaudit", etc needs this
files_getattr_all_files(polaris_admin_tech_t)
files_getattr_all_dirs(polaris_admin_tech_t)
fs_getattr_all_fs(polaris_admin_tech_t)
files_read_all_files(polaris_admin_tech_t)

# '/bin/bash /usr/bin/memaudit' needs access to /proc/kmsg, /proc/mdstat, etc
dev_getattr_mtrr_dev(polaris_admin_tech_t)
kernell_read_all_proc(polaris_admin_tech_t)
dev_getattr_loop_control(polaris_admin_tech_t)

# infra/memaudit/memaudit uses dmesg
dmesg_domtrans(polaris_admin_tech_t)
gen_require(''
    type dmesg_t;
')
polaris_confd_unix_stream_stdio_use(dmesg_t)

# infra/memaudit/memaudit uses mount
mount_domtrans(polaris_admin_tech_t)

# infra/memaudit/memaudit uses fdisk
fstools_domtrans(polaris_admin_tech_t)
polaris_nvram_read(polaris_admin_tech_t)
polaris_nvram_getattr(polaris_admin_tech_t)

# infra/memaudit/memaudit writes to /proc/sys/vm/drop_caches
kernel_rw_vm_sysctls(polaris_admin_tech_t)

# memaudit and smap needs 'getattr', 'search' on sysctl_irq_t:dir
kernel_read_irq_sysctls(polaris_admin_tech_t)

# du -b -s /tmp/cc /tmp/rp /tmp/fp
files_getattr_all_sockets(polaris_admin_tech_t)
files_getattr_all_pipes(polaris_admin_tech_t)

# df -Th -BM needs access to /run/utns/2
fs_getattr_nsfs_files(polaris_admin_tech_t)

# ls /tmp/ufs/harddisk
# maapi --clicmd --get-io --no-hidden show configuration commit list
corecmd_exec_bin(polaris_admin_t)

# bash vconfd_script_admin_tech.sh -u root -c cli executes:
# 1. map on /etc/passwd
auth_map_passwd(polaris_admin_t)
# 2. hostname
hostname_exec(polaris_admin_t)
# 3. journalctl
journalctl_domtrans(polaris_admin_t)

# journalctl writes to /tmp/vm4-bootuplog-20200903-175223-UTC.log
# see vconfd_script_polaris_admin_tech_child.sh
gen_require("
    type journalctl_t;
"
)manage_files_pattern(journalctl_t, polaris_admin_tech_tmp_t, polaris_admin_tech_tmp_t)
polaris_confd_unix_stream_stdio_use(journalctl_t)

# admin_tech reads /tmp/chassis/cpld/chasfs/board_vtype on crankshaft(sdwan)
polaris_chasfs_read(polaris_admin_t)

# find -H /misc/scratch -name MEMORY_LOG_*.text
# memaudit writes to /bootflash/MEMORY_LOG_2020-07-28-01:32:11.text
# We also have 'mv -Z /bootflash/admintech /var/tech/ios'
# admin_tech watches /tmp/chassis/local/rp/chasfs/etc/ios_admintech_done
type polaris_admin_tech_data_t;
polaris_disk_type(polaris_admin_tech_data_t)
polaris_bootflash_filetrans(polaris_admin_tech_t, polaris_admin_tech_data_t, dir)
polaris_bootflash_filetrans(polaris_admin_tech_t, polaris_admin_tech_data_t, file)
polaris_admin_tech_data_manage(polaris_admin_tech_t)

# sdwan_tech_support.sh -o /var/tech/binos; work with /var/tech/ files
type polaris_admin_tech_var_t;
files_tmp_file(polaris_admin_tech_var_t)
files_var_filetrans(polaris_admin_tech_t, polaris_admin_tech_var_t, dir, "tech")manage_files_pattern(polaris_admin_tech_t, polaris_admin_tech_var_t, polaris_admin_tech_var_t)manage_dirs_pattern(polaris_admin_tech_t, polaris_admin_tech_var_t, polaris_admin_tech_var_t)

# vconfd_script_polaris_admin_tech.sh invokes vlog "Requested admin-tech initiated."
# vlog is implemented in viptela/utils/vlog using logger; that needs
# - create/connect unix_dgram_socket of type polaris_admin_tech_t
# - read from devtmpfs of type devlog_t
# - write to sock_file of type devlog_t
# - sendto path="/run/systemd/journal/dev-log" of type unix_dgram_socket
logging_send_syslog_msg(polaris_admin_tech_t)

# maapi --cliget paginate: this performs connect to confd socket
polaris_ripe_confd_ipc_connect(polaris_admin_tech_t)
# reads /tmp/chassis/cpld/chasfs/board_vtype
# on c8kv cpld is at /sys/bus/platform/devices/cpld which has sysfs_t LABEL
polaris_cpld_read(polaris_admin_tech_t)

# handle various files created under /tmp
type polaris_admin_tech_tmp_t;
files_tmp_file(polaris_admin_tech_tmp_t)
files_tmp_filetrans(polaris_admin_tech_t, polaris_admin_tech_tmp_t, file)
manage_files_pattern(polaris_admin_tech_t, polaris_admin_tech_tmp_t, polaris_admin_tech_tmp_t)

# As part of admin-tech generation on cEdges, vconfd_script_polaris_admin_tech.sh
# invokes vconfd_script_polaris_admin_tech_child.sh which in turn invokes the
# script sdwan_tech_support.sh. The sdwan_tech_support.sh passes the file
# /tmp/sdwan_tech_support_command_file_out.txt to a bshell instance. The bshell
# instance does open operation on the file. So bshell needs open allow
# policy for /tmp/sdwan_tech_support_command_file_out.txt
gen_require('    
        type polaris_bshell_t;
    ')
allow polaris_bshell_t polaris_admin_tech_tmp_t:file open;

# maapi needs this.
allow polaris_admin_tech_t self:tcp_socket { getopt setopt create connect read write };

# tar --ignore-failed-read -czf /home/vmanage-admin/vm4-20200903-055157-admin-tech.tar.gz
# /tmp/fp/trace/cpp_cp_F0-0_TAN.20041_0.20
allow polaris_admin_tech_t self:capability dac_override;

# awk /^Shared/ {v +=  $2} END { print v} /proc/6384/smaps
allow polaris_admin_tech_t self:capability sys_ptrace;

# 'top -n1 -b' creates /.config dir
# TODO/LOOKATME: selinux team to review handling of this issue in a
# common way for invoking top
allow polaris_admin_tech_t root_t:dir create;

# "show installerfs" is invoked by vconfd_script_admin_tech_common.sh
# this invokes vconfd_script_show_installerfs.sh via confd
# let's execute this under install_show domain
polaris_install_show_domtrans(polaris_confd_t)

# create_bootflash_snapshot() performs 'ls -l /bootflash/installer'
polaris_disk_install_read(polaris_admin_tech_t)

# vconfd_script_polaris_admin_tech_child.sh
# mv /bootflash/admintech /var/tech/ios
allow polaris_admin_tech_t self:process setscreate;
`# rm -rf $collated_ra  (collated_log_*)`

`#Nutella-XE - Vedge image install`
`#/bin/sh /tmp/sw/rp/0/0/rp_security/mount/bin/sw synccdb`
`#mount -t vfat /dev/mmcblk0gp0p1 /gpp`
`mount_domtrans(polaris_confd_t)`

`#df /bootflash`
`fstools_domtrans(polaris_confd_t)`

`#Nutella-XE - Vedge image activate`
`#/usr/bin/os/bin/flashutil --command unsetvar --name MIG_INT_STATE`
`polaris_flashlib_write(polaris_confd_t)`

`# permit comm="ps" to "getattr" on dev="devtmpfs" for polaris_admin_tech_t`
`term_getattr_unallocated_ttys(polaris_admin_tech_t)`

`# permit to access polarisProc_rmonbifo_t by`
`# /usr/bin/vconfd_script_admin_tech.sh`
`polaris_proc_rmonbifo_read(polaris_admin_tech_t)`

`# permit to access/unlink /bootflash by polaris_admin_tech_t`
`polaris_bootflash_manage(polaris_admin_tech_t)`

`# vconfd_script_admin_tech.sh executes 'top -n1 -b' which creates /.config dir`
`gen_require(`
  `type admin_home_t;`
`)`
`allow polaris_admin_tech_t admin_home_t:dir { add_name create write };`
"vconfd_notifier security-clear-installed-cert" reads
/proc/1/ns/net
polaris_cedge_reset_ns(polaris_confd_t)

allow /usr/binos/conf/execute_confd_cli.sh to access polaris_disk_install_t
polaris_disk_install_read(polaris_confd_cli_t)

vconfd script ends up cleaning core files, most likely its
vconfd_script_polaris_admin_t.sh, so it needs read/write
permission to polaris_core_file_t files.
polaris_core_file_manage(polaris_admin_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisconfd.te
No license file was found, but licenses were detected in source scan.

#
# OWNERS - Code Ownership
#
# For information on the purpose and format of this file see:
#
# Copyright (c) 2019-2021 by Cisco Systems, Inc.
# All rights reserved.
#

* @csg/polaris-selinux-dev

ixo team related files
polariscontainer* @csg/polaris-selinux-dev @csg/iox-selinux
polariscaf* @csg/polaris-selinux-dev @csg/iox-selinux
polarisgsdrp* @csg/polaris-selinux-dev @csg/iox-selinux
polarisioxman* @csg/polaris-selinux-dev @csg/iox-selinux
polarisvman* @csg/polaris-selinux-dev @csg/iox-selinux

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/OWNERS
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
# Copyright (c) 2016-2019 by Cisco Systems, Inc.
# All rights reserved
#
## <summary>Polaris lm Policy Rules.</summary>
####<summary>
#### Read files of type polaris_ltmp_tmp_t (e.g., /tmp/iosd_level)
####</summary>
####<param name="domain">
####  <summary>
####  Domain allowed access.
####  </summary>
####  </param>
#
interface(polaris_ltmp_tmp_read,`
  gen_require(`
    type polaris_ltmp_tmp_t;
  ')
  read_files_pattern($1, polaris_ltmp_tmp_t, polaris_ltmp_tmp_t)
essions
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislm.if
No license file was found, but licenses were detected in source scan.

#
# August 2017, Shawn Lu
#
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# All rights reserved
#
#
####<summary>Polaris nmspd Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnmspd.if
No license file was found, but licenses were detected in source scan.

dnl
dnl April 2018, Victor Kamensky

dnl Copyright (c) 2018-2019 by Cisco Systems, Inc.
dnl All rights reserved
dnl
define(`polaris_database_aux`,
  ###################################################################
  ####<summary>
  ####Use $2 database.
  ####</summary>
  ####<param name="domain">
  ####</param>
  ####Domain allowed access.
interface(`polaris_db_tdl_db\$1\_use'','`

gen_require(
    type $2;
)

    polaris_tdl_db_use(dollarsone, $2, $3)
')

')

define(`polaris\_database',`dnl
polaris\_database\_aux(database\_stem($1), database\_label($1), $1)dnl
')

define(`polaris\_database\_process',``)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris\_database\_db\_if.m4
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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# All rights reserved
#

policy\_module(polarishm, 1.0);

gen\_require(
    type polaris\_hm\_t;
)

polaris\_btrace\_data\_manage(polaris\_hm\_t)
polaris\_chasfs\_manage(polaris\_hm\_t)
polaris\_tlresolve\_read(polaris\_hm\_t)
polaris\_tlldb\_list\_dirs(polaris\_hm\_t)
polaris\_cpld\_read(polaris\_hm\_t)
polaris\_lua\_read(polaris\_hm\_t)
polaris\_flashlib\_read(polaris\_hm\_t)
polaris\_ripe\_sman\_ui\_serv\_connect(polaris\_hm\_t)
polaris\_db\_tld\_dir\_use(polaris\_hm\_t)

Open Source Used In BGP TE Controller Version 4.3.0 6472
files_getattr_all_files(polaris_hm_t)
files_getattr_all_dirs(polaris_hm_t)
gen_require('attribute non_security_file_type;')
allow polaris_hm_t { non_security_file_type }:dir list_dir_perms;

# hman need to read proc for all processes to collect CPU
# utilization information
domain_read_all_domains_state(polaris_hm_t)
domain_signull_all_domains(polaris_hm_t)

kernel_read_system_state(polaris_hm_t)

# hman needs to run "df /dev/shm" command
corecmd_exec_bin(polaris_hm_t)
corecmd_exec_shell(polaris_hm_t)

# hman needs to operate on all maroon files
polaris_maroon_data_manage_all(polaris_hm_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_hm_t)

fs_getattr_tmpfs(polaris_hm_t)

# work with /tmp files (/tmp/myhostname)
type polaris_hm_tmp_t;
files_tmp_file(polaris_hm_tmp_t)
manage_files_pattern(polaris_hm_t, tmp_t, polaris_hm_tmp_t)
files_tmp_filetrans(polaris_hm_t, polaris_hm_tmp_t, file, "myhostname")

allow polaris_hm_t self:capability { chown fsetid dac_override kill sys_resource sys_ptrace }; allow polaris_hm_t self:process setsched;
allow polaris_hm_t self:unix_dgram_socket create;
allow polaris_hm_t self:cap_users { kill sys_ptrace };

polaris_boot_tmp_read(polaris_hm_t)

# Allow write to flash. Needed for usb disable feature
ifdef(`ngwc_family',`polaris_flashlib_write(polaris_hm_t)
')

# "show platform software mount RP active" command needs attributes of
# all file systems
fs_getattr_all_fs(polaris_hm_t)
# above show command accesses /var/run/netns/2
fs_read_nsfs_files(polaris_hm_t)
# reads /scratch link which is labeled as polaris_disk_bootflash_t
polaris_disk_bootflash_read_lnk(polaris_hm_t)
polaris_disk_harddisk_read_lnk(polaris_hm_t)

# needed for "show platform software bound-uds RP active"
kernel_read_network_state(polaris_hm_t)

# "show rom-monitor R0" needs content of /proc/rmonbifo/bootver;
# please refer to hman_ui.tpp file
polaris_proc_rmonbifo_read(polaris_hm_t)

# "show plat soft yang-management process r0" invokes hm_show_yang_proc_cb;
# "show plat soft iox-service" invokes hm_iox_srvc_show_cb;
# They invoke "ps -C" which needs access to /sys/devices/system/cpu/online
# TODO: should we replace system() with something like hm_get_procs_with_name_running
dev_read_sysfs(polaris_hm_t)
# "show platform software yang-management process state" invokes /bin/mcp_pkg_wrap,
# which sources /tmp/sw/boot/rmonbifo/env_var.sh
polaris_rmonbifo_tmp_read(polaris_hm_t)
# show iox-service requires reading of libvirt_ver of created under CAF context
optional_policy('polaris_caf_tmp_files_read(polaris_hm_t)')
# hardcoded policy for hm to df, per Victor
optional_policy('gen_require('
    type polaris_iosd_portal_dmi_lipc_t;
    type polaris_iosd_portal_app_lipc_t;
')
    allow polaris_hm_t { polaris_iosd_portal_dmi_lipc_t polaris_iosd_portal_app_lipc_t }:sock_file getattr;
')

# during "show version installed" command
# "grep -q srdriver /tmp/sw/rp/local/0/rp_base/iso" which is link to the universal image
polaris_bootflash_read(polaris_hm_t)
# this is for calcsha.sh (invoked by the command above) but might work for others too
polaris_install_engine_domtrans(polaris_hm_t)
# this if for hman to read and delete /tmp/version.info created by calcsha.sh in prev context type
polaris_install_tmp_read(polaris_hm_t)
gen_require(''
    type polaris_install_tmp_t;
')
    allow polaris_hm_t polaris_install_tmp_t:file unlink;
')

# need open, read on /bootflash/packages.conf (grep sha1sum: /tmp/packages.conf)
polaris_read_packages_conf(polaris_hm_t)
# This is created for hman to grant it access to /bootflash/topnmemuse
polaris_bootflash_manage(polaris_hm_t)

# read /tmp/pkg_summary.txt file
polaris_pkg_summary_tmp_read(polaris_hm_t)

polaris_zram_getattr(polaris_hm_t)

optional_policy('polaris_ssd_auth_domtrans(polaris_hm_t) ')

optional_policy('polaris_ssdUnmount_domtrans(polaris_hm_t) ')

optional_policy('polaris_confd_domtrans(polaris_hm_t) ')

################################################################################
# show platform software process slot R0 monitor
# mcp_monitor_process_batchmode.sh
# /bin/sh /usr/binos/conf/bexec.sh -c /usr/binos/conf/mcp_monitor_process_batchmode.sh -n 1 -d 3 -l 0
################################################################################
polaris_utility_domain_template(monitor_process)
polaris_bexecute_domtrans(polaris_hm_t)
polaris_bexecute_domain(polaris_monitor_process_t, polaris_monitor_process_exec_t)

# mcp_monitor_process_batchmode.sh calls "top" command
# "top" needs read/getattr access of various files in the system
domain_read_all_domains_state(polaris_monitor_process_t)

# "top" needs access to /sys/devices/system/cpu/online, etc
dev_read_sysfs(polaris_monitor_process_t)

# "top" need read access to /proc/meminfo, /proc/stat
kernel_read_system_state(polaris_monitor_process_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_monitor_process_t)

# need write/ioctl/getattr access for pipes like "pipe:[118396]"
polaris_hman_use_fifo(polaris_monitor_process_t)

corecmd_exec_bin(polaris_monitor_process_t)
# top -b -n3 -d3 needs permission to create dir .config ,write
to files and add files
allow polaris_monitor_process_t admin_home_t:dir { add_name create write }
allow polaris_monitor_process_t self:capability sys_ptrace;
# pkg_summary.sh : show version R0 installed
# /bin/bash /usr/binos/conf/pkg_summary.sh -o /tmp/pkg_summary.txt -d model -P
polaris_utility_domain_template(pkg_summary)
polaris_pkg_summary_domtrans(polaris_hm_t)

# it executes find /tmp/sw -maxdepth 5 -mindepth 5 -name mount
files_getattr_all_dirs(polaris_pkg_summary_t)
files_getattr_all_files(polaris_pkg_summary_t)
files_read_all_dirs_except(polaris_pkg_summary_t)
polaris_chasfs_read(polaris_pkg_summary_t)
polaris_cpld_read(polaris_pkg_summary_t)
polaris_use_btrace_fifo(polaris_pkg_summary_t)
polaris_monbifo_tmp_read(polaris_pkg_summary_t)
polaris_btrace_data_manage(polaris_pkg_summary_t)
polaris_boot_tmp_read(polaris_pkg_summary_t)

# need open, read on /bootflash/debug.conf
polaris_read_debug_conf(polaris_pkg_summary_t)
polaris_read_packages_conf(polaris_pkg_summary_t)

allow polaris_pkg_summary_t self:capability sys_resource;
corecmd_exec_bin(polaris_pkg_summary_t)
auth_use_nsswitch(polaris_pkg_summary_t)
polaris_disk_crashinfo_getattr(polaris_pkg_summary_t)

# read /proc/cmdline
kernel_read_system_state(polaris_pkg_summary_t)

# handle /tmp/pkg_summary.txt file
type polaris_pkg_summary_tmp_t;
files_tmp_file(polaris_pkg_summary_tmp_t)
files_tmp_filetrans(polaris_pkg_summary_tmp_t, polaris_pkg_summary_tmp_t, file)
manage_files_pattern(polaris_pkg_summary_tmp_t, polaris_pkg_summary_tmp_t, polaris_pkg_summary_tmp_t)

# pkg_to_tree.sh : Generates a software tree based on a provisioning file.
# /bin/bash /usr/bin/os/conf/pkg_to_tree.sh -c /tmp/packages.conf
#   -t /tmp/show_patch_provision_temp -p /tmp/sw/ios
#   -r /tmp/show_provision_temp -a -q

polaris_utility_domain_template(pkg_to_tree)

gen_require(''
type unconfined_service_t;
'
)polaris_pkg_to_tree_domtrans({unconfined_service_t polaris_hm_t})

files_getattr_all_files(polaris_pkg_to_tree_t)
polaris_harddisk_read(polaris_pkg_to_tree_t)
polaris_cpld_read(polaris_pkg_to_tree_t)
polaris_use_btrace_fifo(polaris_pkg_to_tree_t)
polaris_rmonbifo_tmp_read(polaris_pkg_to_tree_t)
polaris_trace_data_manage(polaris_pkg_to_tree_t)
polaris_boot_tmp_read(polaris_pkg_to_tree_t)
polaris_patch_data_manage(polaris_pkg_to_tree_t)

# if being executed on other node, telnet /dev/ptsN might be used
# as stdin/stdout
telnet_use_ptys(polaris_pkg_to_tree_t)

# pkg_to_tree.sh creates/deletes directories and files under
# /tmp/show_provision_temp
type polaris_show_provision_tmp_t;
files_tmp_file(polaris_show_provision_tmp_t)
polaris_show_provision_tmp_manage(polaris_pkg_to_tree_t)

# pkg_to_tree.sh verifies each package as it is mounted
polaris_code_verify_domtrans(polaris_pkg_to_tree_t)
corecmd_exec_bin(polaris_pkg_to_tree_t)
polaris_disk_crashinfo_getattr(polaris_pkg_to_tree_t)

# manage the /tmp/lf symbolic link
type polaris_pkg_to_tree_tmp_t;
files_tmp_file(polaris_pkg_to_tree_tmp_t)
files_tmp_filetrans(polaris_pkg_to_tree_tmp_t, polaris_pkg_to_tree_tmp_t, lnk_file, "lf")
manage_lnk_files_pattern(polaris_pkg_to_tree_tmp_t, polaris_pkg_to_tree_tmp_t, polaris_pkg_to_tree_tmp_t)

# permit pkg_to_tree.sh mounting to use conf/pkg files in bootflash
polaris_bootflash_read(polaris_pkg_to_tree_t)
polaris_disk_bootflash_search(polaris_pkg_to_tree_t)

# we want to read the existing mounts in chasfs
polaris_chasfs_read(polaris_pkg_to_tree_t)

# pkg_to_tree.sh interfaces with installer data, including ISSU files
polaris_install_tmp_log_write(polaris_pkg_to_tree_t)
polaris_sw_data_manage(polaris_pkg_to_tree_t)
polaris_read_packages_conf(polaris_pkg_to_tree_t)
polaris_issu_tmp_files_manage(polaris_pkg_to_tree_t)
polaris_install_tmp_manager(polaris_pkg_to_tree_t)

# allow pkg_to_tree.sh to do the loopback mounts of packages and manage
# mount links in tmp. This includes mapping mounted passwd file and
# mounting sysfs. This is also needed to mount /mnt/sd3/iox_alt_hdd.dsk
mount_domtrans(polaris_pkg_to_tree_t)
auth_map_passwd(polaris_pkg_to_tree_t)
dev_list_sysfs(polaris_pkg_to_tree_t)
allow polaris_pkg_to_tree_t sysfs_t:file { getattr open read };
allow polaris_pkg_to_tree_t tmp_t:lnk_file { create rename unlink };

# when expanding/installing super images, pkg_to_tree uses install_engine_exec_t
# utilities like issu_check
polaris_install_engine_domtrans(polaris_pkg_to_tree_t)

########################################################################
# misc hman cli(s)
########################################################################

# hman needs access to /bootflash/.issu_loc_lock
polaris_issu_files_manage(polaris_hm_t)

# hman process creates/deletes directories and files under
# /tmp/show_provision_temp
polaris_show_provision_temp_manage(polaris_hm_t)

# signal send during show platform software process slot R0 monitor
polaris_send_signal_to_bexecute(polaris_hm_t)
polaris_dyncfg_tmp_read(polaris_hm_t)
polaris_disk_crashinfo_getattr(polaris_hm_t)

# setting up /dev/ttyS0 speed from hman_handle_console_baud_rate_change
term_use_unallocated_ttys(polaris_hm_t)

# allow to send message to /dev/log
logging_send_syslog_msg(polaris_hm_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_hm_t)

# hman starts agetty-iosd.service in case of nyquist stack
getty_systemctl(polaris_hm_t)

# This block is policies for "sh pla so filesystem bootflash: de" CLI
polaris_utility_domain_template(cli_fs_cmds)

gen_require(
    type polaris_bexecute_t;
    )
polaris_bexecute_domtrans(polaris_cli_fs_cmds_t)
polaris_cli_fs_cmds_domtrans(polaris_bexecute_t)
telnet_use_ptys(polaris_cli_fs_cmds_t)

# Blanket permission for disk management for cli_fs_cmds (for show/erase fs)
polaris_persistent_manage(polaris_cli_fs_cmds_t)
# permission to manage removable ( seems pretty safe )
polaris_removable_manage(polaris_cli_fs_cmds_t)
polaris_getattr_removable(polaris_cli_fs_cmds_t)
fs_read_removable_symlinks(polaris_cli_fs_cmds_t)
# btrace.sh needs these
polaris_boot_tmp_read(polaris_cli_fs_cmds_t)
polaris_btrace_tmppub_read(polaris_cli_fs_cmds_t)
# this is for NFS access mounted in a dir of ncd context
optional_policy(
    polaris_ncd_tmp_read(polaris_cli_fs_cmds_t)
    )

#need to access pipes like pipe:[107820]
polaris_hman_use_fifo(polaris_cli_fs_cmds_t)

# df or stat the mount point
fs_getattr_nfs(polaris_cli_fs_cmds_t)
# mkfs permissions via domtrans
fstools_domtrans(polaris_cli_fs_cmds_t)
# runs NFS exportfs ( copied from ncd )
rpc_read_exports(polaris_cli_fs_cmds_t)
rpc_write_exports(polaris_cli_fs_cmds_t)
rpc_manage_nfs_state_data_dir(polaris_cli_fs_cmds_t)
rpc_manage_nfs_state_data(polaris_cli_fs_cmds_t)
fs_rwlock_nfsd_fs(polaris_cli_fs_cmds_t)
kern_rwlock_rpc_sysctls(polaris_cli_fs_cmds_t)
fs_getattr_xattr_fs(polaris_cli_fs_cmds_t)

# rsync/remote_format perms (rsync borrowed from polariscrft.te)
polaris_udev_tmp_list_dirs(polaris_cli_fs_cmds_t)
gen_require(
    type rsync_exec_t;
    type rsync_port_t;
    type rsync_tmp_t;
')
allow polaris_cli_fs_cmds_t rsync_port_t:tcp_socket name_connect;
allow polaris_cli_fs_cmds_t rsync_exec_t:file { execute execute_no_trans get attr map open read };

allow polaris_cli_fs_cmds_t rsync_tmp_t:file open;

allow polaris_cli_fs_cmds_t self:capability { chown fsetid setgid };

# Need to access /proc/self/fd/1 by platform_fs_operation.sh which is invoked by
# /bin/bash/usr/bin/os/conf/mcp_cli_fs_cmds.sh show bootflash:all
fs_associate_proc(polaris_cli_fs_cmds_t)

polaris_cli_fs_cmds_domtrans(polaris_hm_t)
corecmd_exec_bin(polaris_cli_fs_cmds_t)
polaris_cpld_read(polaris_cli_fs_cmds_t)
polaris_chasfs_manage(polaris_cli_fs_cmds_t)
polaris_use_btrace_fifo(polaris_cli_fs_cmds_t)
polaris_rmonbifo_tmp_read(polaris_cli_fs_cmds_t)

auth_use_nsswitch(polaris_cli_fs_cmds_t)

# allow polaris_cli_fs_cmds_t polaris_udev_tmp_files_t:file open;
polaris_udev_tmp_read(polaris_cli_fs_cmds_t)
# watch on modify /tmp/udev/etc/udev/usbflash1-2/udev-info for remote/stby usb device
polaris_udev_tmp_watch(polaris_cli_fs_cmds_t)

# allow to run mount in its own domain
mount_domtrans(polaris_cli_fs_cmds_t)
# runs systemctl to remount file system.
# usb[01] fs_target remount service used.
systemd_exec_systemctl(polaris_cli_fs_cmds_t)
systemd_config_generic_services(polaris_cli_fs_cmds_t)

# allow to run readlink - f /dev/bootflash1
storage_getattr_fixed_disk_dev(polaris_cli_fs_cmds_t)
# allow "format" CLI to add/delete links in /dev/, and /; e.g., /dev/harddisk1 /harddisk
ifdef('crankshaft_family',
    gen_require(
        type device_t;
        type root_t;
        type udev_t;
    )
) #/dev/harddisk1 /dev/harddisk1 -> /dev/dm-0
filetrans_pattern({udev_t polaris_cli_fs_cmds_t}, device_t, fixed_disk_device_t, lnk_file, "harddisk1")
filetrans_pattern({udev_t polaris_cli_fs_cmds_t}, device_t, fixed_disk_device_t, lnk_file, "harddisk")
#harddisk -> /misc/scratch
filetrans_pattern(polaris_cli_fs_cmds_t, root_t, polaris_disk_bootflash_t, lnk_file, "harddisk")

manage_lnk_files_pattern(polaris_cli_fs_cmds_t, fixed_disk_device_t, fixed_disk_device_t)
')
seutil_domtrans_setfiles(polaris_cli_fs_cmds_t)
polaris_hman_use_fifo(setfiles_t)
# need open, read on /bootflash/packages.conf
polaris_read_packages_conf(polaris_cli_fs_cmds_t)

# "sed" needs access to /proc/cmdline
kernel_read_system_state(polaris_cli_fs_cmds_t)

# work with /tmp files (/tmp/fs_lock_bootflash)
type polaris_cli_fs_cmds_tmp_t;
gen_require(
    type tmp_t;
    )
files_tmp_file(polaris_cli_fs_cmds_tmp_t)
manage_files_pattern(polaris_cli_fs_cmds_t, tmp_t, polaris_cli_fs_cmds_tmp_t)
files_tmp_filetrans(polaris_cli_fs_cmds_t, polaris_cli_fs_cmds_tmp_t, file)

"find /vol/disk0/caf" when show CLI is executed
polaris_caf_tmp_files_read(polaris_cli_fs_cmds_t)

#Caf and IOxMan-CLI interaction
polaris_caf_tmp_files_manage(polaris_cli_fs_cmds_t)

# mcp_cli_fs_cmds.sh show webui: all runs df -P /webui
fs_getattr_tmpfs(polaris_cli_fs_cmds_t)

polaris_persistent_getattr(polaris_cli_fs_cmds_t)
fs_getattr_xattr_fs(polaris_cli_fs_cmds_t)
allow polaris_cli_fs_cmds_t self:capability dac_override;
allow polaris_cli_fs_cmds_t self:dir { add_name write };

# allow caf access to mcp_cli_fs_cmds.sh for fsck on ngwc platforms
ifdef('ngwc_family',

domain_read_all_domains_state(polaris_cli_fs_cmds_t)
polaris_caf_domtrans(polaris_cli_fs_cmds_t)
polaris_caf_files_read(polaris_cli_fs_cmds_t)
dev_read_sysfs(polaris_cli_fs_cmds_t)
')

# fsck CLI using mcp_cli_fs_cmds.sh as tested on sparrow
# allow fsck in mcp_cli_fs_cmds.sh to execute udev in the udev domain
udev_domtrans(polaris_cli_fs_cmds_t)
# allow cryptsetup to be executed
lvm_domtrans(polaris_cli_fs_cmds_t)
# allow fsck to run on bootflash
polaris_nvram_getattr(polaris_cli_fs_cmds_t)

# during SDWAN admin-tech generation, fs_display_*() in mcp_cli_fs_cmds.sh is
# invoked; this tries to find files like /bootflash/tracelogs/cia-netcon* with
# LABEL polaris_confd_var_log_t
polaris_confd_var_log_read(polaris_cli_fs_cmds_t)

# hm calls df to figure out tmpfs size, on some platforms
# where configfs is mounted it needs statfs access to it
gen_require(''
        type configfs_t;
')
allow polaris_hm_t configfs_t:dir getattr;

# hm populates vrf_shm on behalf of iosd, and may create
# and delete vrf-based nets
polaris_vrf_netns_manage(polaris_hm_t)
fs_unmount_nsfs(polaris_hm_t)

#read udev_info
polaris_udev_tmp_read(polaris_hm_t)

gen_require(''
        type rsync_t;
')
allow rsync_t polaris_hm_t:fifo_file read;

# show platform software yang-management process monitor
# mcp_monitor_dmi_proc.sh
# /bin/bash /bin/mcp_pkg_wrap rp_daemons /usr/binos/conf/mcp_monitor_dmi_proc.sh
polaris_utility_domain_template(monitor_dmi_process)
polaris_bexecute_domain(polaris_monitor_dmi_process_t, polaris_monitor_dmi_process_exec_t)

# mcp_monitor_dmi_proc.sh calls "ps" command
# "ps" needs read/getattr access of various files in the system
# ps -eo comm,pid,s,vsize/rssize,%cpu,%mem,etime --sort=comm
domain_read_all_domains_state(polaris_monitor_dmi_process_t)

# "ps" needs access to /proc/uptime
kernel_read_system_state(polaris_monitor_dmi_process_t)

# "ps" needs access to /sys/devices/system/cpu/online, etc
dev_read_sysfs(polaris_monitor_dmi_process_t)

# "ps" need read access to /proc
kernel_list_proc(polaris_monitor_dmi_process_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_monitor_dmi_process_t)

# executes head command
corecmd_exec_bin(polaris_monitor_dmi_process_t)

# sources cyan_api.sh
files_exec_usr_files(polaris_monitor_dmi_process_t)

# /bin/bash /tmp/sw/rp/0/0/rp_daemons/mount/usr/binos/conf/mcp_monitor_dmi_proc.sh
corecmd_shell_entry_type(polaris_monitor_dmi_process_t)

# need write/ioctl/getattr access for pipes like "pipe:[79843]"
polaris_hman_use_fifo(polaris_monitor_dmi_process_t)

# read /etc/init.d/quad_sup_usb_infra.sh
init_read_script_files(polaris_cli_fs_cmds_t)
#This triggers access to /tmp/.flashlock and /dev/sda3
polaris_flashlib_lock(polaris_cli_fs_cmds_t)
#allow flash utility
polaris_flashlib_read(polaris_cli_fs_cmds_t)
# /sys/bus/usb/drivers/usb/*/authorized is accessed (read and write) from hman.
# For USB disable feature across all ngwc platforms needs authorized file to
# be accessed.
ifdef(`ngwc_family',`
gen_require(`
type sysfs_t;
``)
allow polaris_hm_t sysfs_t:file create;
dev_rw_sysfs(polaris_hm_t)
dev_manage_sysfs_dirs(polaris_hm_t)
# work with /tmp files (/tmp/usb-disable)
polaris_iosd_usb_disable_tmp_manage(polaris_hm_t)

# need access to tmp files created under issu directory
polaris_issu_tmp_files_read(polaris_hm_t)

# HMMAN calls for checking database compactability
# tdllib_db_epoch_test is requires access to /tmp/issu/provision/sw-running.txt
polaris_install_tmp_read(polaris_hm_t)

optional_policy(
    polaris_efi_files_list_dirs(polaris_cli_fs_cmds_t)
)

# Execute hdparam in its own domain
fstools_domtrans(polaris_hm_t)

# Allow polaris_hm to get attributes of fixed disk
storage_getattr_fixed_disk_dev(polaris_hm_t)

# Allow read to ssd auth tmp files /tmp/ssd_blk_device
polaris_read_ssd_tmp_files(polaris_hm_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarishm.te
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#
# March 2017, Victor Kamensky
#
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#
## <summary>Polaris ngwc_tbl_mgr Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwctblmgr.if
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#
# September 2017, Victor Kamensky
#
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#
## <summary>Polaris polarisbtman Policy Rules.</summary>

### <summary>

### Execute fs tools in the btrace_rotate domain.
### </summary>
### <param name="domain">
### Domain allowed to transition.
### </param>
#
interface('polaris_btrace_rotate_domtrans',
   gen_require('type polaris_btman_t, polaris_btman_exec_t;
   ')

corecmd_search_bin($1)
domtrans_pattern($1, polaris_btman_exec_t, polaris_btman_t)
')

### <summary>

### Read /tmp/tmppub files/dirs
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
interface('polaris_btrace_tmmpub_read',
   gen_require('type polaris_btrace_tmppub_t;
   ')

read_files_pattern($1, polaris_btrace_tmppub_t, polaris_btrace_tmppub_t)
read_lnk_files_pattern($1, polaris_btrace_tmppub_t, polaris_btrace_tmppub_t)
list_dirs_pattern($1, polaris_btrace_tmppub_t, polaris_btrace_tmppub_t)
')

### <summary>

### Manage /tmp/tmppub files/dirs
### </summary>
### <param name="domain">
### </param>

### Domain allowed access.

```c
interface('polaris_btrace_tmppub_manage',
    gen_require(
        type polaris_btrace_tmppub_t;
    ')

    manage_files_pattern($1, polaris_btrace_tmppub_t, polaris_btrace_tmppub_t)
    manage_dirs_pattern($1, polaris_btrace_tmppub_t, polaris_btrace_tmppub_t)
    ')
```

---

### Read and write all btman's fifo file, used as standard input/output.

```c
interface('polaris_use_btman_fifo',
    gen_require(
        type polaris_btman_t;
    ')

    allow $1 polaris_btman_t:fifo_file { rw_term_perms lock append create unlink }
    ')
```

---

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## Read files under /webui/..., these are webui odm file

## <summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>

```c
interface('polaris_read_webui_files',
    gen_require(
        type polaris_webui_file_t;
    ')
)
```

read_files_pattern($1, polaris_webui_file_t, polaris_webui_file_t)
read_lnk_files_pattern($1, polaris_webui_file_t, polaris_webui_file_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswebui.if

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#
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#

```
/tmp/fp/tdldb(/.*)?                      gen_context(system_u:object_r:polaris_tdldb_t,s0)
/tmp/rp/tdldb(/.*)?                      gen_context(system_u:object_r:polaris_tdldb_t,s0)
/tmp/cc/tdldb(/.*)?                      gen_context(system_u:object_r:polaris_tdldb_t,s0)
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristdldb.fc

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#

## <summary>Polaris NVRAM Policy Rules.</summary>

# Polaris lsmpi

```
#################################################################################################
# Polaris lsmpi
```

Open Source Used In BGP TE Controller Version 4.3.0 6487
## <summary>
## Work (read, write, ioctl) with /dev/lsmpi device.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>

interface(`polaris_lsmpi_dev_use`,
  gen_require(`
    type device_t;
    type polaris_lsmpi_device_t;
    `)
  write_chr_files_pattern($1, device_t, polaris_lsmpi_device_t)
  read_chr_files_pattern($1, device_t, polaris_lsmpi_device_t)
  allow $1 polaris_lsmpi_device_t:chr_file map;
`)

## <summary>
## Read lsmpi sysctl file, ie one under /proc/sys/lsmpi and
## /proc/sys/lsmpi_lodrv directories.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>

interface(`polaris_lsmpi_sysctl_read`,
  gen_require(`
    type polaris_sysctl_lsmpi_t;
    `)
  read_files_pattern($1, polaris_sysctl_lsmpi_t, polaris_sysctl_lsmpi_t)
`)

## <summary>
## Read from /sys/devices/virtual/contdev sysfs files.
## sys files.
## </summary>
## <param name="domain">
## </param>
## Domain allowed access.

<!--/summary>
## </param>
#
interface('polaris_contdev_dev_read',

gen_require('  
type polaris_sysfs_contdev_t;
   type sysfs_t;
')
    read_files_pattern($1, polaris_sysfs_contdev_t, polaris_sysfs_contdev_t)
list_dirs_pattern($1, polaris_sysfs_contdev_t, polaris_sysfs_contdev_t)
  # genfscon statement specifically excludes symbolic links from
  # genfscon path specific entries. To workaround, let us allow
  # to follow sysfs_t symbolic links
  allow $1 sysfs_t:lnk_file read;
')

###############################################################################
## <summary>
## Write into /sys/devices/virtual/contdev sysfs files.
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
#
interface('polaris_contdev_dev_write',

gen_require('  
type polaris_sysfs_contdev_t;
   type sysfs_t;
')
    write_files_pattern($1, polaris_sysfs_contdev_t, polaris_sysfs_contdev_t)
# genfscon statement specifically excludes symbolic links from
# genfscon path specific entries. To workaround, let us allow
# to follow sysfs_t symbolic links
  allow $1 sysfs_t:lnk_file read;
')

###############################################################################
## <summary>
## Manage /sys/devices/virtual/contdev sysfs files.
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
interface('polaris_manage_contdev_dev',

gen_require(

type polaris_sysfs_contdev_t;

type sysfs_t;
')

manage_files_pattern($1, polaris_sysfs_contdev_t, polaris_sysfs_contdev_t)
manage_dirs_pattern($1, polaris_sysfs_contdev_t, polaris_sysfs_contdev_t)

# genfscon statement specifically excludes symbolic links from
# genfscon path specific entries. To workaround, let us allow
# to follow sysfs_t symbolic links
allow $1 sysfs_t:lnk_file read;
')

###############################
## <summary>
##      Allow the specified domain to manage punt/inject socket
## files. i.e /tmp/pi/dp_2_iosd_pi and /tmp/pi/iosd_2_dp_pi
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_pi_uds_manage',

gen_require(

type polaris_pi_uds_t;
')

manage_sock_files_pattern($1, polaris_pi_uds_t, polaris_pi_uds_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislsmpi.if
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# # March 2017, Victor Kamensky
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#
/usr/binos/conf/issu_stack.sh -- gen_context(system_u:object_r:polaris_issu_stack_exec_t,s0)
/tmp/issu_stk(/.*)?       gen_context(system_u:object_r:polaris_issu_stack_tmp_t,s0)
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisissustack.fc
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#
# August 2017, Shawn Lu
#
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#

# polarisnmspd file contexts place holder

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#
# Aug 2020, Sridhar C
#
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#

policy_module(polarisxcopy, 1.0);

#########################################################################
## xcopy_script.sh
#########################################################################
polaris_utility_domain_template(xcopy_script)

polaris_bexecute_domain(polaris_xcopy_script_t, polaris_xcopy_script_exec_t)
# xcopy_script.sh call other scripts through brelay.sh
polaris_bexecute_domtrans(polaris_xcopy_script_t)

polaris_chasfs_manage(polaris_xcopy_script_t)

# xcopy calls curl/sshpass/scp command and support scp/http/https
gen_require(`
    type polaris_curl_t;
    type ssh_exec_t;
    type ssh_home_t;
    type devpts_t;
`)
polaris_curl_domtrans(polaris_xcopy_script_t) corenet_tcp_connect_ssh_port(polaris_curl_t) corenet_tcp_connect_http_port(polaris_curl_t) corenet_tcp_connect_ssh_port(polaris_xcopy_script_t)
# allow read of /etc/passwd
auth_use_nsswitch(polaris_xcopy_script_t)

# read polaris vrf net namespace file
fs_read_nsfs_files(polaris_xcopy_script_t)

# curl needs access to bootflash
polaris_bootflash_manage(polaris_curl_t)
polaris_bootflash_manage(polaris_xcopy_script_t)

# also need to be able to ls /tmp/ufs/ on ngwc
optional_policy('polaris_ncd_tmp_read(polaris_xcopy_script_t)
')

# Execute
corecmd_exec_bin(polaris_xcopy_script_t)

# uses kernel utilities like pidof, stat
domain_read_all_domains_state(polaris_xcopy_script_t)
kernellist_proc(polaris_xcopy_script_t)

# read /proc/cmdline
kernel_read_system_state(polaris_xcopy_script_t)
fs_getattr_tmpfs(polaris_xcopy_script_t)
fs_getattr_xattr_fs(polaris_xcopy_script_t)

# xcopy started from the smand and needs fifo
polaris_smand_use_fifo(polaris_xcopy_script_t)

# ping to check reachability
netutls_domtrans_ping(polaris_xcopy_script_t)
#
# calls mcp_chvrf.sh for ping and curl
polaris_chvrf_domtrans(polaris_xcopy_script_t)

# xcopy uses ps to find the curl process state
# "ps" needs read access to /sys/devices/system/cpu/online
# "ps" needs read access to /proc/uptime
dev_read_sysfs(polaris_xcopy_script_t)

# Started by bexecute so it has its stdin set to telnet pty file
telnet_use_ptys(polaris_xcopy_script_t)

# stdout is set to fifo set by rotte to capture output into btrace
# btrace also need these policies :
# btrace_init also refer to /tmp/sw/boot/..
polaris_use_btrace_fifo(polaris_xcopy_script_t)
polaris_cpld_read(polaris_xcopy_script_t)
polaris_boot_tmp_read(polaris_xcopy_script_t)

# Allow /tmp/xcopy/
type polaris_xcopy_tmp_t;
files_tmp_file(polaris_xcopy_tmp_t)
files_tmp_filetrans(polaris_xcopy_script_t, polaris_xcopy_tmp_t, { dir file })
polaris_xcopy_tmp_manage(polaris_xcopy_script_t)

# Curl writes the progress...
polaris_xcopy_tmp_manage(polaris_curl_t)

# PS command access ttyS1
term_getattr_unallocated_ttys(polaris_xcopy_script_t)

# sshpass/scp
ssh_getattr_user_home_dir(polaris_xcopy_script_t)

# sshpass uses the ptxm
term_use_ptxm(polaris_xcopy_script_t)
term_getattr_pty_fs(polaris_xcopy_script_t)

# scp uses ssh
#allow polaris_xcopy_script_t ssh_exec_t:file { execute execute_no_trans map open read };
ssh_exec(polaris_xcopy_script_t)
allow polaris_xcopy_script_t self:capability {sys_resource fsetid};
allow polaris_xcopy_script_t self:process setfscreate;
allow polaris_xcopy_script_t ssh_home_t:dir { create search };
allow polaris_xcopy_script_t devpts_t:chr_file { getattr open read setattr write };

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisxcopy.te
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#
# April 2017, Victor Kamensky
#
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#
#### <summary>Polaris dmi_ncsshd_fwd Policy Rules.</summary>
####
#### <summary>
## Connect to and send messages to dmi ncshhd_bp
## tmp/.ncsshd_bp.sock unix datagram sockets.

## <summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
#

interface(`polaris_dmi_ncsshd_fwd_dgram_send',
    gen_require(`
        type polaris_dmi_ncsshd_log_t;
        type polaris_dmi_ncsshd_fwd_t;
    ')
)

allow $1 self:unix_stream_socket {create_socket_perms};
allow $1 polaris_dmi_ncsshd_fwd_t:unix_stream_socket {connectto};
write_sock_files_pattern($1, polaris_dmi_ncsshd_log_t, polaris_dmi_ncsshd_log_t)
')

##################################################
## <summary>
## Write into fifo file created by dmi_ncsshd_fwd, typical case when
## hman starts script under popen.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## </summary>
## <rolecap/>
#

interface(`polaris_dmi_ncsshd_fwd_use_fifo',
    gen_require(`
        type polaris_dmi_ncsshd_fwd_t;
    ')
    write_fifo_files_pattern($1, polaris_dmi_ncsshd_fwd_t, polaris_dmi_ncsshd_fwd_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmincsshd_fwd.if
No license file was found, but licenses were detected in source scan.

dnl
dnl April 2018, Victor Kamensky
dnl
dnl Copyright (c) 2018-2019 by Cisco Systems, Inc.
dnl All rights reserved
define(`polaris_database_aux', `dnl
/tmp/rp/tdldb/[0-9]/$2 -- gen_context(system_u:object_r:$1,s0)
/tmp/fp/tdldb/[0-9]/$2 -- gen_context(system_u:object_r:$1,s0)
/tmp/cc/tdldb/[0-9]/$2 -- gen_context(system_u:object_r:$1,s0)
/tmp/rp/tdldb/[0-9]/$2.lock -- gen_context(system_u:object_r:$1,s0)
/tmp/fp/tdldb/[0-9]/$2.lock -- gen_context(system_u:object_r:$1,s0)
/tmp/cc/tdldb/[0-9]/$2.lock -- gen_context(system_u:object_r:$1,s0)
')

define(`polaris_database', `dnl
polaris_database_aux(database_label($1), $1)
')

define(`polaris_database_process', `)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_database_db_fc.m4

No license file was found, but licenses were detected in source scan.

#
# June 2017, Victor Kamensky
#
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#
#
## <summary>Polaris ioxman Policy Rules.</summary>

########################################
## <summary>
##      Manage ioxman temporary files and directories in /tmp.
## Like /tmp/ios_xml.dat.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_iox_manage_tmp_files',
  gen_require(
    type polaris_iox_tmp_t;
  )
  manage_files_pattern($1, polaris_iox_tmp_t, polaris_iox_tmp_t)
  files_tmp_filetrans($1, polaris_iox_tmp_t, file, "iox_xml.dat")
  files_tmp_filetrans($1, polaris_iox_tmp_t, file, "iox_override.conf")
)
# /tmp/trace/resource.log can be created by ioxman/vman/caf
# through sourcing in the family of the pvsm_*.sh scripts
files_tmp_filetrans($1, polaris_iox_tmp_t, file, "resource.log")
)

#########################################################################
## <summary>
##      Read ioxman temporary files and directories in /tmp.
## Like /tmp/ios_xml.dat and /tmp/iox_override.conf
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_iox_read_tmp_files',
    gen_require(
        type polaris_iox_tmp_t;
    ')
    read_files_pattern($1, polaris_iox_tmp_t, polaris_iox_tmp_t)
    ')

#########################################################################
## <summary>
##      Make the specified domain able to work with iosd2iox files
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_iox2iosd_tmp_manage',
    gen_require(
        type polaris_iox2iosd_tmp_t;
    ')
    manage_dirs_pattern($1, polaris_iox2iosd_tmp_t, polaris_iox2iosd_tmp_t)
    manage_files_pattern($1, polaris_iox2iosd_tmp_t, polaris_iox2iosd_tmp_t)
    ')

#########################################################################
## <summary>
##      Read ioxman executable file. Used by caf to read iosman
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_ioxman_exec_read',``
   gen_require(`
       type polaris_ioxman_exec_t;
       type bin_t;
   `)
   read_files_pattern($1, bin_t, polaris_ioxman_exec_t)
`)

######################################
## <summary>
##      Allow the specified domain to get show_version information
## from ioxman executable
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_ioxman_show_version',``
   gen_require(`
       type polaris_ioxman_exec_t;
   `)
   polaris_show_version($1, polaris_ioxman_exec_t)
`)

######################################
## <summary>
##      Allow the specified domain to get show_version information
## from dockerd and other container_runtime_t executables
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_container_runtime_show_version',``
   gen_require(`
       type container_runtime_exec_t;
   `)
polaris_show_version($1, container_runtime_exec_t)
')

###############################################
## <summary>
## Execute a domain transition to run cat9k_ssd_auth_cmds.sh
## </summary>
## <param name="domain">
## Domain allowed to transition.
## </param>
#
# interface('polaris_ssd_auth_domtrans',
#   gen_require(
#       type polaris_ssd_auth_t, polaris_ssd_auth_exec_t;
#   )
#
#   domtrans_pattern($1, polaris_ssd_auth_exec_t, polaris_ssd_auth_t)
#
###############################################
## <summary>
## Read ssd files in /tmp/ssd_blk_device
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
# interface('polaris_read_ssd_tmp_files',
#   gen_require(
#       type polaris_ssd_auth_tmp_t;
#   )
#
#   read_files_pattern($1, polaris_ssd_auth_tmp_t, polaris_ssd_auth_tmp_t)
#
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisioxman.if
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#
# Nov 2020, Swati Kumaro
#
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#

/dev/blzi_fpga -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)
/dev/blzi_ts_1pps -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)
/dev/blzi_gps_1pps -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)
/dev/blzi_lol_1pps -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)
/dev/blzi_ts_interest_0 -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)
/dev/blzi_ts_interest_1 -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)
/dev/blzi_ts_interest_2 -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)
/dev/blzi_ts_interest_3 -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)
/dev/blzi_ts_interest_4 -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)
/dev/blzi_ts_interest_5 -c gen_context(system_u:object_r:polaris_blzi_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisptpdrp.fc

No license file was found, but licenses were detected in source scan.

#

# January 2021, Gabriel Lee, Shawn Liu
#
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#

policy_module(polarisezmanage, 1.0);

type polaris_ezmanage_file_t;
files_type(polaris_ezmanage_file_t)
polaris_pfile_type(polaris_ezmanage_file_t)

polaris_process_domain_template(ezmanage)

# Allow ezManage script to be executed by systemd
gen_require(
    type unconfined_service_t;
')

polaris_ezmanage_domtrans(unconfined_service_t)

# Allow ezManage file and directory access
polaris_manage_ezmanage_files(polaris_ezmanage_t)

# Allow ezManage socket access
allow polaris_ezmanage_t self:unix_dgram_socket { connected_socket_perms sendto };

# Allow read of /etc/passwd
auth_use_nsswitch(polaris_ezmanage_t)
# ezManage python script needs access to USB ttys for modem AT channel
term_use_usb_ttys(polaris_ezmanage_t)

# ezManage python script needs /usr/bin/python3 execution and may also call other generic system bin utilities
corecmd_exec_bin(polaris_ezmanage_t)

# ezManage needs to access /bootflash/ciscosdwan.cfg and a variably named tar file in /bootflash/modem_firmware
polaris_bootflash_filetrans(polaris_ezmanage_t, polaris_ezmanage_file_t, file, "ciscosdwan.cfg")
polaris_bootflash_filetrans(polaris_ezmanage_t, polaris_ezmanage_file_t, file, "modem_firmware.tar.gz")

# ezManage socket file is created in /var/run
type polaris_ezmanage_var_run_t;
files_pid_file(polaris_ezmanage_var_run_t)
files_pid_filetrans(polaris_ezmanage_t, polaris_ezmanage_var_run_t, sock_file, "cwan_ezmanage_py_server")

# Allow ezManage to access its socket file in /var/run
polaris_manage_ezmanage_var_run_files(polaris_ezmanage_t)

# Allow ezManage to access ngiolite socket file in /var/run
gen_require(''
      type polaris_cwan_svr_var_run_t;
')
rw_sock_files_pattern(polaris_ezmanage_t, polaris_cwan_svr_var_run_t, polaris_cwan_svr_var_run_t)

# Allow ezManage to access ngiolite dgram_socket
gen_require(''
      type polaris_ngiolite_t;
')
allow polaris_ezmanage_t polaris_ngiolite_t:unix_dgram_socket sendto;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisezmanage.te

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#
# March 2017, Victor Kamensky
#
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#

## <summary>Polaris dbm Policy Rules.</summary>

#--------------------
##
## Setup /bootflash/.dbpersist directory and content.
##
## <param name="domain">
## Domain allowed access.

```c
interface('polaris_tddbpersist_setup',
    gen_require('`
       type polaris_disk_bootflash_t;
       type polaris_disk_dbm_t;
    `)
)  
filetrans_pattern($1, polaris_disk_bootflash_t, polaris_disk_dbm_t, dir, ".dbpersist")  
# allow creation of /bootflash/.dbpersist directory
manage_dirs_pattern($1, polaris_disk_bootflash_t, polaris_disk_dbm_t)
# dbm can manage files inside of its own polaris_disk_dbm_t directories
manage_files_pattern($1, polaris_disk_dbm_t, polaris_disk_dbm_t)
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdbm.if

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#
# May 2017, Victor Kamensky
#
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#

# polarismdtpubd file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismdtpubd.fc

No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#

policy_module(polaristtm, 1.0);

gen_require('`
    type polaris_ttm_t;
  `
)  
polaris_chasfs_read(polaris_ttm_t)
polaris_cpld_read(polaris_ttm_t)
logging_send_syslog_msg(polaris_ttm_t)

# vconfd_load_shared_schemas
polaris_conf_shared_schema_read(polaris_ttm_t)

# /var/run/ttmd socket and pid
type polaris_ttm_var_run_t;
files_pid_file(polaris_ttm_var_run_t)
manage_files_pattern(polaris_ttm_t, polaris_ttm_var_run_t, polaris_ttm_var_run_t)
manage_sock_files_pattern(polaris_ttm_t, polaris_ttm_var_run_t, polaris_ttm_var_run_t)
files_pid_filetrans(polaris_ttm_t, polaris_ttm_var_run_t, { file sock_file })

# allow /usr/binos/bin/ttmd to acces polaris_tdlresolve_t and
#                                    polaris_global_service_t
polaris_tdlresolve_manage(polaris_ttm_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristtm.te
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#
# February 2020, Victor Kamensky
#
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#

class_module(polarissdavcproxy, 1.0);

gen_require(`
    type polaris_sdavc_proxy_t;
')

# btrace_application_start
polaris_chasfs_read(polaris_sdavc_proxy_t)
polaris_tdlresolve_read(polaris_sdavc_proxy_t)
polaris_cpld_read(polaris_sdavc_proxy_t)

# Allow SDAVC exports using UDP socket.
allow polaris_sdavc_proxy_t self:udp_socket create_socket_perms;

# Change namespace to allow network communitcation with vManage
(process_namespace_network_change_internal - opens /var/run/netns/*)
polaris_cedge_set_ns(polaris_sdavc_proxy_t)

# Reset the anmespace back to default (process_namespace_network_default opens /proc/1/ns/net)
polaris_cedge_reset_ns(polaris_sdavc_proxy_t)
type polaris_sdavc_proxy_files_t;
files_type(polaris_sdavc_proxy_files_t)
polaris_pfile_type(polaris_sdavc_proxy_files_t)

# Create /bootflash/sdavc directory, Write, Read & Removed files (For SDAVC imports)
polaris_bootflash_filetrans(polaris_sdavc_proxy_t, polaris_sdavc_proxy_files_t, dir, "sdavc")
polaris_bootflash_filetrans(polaris_iosd_t, polaris_sdavc_proxy_files_t, dir, "sdavc")
polaris_sdavc_proxy_manage(polaris_sdavc_proxy_t)

# IOSd process also should have access to /bootflash/sdavc directory
gen_require('type polaris_iosd_t;
')
polaris_sdavc_proxy_manage(polaris_iosd_t)

# Allow SDAVC imports (HTTP GET, PUT) we use /usr/bin/curl executable.
# Exe: curl -f -s --connect-timeout 10 -o /bootflash/sdavc/... -w%{http_code} http://<user>:<pw>@<vManage system ip>:<port>
# Run CURL in its domain so it wont have all sdavcproxy permissions.

gen_require('type polaris_curl_t;
')
polaris_curl_domtrans(polaris_sdavc_proxy_t)
corenets_tcp_connect_generic_port(polaris_curl_t)

# cURL process also should have access to /bootflash/sdavc directory
polaris_sdavc_proxy_manage(polaris_curl_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissdavcproxy.te
No license file was found, but licenses were detected in source scan.

# # Sep 2020, Sridhar C
#
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#

/usr/binos/conf/xcopy_script.sh -- gen_context(system_u:object_r:polaris_xcopy_script_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisxcopy.fc
No license file was found, but licenses were detected in source scan.
policy_module(polarisdroputil, 1.0);

polaris_process_domain_template(droputil)

corecmd_exec_bin(polaris_droputil_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_droputil_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_droputil_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_droputil_t)

# work with /tmp files
file_type polaris_droputil_tmp_t;

files_tmp_file(polaris_droputil_tmp_t)
manage_dirs_pattern(polaris_droputil_t, tmp_t, polaris_droputil_tmp_t)
manage_files_pattern(polaris_droputil_t, polaris_droputil_tmp_t, polaris_droputil_tmp_t)
manage_fifo_files_pattern(polaris_droputil_t, polaris_droputil_tmp_t, polaris_droputil_tmp_t)
manage_lnk_files_pattern(polaris_droputil_t, polaris_droputil_tmp_t, polaris_droputil_tmp_t)
files_tmp_filetrans(polaris_droputil_t, polaris_droputil_tmp_t, { file dir })

# on some platform /tmp/rp/dropbox is created by binos service
# that runs under initrc_t


gen_require(
      type initrc_t;
    )

files_tmp_filetrans(initrc_t, polaris_droputil_tmp_t, dir, "dropbox")

allow polaris_droputil_t self:capability { sys_resource dac_override };
allow polaris_droputil_t self:process setpgid;

polaris_btrace_data_manage(polaris_droputil_t)
polaris_cpld_read(polaris_droputil_t)
polaris_chasfs_manage(polaris_droputil_t)
polaris_boot_tmp_read(polaris_droputil_t)
polaris_read_debug_conf(polaris_droputil_t)
polaris_disk_crashinfo_getattr(polaris_droputil_t)
polaris_monbifo_tmp_read(polaris_droputil_t)
# runs systemctl start reflector.service
systemd_exec_systemctl(polaris_droputil_t)

# PLEASE LOOK AT ME need to have separate label for reflector.service
# allow only to start if, do it once copy of reflector.service is fixed
systemd_config_generic_services(polaris_droputil_t)

# droputil.sh deletes /tmp/rp/droputil/so-del-stage/rp/0
fs_getattr_tmpfs(polaris_droputil_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdroputil.te
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#
# March 2017, Victor Kamensky
#
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#

policy_module(polarisofa, 1.0);

gen_require(
  type polaris_ofa_t;
')

polaris_btrace_data_manage(polaris_ofa_t)
polaris_crft_data_manage(polaris_ofa_t)
polaris_chasfs_manage(polaris_ofa_t)
polaris_tdlresolve_read(polaris_ofa_t)
polaris_tdlldb_list_dirs(polaris_ofa_t)
polaris_cpld_read(polaris_ofa_t)
polaris_flashlib_read(polaris_ofa_t)

allow polaris_ofa_t self:capability sys_admin;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisofa.te
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
# /bootflash labels
/bootflash(/.*)? gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

/bootflash/ssh(/.*)? gen_context(system_u:object_r:ssh_home_t,s0)

/bootflash/ssh/ssh_host.*_key\pub gen_context(system_u:object_r:sshd_key_t,s0)

/bootflash/ssh/ssh_host.*_key gen_context(system_u:object_r:sshd_key_t,s0)

/bootflash/tracelogs(/.*)? gen_context(system_u:object_r:polaris_btrace_data_t,s0)

/bootflash/tan(/.*)? gen_context(system_u:object_r:polaris_btrace_data_t,s0)

/bootflash/core(/.*)? gen_context(system_u:object_r:polaris_core_file_t,s0)

/bootflash/debug.conf gen_context(system_u:object_r:polaris_debug_conf_t,s0)

/bootflash/packages.conf gen_context(system_u:object_r:polaris_packages_conf_t,s0)

# /objstore
/objstore(/.*)? gen_context(system_u:object_r:polaris_disk_objstore_t,s0)

/dev/shm/sem\objstore_sem gen_context(system_u:object_r:polaris_objstore_sem_t,s0)

# hanet driver used by vpcgw platform of VXFamily
ifdef(`vpcgw_platform',`
/dev/hanet -c gen_context(system_u:object_r:polaris_hanet_device_t,s0)
')

# /csl_p_0
/csl_p_0(/.*)? gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)

# /csl_p_1.context
/csl_p_1(/.*)? gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)

# /csl_s_0.context
/csl_s_0(/.*)? gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)

# /csl_s_1.context
/csl_s_1(/.*)? gen_context(system_u:object_r:polaris_disk_csl_s_t,s0)

# /varied
/varied(/.*)? gen_context(system_u:object_r:polaris_disk_varied_t,s0)

/varied/install_info gen_context(system_u:object_r:polaris_vxeinstall_info_t,s0)

/varied/obfl.* gen_context(system_u:object_r:polaris_obfl_data_t,s0)

/varied/grub_cisco_version gen_context(system_u:object_r:polaris_grubver_t,s0)

/varied/grub(/.*)? gen_context(system_u:object_r:boot_t,s0)

/varied/grub2(/.*)? gen_context(system_u:object_r:polaris_grub_bios_t,s0)

/varied/vcpu_template.txt gen_context(system_u:object_r:polaris_iosd_vcpu_t,s0)

/sbin/grub* gen_context(system_u:object_r:bootloader_exec_t,s0)

# /grubenv
/bootefi(/.*)? gen_context(system_u:object_r:polaris_grub_efi_t,s0)

# from /lib/tmpfiles.d/binos-vxe.conf
/lic0 -l gen_context(system_u:object_r:polaris_disk_csl_p_t,s0)
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisvxe.fc
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#
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#

policy_module(polarisboot, 1.0);

# /tmp/sw/boot policy

# dmesg command is executed in its own domain and result is store
# into /tmp/sw/boot/dmesg file


# /tmp/reload_reason copied from /bootflash/prst_sync/reload_info
files_tmp_filetrans(domain, polaris_boot_tmp_t, file, "reload_reason")

# /tmp/bootup_timestamp created by /etc/init.d/binos
gen_require(
    type initrc_t;
    type init_t;
)
files_tmp_filetrans( { initrc_t init_t }, polaris_boot_tmp_t, file, "bootup_timestamp")

type polaris_boot_file_t;
files_type(polaris_boot_file_t)
polaris_pfile_type(polaris_boot_file_t)
gen_require(
    type polaris_disk_bootflash_t;
)
filetrans_pattern(domain, polaris_disk_bootflash_t, polaris_boot_file_t, file, "reload_info")
filetrans_pattern(domain, polaris_disk_bootflash_t, polaris_boot_file_t, file, "stack_reload_info")

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisboot.te
No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscfgmgr.fc
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscxp.fc
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdnimportsfetch.fc
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisftm.fc
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmbdg.fc
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfpm.fc
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisvdaemon.fc
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristtm.fc
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisomp.fc
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisinstallmgr.fc
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
# Copyright (c) 2016-2021 by Cisco Systems, Inc.
## <summary>Polaris Common Policy Rules.</summary>

### Create a domain for long running Polaris processes in confined mode.

### <param name="domain">
### Domain allowed access.
### </param>

### <param name="entry_point">
### Type of the program to be used as an entry point to this domain.
### </param>

```plaintext
interface('polaris_process_domain_confined',

gen_require(
    type unconfined_service_t;
')
init_daemon_domain($1, $2)

# polaris process now started by pman, which still runs
# under unconfined label
type_transition unconfined_service_t $2:process $1;
allow unconfined_service_t $1:process transition;
allow $1 unconfined_service_t:process sigchld;

polaris_pman_entry($1, $2)

gen_require('attribute polaris_domain;
    attribute polaris_exec_domain;
    attribute polaris_extended_domain;
')
typeattribute $1 polaris_domain, polaris_extended_domain;
typeattribute $2 polaris_exec_domain;

# allow all process to check whether kernel ksm is enabled
```
polaris_ksm_run_check($1)
')

########################################################
## <summary>
## Create a domain for long running Polaris processes. Note
## depending on policy build setting it could be confined or
## not confined
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <param name="entry_point">
## Type of the program to be used as an entry point to this domain.
## </param>
# interface(`polaris_process_domain',`

# the default is to confine all domains
polaris_process_domain_confined($1, $2)

#
# if the domain is in the permissive map, then set it to be confined
# permissive. if the domain is in the confined map, then there really
# isnt much else to do but leave it confined. if the domain isnt in
# the permissive or confined maps then determine if the domain should
# be unconfined.
#
# ifelse(permissive_domain($1), $1, `polaris_permissive_domain_setup($1)',
#        confined_domain($1), $1, `',
#        `polaris_domain_maybe_unconfined($1)'
')

########################################################
## <summary>
## Create a domain for utility Polaris processes in
## confined mode.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <param name="entry_point">

## <summary>
## Type of the program to be used as an entry point to this domain.
## </summary>
## </param>
#

interface('polaris_utility_domain_confined',
    domain_type($1)
domain_entry_file($1, $2)
    role system_r types $1;

    gen_require(
        attribute polaris_domain;
        attribute polaris_exec_domain;
        attribute polaris_extended_domain;
    )
typeattribute $1 polaris_domain, polaris_extended_domain;
typeattribute $2 polaris_exec_domain;

    # allow all process to check whether kernel ksm is enabled
    polaris_ksm_run_check($1)
)

############################################################
## <summary>
## Create a domain for utility Polaris processes. Note
## depending on policy build setting it could be confined or
## not confined
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
## <param name="entry_point">
## <summary>
## Type of the program to be used as an entry point to this domain.
## </summary>
## </param>
#

interface('polaris_utility_domain',
    # the default is to confine all domains
    polaris_utility_domain_confined($1, $2)

    #
    # if the domain is in the permissive map, then set it to be confined
    # permissive. if the domain is in the confined map, then there really
    # isn't much else to do but leave it confined. if the domain isn't in
# the permissive or confined maps then determine if the domain should
# be unconfined.
#
#endif
#endif
ifelse(permissive_domain($1), $1, `polaris_permissive_domain_setup($1)',
  confined_domain($1), $1, "",
  `polaris_domain_maybe_unconfined($1)')
')

########################################
## <summary>
##	Creates types and rules for a basic
##	polaris process domain.
## </summary>
## <param name="stem">
##	<summary>
##	Stem for the domain. Name is contrstucted as polaris_stem_t
##	</summary>
## </param>
#
#template(`polaris_process_domain_template',`
  type polaris_$1_t;
  type polaris_$1_exec_t;

  polaris_process_domain(polaris_$1_t, polaris_$1_exec_t)
  ifdef(polaris_permissive,`
    permissive polaris_$1_t;
  `)

  polaris_btrace_data_client_template($1)
polaris_maroon_data_client_template($1)
polaris_crft_data_client_template($1)
polaris_process_proc_kpageflags_template($1)
polaris_process_uswap_access(polaris_$1_t, $1, "$1")
')

########################################
## <summary>
##	Creates types and rules for a basic
##	polaris process domain.
## </summary>
## <param name="stem">
##	<summary>
##	Stem for the domain. Name is contrstucted as polaris_stem_t
##	</summary>
## </param>
#
#template(`polaris_utility_domain_template',`
  type polaris_$1_t;
type polaris$_1$_exec_t;

polaris_utility_domain(polaris$_1$_t, polaris$_1$_exec_t)
ifdef(polaris_permissive,
    permissive polaris$_1$_t;
')

polaris_btrace_data_client_template($1)
polaris_maroon_data_client_template($1)
polaris_crft_data_client_template($1)
polaris_process_proc_kpageflags_template($1)
')

######################################
## <summary>
##  Allow the specified domain to execute polaris domain
##  process in the caller domain.
## </summary>
## <param name="domain">
##  Domain allowed access.
## </param>
#
interface(`polaris_exec',`
    gen_require(`
        attribute polaris_exec_domain;
    ')

can_exec($1, polaris_exec_domain)
')

######################################
## <summary>
##  Allow the specified domain to read polaris domain
##  executable file. I.e to get information from executables
##  like binary trace info, trace key etc
## </summary>
## <param name="domain">
##  Domain allowed access.
## </param>
## <//summary>
#
interface(`polaris_read_exec_domain',`
    gen_require(`
        attribute polaris_exec_domain;
    ')
type bin_t;
)

read_files_pattern($1, bin_t, polaris_exec_domain)
)

#########################################################
## <summary>
##   Allow the specified domain to receive signals from any
##   polaris process.
## </summary>
## <param name="domain">
##   <summary>
##   Domain allowed access.
##   </summary>
## </param>
#
# interface('polaris_receive_signal_from_domain',
#       gen_require(
#           attribute polaris_domain;
#       )
#
#   allow polaris_domain $1:process signal_perms;
#)

#########################################################
## <summary>
##   Systemd-tmpfiles utility creates an object
##   in the tmp directories, with a private type using a type
##   transition.
##   Note rules to create files and directories which are
##   performed by systemd-tmpfiles reside in /lib/tmpfiles.d/
##   directory. And polaris specific rules are in binos.conf file.
##   Note systemd-tmpfiles utility would use label from file_contexts
##   to restore proper label. I.e the same effect could be achived by
##   placing proper .fc expression.
## </summary>
## <param name="private type">
##   <summary>
##   The type of the object to be created.
##   </summary>
## </param>
## <param name="object">
##   <summary>
##   The object class of the object being created.
##   </summary>
## </param>
## <param name="name"
interface('polaris_systemd_tmpfiles_tmp_filetrans', `)
gen_require(`
    type systemd_tmpfiles_t;
  )
files_tmp_filetrans(systemd_tmpfiles_t, $1, $2, $3)
)`

# socketat through get_netns_fd function call access
# /proc/pid/ns/net file
#
# Implementation notes:
#
# wants to read /proc/pid/ns/net but gets denial because our 3.10 kernel
# does not support nsfs yet, so /proc/pid/ns/net is marked as proc_t instead
# of be nsfs_t. For now allow read access to proc_t through
# kernel_system_state_reader attribute. Try to drop it in latter kernels
# type=AVC msg=audit(1479574148.450:70): avc: denied { open } for pid=27619 comm="smd"
# path="net:[4026531957]" dev="proc" ino=4026531957 scontext=system_u:system_r:polaris_smd_t:s0
tcontext=system_u:object_r:proc_t:s0 tclass=file
# in 4.4 /proc/pid/ns/net inode is under nsfs_t, polaris_smd_t needs to
# open,getattr, and read from it
#
# Domain allowed access.
#
interface('polaris_socketat_nsfs_read', `)
kernel_read_system_state($1)
fs_read_nsfs_files($1)
gen_require(`
    type ifconfig_var_run_t;
  )
list_dirs_pattern($1, ifconfig_var_run_t, ifconfig_var_run_t)
)`

# All namespace related operation to switch name space
# is covered under this macro.
interface('polaris_namespace_set_netns_with_etc',

    files_mounton_isid($1)
    files_mounton_rootfs($1)
    dev_mount_sysfs_fs($1)
    dev_unmount_sysfs_fs($1)
    sysnet_read_config($1)
    sysnet_write_config($1)
    sysnet_manage_config_dirs($1)
    files_rw_etc_files($1)
    allow $1 net_conf_t:file mounton;
    allow $1 etc_t:file mounton;
    allow $1 self:capability sys_chroot;
')

###################################################################
## <summary>
##      process can execute libeiutil build_config_directory function
##
## Implementation notes:
## build_config_directory function from mgmt/libeiutil/src/eutil.c
## calls glibc nftw function, which effectively walks whole file tree
## and execute given call back. While function is executed it needs
## access to all files and directories attributes also it wants to
## search all directories. But we will not grant search access to
## security_file_type, instead we will dontaudit those. Anyway no
## relevant config file should be under security_file_type directory.
##
## @param domain
##      Domain allowed access.
##      
##    files_getattr_all_files($1)
##    files_getattr_all_dirs($1)
##    files_read_all_symlinks($1)
##    files_list_non_security($1)
##    files_dontaudit_list_security_dirs($1)
')
## <summary>
## Allow the specified domain to read write from i2c device.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>

```cpp
interface(`polaris_i2c_use',
    gen_require(`
        type device_t;
        type polaris_i2c_device_t;
    ')
    rw_chr_files_pattern($1, device_t, polaris_i2c_device_t)
')
```

## <summary>
## Work (read, write, ioctl) with /dev/remap_mem0
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>

```cpp
interface(`polaris_remap_mem_dev_use',
    gen_require(`
        type device_t;
        type polaris_remap_mem_device_t;
    ')
    write_chr_files_pattern($1, device_t, polaris_remap_mem_device_t)
    read_chr_files_pattern($1, device_t, polaris_remap_mem_device_t)
    allow $1 polaris_remap_mem_device_t:chr_file map;
')
```

## <summary>
## Allow the specified domain to read firmware files
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <summary>
## Allow the specified domain to manage firmware files
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_firmware_manage',
    gen_require(
        type polaris_firmware_t;
    )
)
manage_files_pattern($1, polaris_firmware_t, polaris_firmware_t)
manage_link_files_pattern($1, polaris_firmware_t, polaris_firmware_t)
manage_dirs_pattern($1, polaris_firmware_t, polaris_firmware_t)
')

## <summary>
## Allow the specified domain to getattr of firmware files
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_firmware_getattr',
    gen_require(
        type polaris_firmware_t;
    )
)
getattr_files_pattern($1, polaris_firmware_t, polaris_firmware_t)
')

####################################################
## <summary>
##     Allow the specified domain to map of firmware files
## </summary>
## <param name="domain">
##     Domain allowed access.
## </param>
#
# interface('polaris_firmware_map',
#     gen_require(
#         type polaris_firmware_t;
#     ')
#     read_files_pattern($1, polaris_firmware_t, polaris_firmware_t)
#     allow $1 polaris_firmware_t:file map;
#)

####################################################
## <summary>
##     Allow the specified domain to write relocations into text segment, deals
##     with icc broken relocations.
##
## LOOK AT ME:
## Basically it deals with denials like this:
## type=AVC msg=audit(1475815369.598:3): avc: denied { execmod } for pid=4929 comm="cman_fp"
## path="/tmp/sw/mount/csr1000v-mono-universalk9.2016-10-06_20.15_kamensky.SSA.pkg/usr/cpp/lib64/libcpp_client_ha_oor.so" dev="loop0" ino=7683
## scontext=system_u:system_r:unconfined_service_t:s0 tcontext=system_u:object_r:lib_t:s0 tclass=file
## It happens because icc generates code with relocations in text segment and
## run-time linker is dealing with it by doing mprotect(WRITE), relocatings,
## mprotect(NO WRITE). Remove once icc compiled is fixed
##
## </summary>
## <param name="domain">
##     Domain allowed access.
## </param>
#
# interface('polaris_icc_broken_relocations',
#     gen_require(
#         type lib_t;
#     ')
#     read_files_pattern($1, polaris_firmware_t, polaris_firmware_t)
#     allow $1 polaris_firmware_t:file map;
#)
allow $1 lib_t:file execmod;

')

###############################
## <summary>
## Allow the specified domain to work with /dev/mem
##
## LOOK AT ME!!! LOOK AT ME!!! Missing driver: application works with /dev/mem directly
##
## </summary>
## <param name="domain">
##
## Domain allowed access.
##
## </param>
#
#
interface('polaris_dev_mem_use',
    dev_read_raw_memory($1)
    dev_write_raw_memory($1)
    allow $1 self:capability sys_rawio;
    gen_require(
        type memory_device_t;
        )
    allow $1 memory_device_t:chr_file map;
')

###############################
## <summary>
## Append to /tmp/etc file. First usage to update xinetd.conf files.
##
## </summary>
## <param name="domain">
##
## Domain allowed access.
##
## </param>
#
#
interface('polaris_etc_append',
    gen_require(
        type polaris_etc_t;
        )
    append_files_pattern($1, polaris_etc_t, polaris_etc_t)
')

###############################
## <summary>
## Search /tmp/etc directory
## <summary>
## Domain allowed access.
## </summary>

```
interface('polaris_etc_search',
    gen_require(
        type polaris_etc_t;
    )
    search_dirs_pattern($1, polaris_etc_t, polaris_etc_t)
)
```

### List the contents of /etc directories.

```
interface('polaris_etc_list',
    gen_require(
        type polaris_etc_t;
    )
    allow $1 polaris_etc_t:dir list_dir_perms;
)
```

### Allow domain to attach to TUN devices created by ifconfig_t subject.

```
interface('ifconfig_attach_tun_iface',
    gen_require(
        type ifconfig_t;
    )
    allow $1 ifconfig_t:tun_socket relabelfrom;
)
allow $1 self:tun_socket relabelto;
'

############################

## <summary>
## Perms used by pidof
## binos/infra/systemd/scripts/errmsg.sh, might needs /dev/ttyS0
## access.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <rolebase/>
#
interface(`pidof_use',`
  # FIXME or fix labeling
  # /sys/devices/system/cpu/online should be labeled cpu_online_t
  # but for some reason this did not happen, grant perms for both
  dev_read_sysfs($1)
  dev_read_cpu_online($1)
  # /proc scan
  domain_read_all_domains_state($1)
  kernel_list_proc($1)
')

############################

## <summary>
## Script can execute errmsg function from
## binos/infra/systemd/scripts/errmsg.sh, might needs /dev/ttyS0
## access.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <rolebase/>
#
interface(`polaris_script_errmsg_use',`
  # send to syslog (journal), iosd outputs to console if up
  logging_send_syslog_msg($1)
  # check if iosd is up and find its pid and if ttyS0 is opened
  pidof_use($1)
  # if FDs dont have ttyS0 it sends to console itself
  term_use_unallocated_ttys($1)
')
## <summary>
## Allow the specified domain to read ebf (explicit bindind) files
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_ebf_map`,
    gen_require(
        type polaris_ebf_t;
    ')

    read_files_pattern($1, polaris_ebf_t, polaris_ebf_t)
    allow $1 polaris_ebf_t:file map;
')

## <summary>
## Allow the specified domain to execute show_version command for given executable label
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <param name="subject_exec">
## Domain of executable that version can be checked
## </param>
#
interface(`polaris_show_version`,
    read_files_pattern($1, $2, $2)
    allow $1 $2:file map;
')

## <summary>
## Configure the polaris domain as permissive
## </summary>
## <param name="domain"/>
### <summary>
### Domain allowed access.
### </summary>
### </param>
### <rolebase/>
#
interface('polaris_permissive_domain_setup',
    gen_require(
        type $1;
    ')

permissive $1;
')

########################################
### <summary>
### Creates types and rules for process access to uswap feature.  
### Ability to create file/folder under /bootflash/.USWAP/"FRU", and map file.
### </summary>
### </param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
### <param name="stem">
### <summary>
### Stem for the object label. Name is contructed as polaris_"stem"_uswap_files_t. It should be the short form of the process name.  
### E.g., for IOSd polaris_iosd_uswap_files_t.
### </summary>
### </param>
### <param name="name">
### <summary>
### The name of the object being created.  
### Name of the folder created by the process for creating the uswap files.
### </summary>
### </param>
#
template('polaris_process_uswap_access',
    gen_require(
        type polaris_uswap_files_t;
    ')  
        type polaris_$2_uswap_files_t;
files_type(polaris_$2_uswap_files_t)
polaris_pfile_type(polaris_$2_uswap_files_t)

filetrans_pattern($1, polaris_uswap_files_t, polaris_$2_uswap_files_t, {file dir})
manage_dirs_pattern($1, polaris_$2_uswap_files_t, polaris_$2_uswap_files_t)
manage_files_pattern($1, polaris_$2_uswap_files_t, polaris_$2_uswap_files_t)
manage_link_files_pattern($1, polaris_$2_uswap_files_t, polaris_$2_uswap_files_t)
allow $1 polaris_$2_uswap_files_t:file map;

# allow access to pvp to clean-up the process related uswap file/folder
   gen_require('  
       type polaris_pvp_t;
       ')  
   allow polaris_pvp_t polaris_$2_uswap_files_t:dir { read remove_name rmdir write };  
   allow polaris_pvp_t polaris_$2_uswap_files_t:file unlink;  
   ')  

########################################
   ## <summary>
   ##      Allow process access to access page related files such as "/proc/kpageflags"
   ## </summary>
   ## <param name="stem">
   ##      <summary>
   ##      Stem for the domain. Name is contrstructed as polaris.stem_t
   ##      </summary>
   ## </param>
   #
   template('polaris_process_proc_kpageflags_template',
      gen_require('  
          type proc_t;
          ')  
      allow polaris_$1_t proc_t:file { open read };  
      ')  

########################################
   ## <summary>
   ##      transition context of fman(rp/fp) created iptbl tmp files related to acl mgmt.
   ## </summary>
   ## <param name="domain">
   ##      <summary>
   ##      Domain allowed access.
   ##      </summary>
   ## </param>
   #
   interface('polaris_fman_acl_iptbl_tmp_file',
      gen_require('  
          type polaris_iptbl_tmp_t;
files_tmp_filetrans($1, polaris_iptbl_tmp_t, file, "iptbl.v4")
files_tmp_filetrans($1, polaris_iptbl_tmp_t, file, "iptbl.v6")
manage_files_pattern($1, polaris_iptbl_tmp_t, polaris_iptbl_tmp_t)

#######################################
## <summary>
##      Manage files/folders in /tmp/rsync_log_dir.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_manage_rsync_tmplog_dir',`
  gen_require(
    type polaris_rsync_tmp_t;
  )
  manage_files_pattern($1, polaris_rsync_tmp_t, polaris_rsync_tmp_t)
  manage_dirs_pattern($1, polaris_rsync_tmp_t, polaris_rsync_tmp_t)
')

#######################################
## <summary>
##      Manage cerr shared memory /dev/shm/cerrno_dll.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_cerr_shm_manage',`
  gen_require(
    type tmpfs_t;
    type polaris_cerr_shm_t;
  )
  fs_getattr_tmpfs($1)
  manage_files_pattern($1, tmpfs_t, polaris_cerr_shm_t)
  allow $1 polaris_cerr_shm_t:file map;
  fs_tmpfs_filetrans($1, polaris_cerr_shm_t, file, "cerrno_dll")
')

#######################################
## <summary>
## Manage shared memory for vrf - /dev/shm/vrf_shm.

### <summary>

### <param name="domain">

### Domain allowed access.

### </summary>

```
interface(`polaris_vrf_shm_manage',
    gen_require(`
        type tmpfs_t;
        type polaris_vrf_shm_t;
    `)
    fs_getattr_tmpfs($1)
    manage_files_pattern($1, tmpfs_t, polaris_vrf_shm_t)
    allow $1 polaris_vrf_shm_t:file map;
    filetrans_pattern($1, tmpfs_t, polaris_vrf_shm_t, file, "vrf_shm")
)
```

### On-demand creation of vrf-based netns using "ip netns".

### <summary>

### <param name="domain">

### Domain allowed access.

### </summary>

```
interface(`polaris_vrf_netns_manage',
    polaris_vrf_shm_manage($1)
    kernel_rw_net_sysctls($1)
    polaris_lfts_dev_use($1)
    sysnet_exec_ifconfig($1)
    sysnet_manage_ifconfig_run($1)
    gen_require(`
        type ifconfig_var_run_t;
    `)
    allow $1 ifconfig_var_run_t:file { create mounton open read };
    allow $1 ifconfig_var_run_t:dir mounton;
    gen_require(`
        type polaris_ip_linux_port_var_t;
    `)
    read_files_pattern($1, var_t, polaris_ip_linux_port_var_t)
    getattr_files_pattern($1, var_t, polaris_ip_linux_port_var_t)
)```
### <summary>
### Allow read/write of network state directory files
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>

```c
interface('polaris_kernel_rwlock_network_state_files',
gen_require(
    type proc_net_t;
')

rw_files_pattern($1, proc_net_t, proc_net_t)
')
```

### <summary>
### Allow the specified domain to send signals to Binos shell
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>

```c
interface('polaris_send_signal_to_shell',
gen_require(
    type polaris_shell_t;
')

    allow $1 polaris_shell_t:process signal_perms;
')
```

### <summary>
### Execute curl in the curl domain.
### </summary>
### <param name="domain">
### Domain allowed to transition.
### </summary>
interface('polaris_curl_domtrans',
    gen_require(
        type polaris_curl_t, polaris_curl_exec_t;
    ')
)

corecmd_search_bin($1)
domtrans_pattern($1, polaris_curl_exec_t, polaris_curl_t)
'

interface('rsync_tmp_manage',
    gen_require(
        type rsync_tmp_t;
    ')
)

manage_dirs_pattern($1, rsync_tmp_t, rsync_tmp_t)
manage_files_pattern($1, rsync_tmp_t, rsync_tmp_t)
manage_lnk_files_pattern($1, rsync_tmp_t, rsync_tmp_t)
manage_fifo_files_pattern($1, rsync_tmp_t, rsync_tmp_t)
'

interface('polaris_ldwm_envelope_read',
    gen_require(
        type polaris_ldwm_envelope_tmp_t;
    ')
)

read_files_pattern($1, polaris_ldwm_envelope_tmp_t, polaris_ldwm_envelope_tmp_t)
'

## <param name="domain">
##      Domain allowed access.
## </param>

## <summary>
##      Allow the specified domain to read /tmp/ldwm_envelope file
## </summary>
### <summary>
### This is copied from polarisngwc.if since other platforms may also
### read/write /sys/devices files. In addition to ngwc, tsn requires it.
### Write into /sys/devices/virtual/misc/ggpio/gpio_out_assert sysfs files.
### or /sys/devices/platform/cpn-110-master/cpn-110-master sysfs
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
interface('polaris_ggpio_dev_read_write',
    gen_require(
        type polaris_sysfs_ggpio_t;
    ')
    read_files_pattern($1, polaris_sysfs_ggpio_t, polaris_sysfs_ggpio_t)
    write_files_pattern($1, polaris_sysfs_ggpio_t, polaris_sysfs_ggpio_t)
')

### <summary>
### Manage files under /bootflash/certs, cert files for AP
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
#
interface('polaris_wlc_ap_cert_manage',
    gen_require(
        type polaris_ap_cert_file_t;
    ')
    manage_files_pattern($1, polaris_ap_cert_file_t, polaris_ap_cert_file_t)
    manage_dirs_pattern($1, polaris_ap_cert_file_t, polaris_ap_cert_file_t)
')

### <summary>
### Manage SERDES key directory and files
### SERDES library stores info in /tmp/serdes_asic_key_dir/*
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
interface('polaris_serdes_asic_key_tmp_manage',
    gen_require(
        type polaris_serdes_asic_key_tmp_t;
    )
)
files_tmp_filetrans($1, polaris_serdes_asic_key_tmp_t, {dir file}, "serdes_asic_key_dir")
manage_dirs_pattern($1, {tmp_t polaris_serdes_asic_key_tmp_t}, polaris_serdes_asic_key_tmp_t)
manage_files_pattern($1, polaris_serdes_asic_key_tmp_t, polaris_serdes_asic_key_tmp_t)
')

#######################################
## <summary>
##      Manage polaris_tech_support_tmp_t in /tmp.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
interface('polaris_tech_support_tmp_read',
    gen_require(
        type polaris_tech_support_tmp_t;
    )
)
read_files_pattern($1, polaris_tech_support_tmp_t, polaris_tech_support_tmp_t)
')

#######################################
## <summary>
##      Getattr of any file under /proc/*/fd/*. Typically
## run by lsof.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
interface('polaris_proc_fd_all_getattr',
    domain_read_all_domains_state($1)
    files_getattr_all_files($1)
    files_getattr_all_dirs($1)
    files_getattr_all_sockets($1)
    files_getattr_all_pipes($1)
files_getattr_all_chr_files($1)
files_getattr_all_symlinks($1)
files_read_all_dirs_except($1)
dev_getattr_all_chr_files($1)
dev_getattr_all_blk_files($1)
dev_getattr_mtrr_dev($1)

# misc socket and fifo files got created under label of its process domain
# and since domain labes are not in file_type attribute, need special
# permission
    gen_require('attribute domain;'')
    allow $1 domain:{socket socket_class_set fifo_file} getattr;
# access sysctl_rpc_t
    kernel_read_rpc_sysctls($1)
)

###########################################################

###<summary>
### Manage files and directories sysfs. This should only be used
### if the interface needs sysfs_t create access. Otherwise please use
### dev_rw_sysfs
###</summary>

###<param name="domain">
###<summary>
### Domain allowed access.
###</summary>

###</param>
###<rolebase/>
#
interface(`polaris_sysfs_manage',``
    gen_require('type sysfs_t;'')
    manage_files_pattern($1, sysfs_t, sysfs_t)
)

###########################################################

###<summary>
### Check access to the init/systemd executable.
###</summary>

###<param name="domain">
###<summary>
### Domain allowed access.
###</summary>

###</param>
interface('polaris_init_access_check',`;
  gen_require(`
    type init_exec_t;
  `);
  init_access_check($1)
  allow $1 init_exec_t:file {open read};
  allow $1 init_exec_t:lnk_file read_lnk_file_perms;
`);

#######################################
## <summary>
##      Manage polaris_manage_rommon_info in /tmp.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
interface('polaris_manage_rommon_info',`
  gen_require(`
    type polaris_rommon_info_tmp_t;
  `);
  manage_files_pattern($1, polaris_rommon_info_tmp_t, polaris_rommon_info_tmp_t)
`);

#######################################
## <summary>
##      Allow the specified domain to manage tamlib debug file /bootflash/tamlib_dbg_log
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_tamlib_dbg_file_manage',`
  gen_require(`
    type polaris_tamlib_dbg_file_t;
  `);
  filetrans_pattern($1, polaris_disk_bootflash_t, polaris_tamlib_dbg_file_t, file, "tamlib_dbg_log")
  manage_files_pattern($1, polaris_tamlib_dbg_file_t, polaris_tamlib_dbg_file_t)
`);

#######################################
## <summary>
##      Allow access to /dev/ddr
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
#
interface(`polaris_ddr_dev_use`,
  gen_require(`
    type device_t;
    type polaris_ddr_device_t;
  `)
  write_chr_files_pattern($1, device_t, polaris_ddr_device_t)
  read_chr_files_pattern($1, device_t, polaris_ddr_device_t)
`)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscommon.if
No license file was found, but licenses were detected in source scan.

#
# July 2017, Victor Kamensky
#
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#
#
## <summary>Polaris tams_rp Policy Rules.</summary>

########################################
## <summary>
##      Allow polaris_tams_rp_t unix stream socket connect
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_tams_rp_socket_connect`,
  gen_require(`
    type polaris_tams_rp_t;
  `)
  allow $1 polaris_tams_rp_t:unix_stream_socket connectto;
`)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristamsrp.if
No license file was found, but licenses were detected in source scan.
# August 2017, Shawn Lu
#
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#
#
# polariswnecd file contexts place holder

/mnt/images(/.*?)? gen_context(system_u:object_r:polaris_wlc_ap_images_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswnecd.fc
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
#
#  /harddisk   /harddisk -> /misc/scratch
/harddisk                gen_context(system_u:object_r:polaris_disk_harddisk_t,s0)
/misc/scratch            gen_context(system_u:object_r:polaris_disk_bootflash_t,s0)

/usb0                    gen_context(system_u:object_r:removable_t,s0)
/usb1                    gen_context(system_u:object_r:removable_t,s0)
/misc/usb0               gen_context(system_u:object_r:removable_t,s0)
/misc/usb1               gen_context(system_u:object_r:removable_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissstorage.fc
No license file was found, but licenses were detected in source scan.

#
# July 2017, Victor Kamensky
#
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#

/tmp/tam_cfg_done(/.*)? gen_context(system_u:object_r:polaris_tam_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisesgtamcfg.fc
No license file was found, but licenses were detected in source scan.
# February 2020, Victor Kamensky
#
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#

### <summary>Polaris omp Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisomp.if
No license file was found, but licenses were detected in source scan.

#
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#
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#

### <summary>Polaris TDLDB Policy Rules.</summary>

#############################################################################################################
# Polaris tdl db (infra/tdllib)
#############################################################################################################

#############################################################################################################
### <summary>
### Make specified domain as one of tdl db types.
### </summary>
### <param name="domain">
### <summary>
The domain serving as polaris_tdl db type
### </summary>
### </param>
#
interface('polaris_tdl db_type',`
gen_require(`
    attribute polaris_tdl db;
')
typeattribute $1 polaris_tdl db;
files_type($1)
')

#############################################################################################################
### <summary>
### List directories in /tmp/[rp|fp|cc]/tdl db directories.
### </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_tdldb_list_dirs',`
gen_require(`
type polaris_tdldb_t;
`)
    list_dirs_pattern($1, polaris_tdldb_t, polaris_tdldb_t)
`)

# Use tdldb database files in /tmp/[rp|fp|cc]/tdldb
#
interface('polaris_tdldb_use',`
gen_require(`
type polaris_tdldb_t;
type tmp_t;

manage_dirs_pattern($1, polaris_tdldb_t, polaris_tdldb_t)
manage_files_pattern($1, polaris_tdldb_t, $2)
allow $1 $2:file map;
allow $1 polaris_tdldb_t:file lock;
type_transition $1 polaris_tdldb_t : file $2 "$3";
type_transition $1 polaris_tdldb_t : file $2 "$3.lock";

# manage /var/tmp/tdldb_ene_fifo.0xYYYYY files - it seems there is
# no way to assign separate label to them
manage_fifo_files_pattern($1, tmp_t, tmp_t)
# tdllib_database_handle_open_internal through libuuid calls
# uuid_generate_time_generic, which needs access to udp socket
# once it reaches get_node_id function
allow $1 self:udp_socket { create ioctl };

')

-------------------------------------------------------------
## <summary>
## Setup tdldb database persistent files in
## /tmp/[rp|fp|cc]/tdldb/persist-config
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <param name="database_label">
## Database file label.
## </param>
## <param name="object">
## Database file name. Also used to derive lock file name.
## </param>
#
interface(`polaris_tmp_tdldb_persist_setup',
  gen_require(`
type polaris_tdldb_t;
type polaris_tdldb_persist_t;
')
  filetrans_pattern($1, polaris_tdldb_t, polaris_tdldb_persist_t, dir, "persistent-config")
  # allow creation of /tmp/rp/tdldb/persistent-config
  manage_dirs_pattern($1, polaris_tdldb_t, polaris_tdldb_persist_t)
  # Manage files inside of its own polaris_tdldb_persist_t directories
  manage_files_pattern($1, polaris_tdldb_persist_t, polaris_tdldb_persist_t)
')

-------------------------------------------------------------
## <summary>
## Manage tdldb directories
## </summary>
## <param name="domain">
## The domain serving as polaris_tdldb type
## </param>
## <summary>
## <summary>
## Use polaris_dir_db_tdldb_t database.
## </summary>

## <param name="domain">
## Domain allowed access.
## </param>

```
interface('polaris_db_tdldb_dir_use',
    gen_require(
        type polaris_dir_db_tdldb_t;
    )
    polaris_tdldb_use($1, polaris_dir_db_tdldb_t, DB_DIR)
)
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristdldb.if
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```
policy_module(polariswncd, 1.0);
```
polaris_tdlresolve_read(polaris_wncd_t)
polaris_tldldb_list_dirs(polaris_wncd_t)
polaris_cpld_read(polaris_wncd_t)
polaris_lua_read(polaris_wncd_t)
polaris_flashlib_read(polaris_wncd_t)

polaris_ripc_sman_ui_serv_connect(polaris_wncd_t)
polaris_db_tldldb_dir_use(polaris_wncd_t)

# wncd need setrlimit to change limit of resource
allow polaris_wncd_t self:process setrlimit;
allow polaris_wncd_t self:capability sys_resource;

# allow tcp connection from http port
allow polaris_wncd_t self:capability net_bind_service;
corenets_tcp_bind_http_port(polaris_wncd_t)

# allow udp for dhcpd
corenet_udp_bind_dhcpd_port(polaris_wncd_t)
corenets_udp_bind_generic_node(polaris_wncd_t)
allow polaris_wncd_t self:udp_socket { create_socket_perms recv_msg send_msg };

# allow AF_PACKET
allow polaris_wncd_t self:capability net_raw;
allow polaris_wncd_t self:packet_socket { create_socket_perms recv_msg send_msg };

# required in function ewlc_capwap_dgram_srvr_state_update()
allow polaris_wncd_t self:rawip_socket { create_socket_perms setopt ioctl };
corenets_raw_bind_generic_node(polaris_wncd_t)

gen_require(`
  type port_t;
`)
allow polaris_wncd_t port_t:rawip_socket name_bind;

# allow to read /etc/passwd
auth_use_nsswitch(polaris_wncd_t)

# stuff related to vrf support of the socket
polaris_lft_dev_use(polaris_wncd_t)
polaris_socketat_nsfs_read(polaris_wncd_t)

# each instance of wncd has a devshell support
corenet_tcp_bind_polaris_wncd_devshell_port(polaris_wncd_t)

# extra instances of wncd do set up cyan database for given elastic number
polaris_dyncfg_setup(polaris_wncd_t)

allow polaris_wncd_t self:capability dac_override;

# wncd does ionotify for /bootflash/apple_device_map.xml file in
# wsanotif_register_filepath function
polaris_bootflash_read(polaris_wncd_t)
polaris_persistent_watch(polaris_wncd_t)

# manage pem certificates on /bootflash
polaris_persistent_manage(polaris_wncd_t)

# for /dev/shm/cerrno_dll
polaris_cerr_shm_manage(polaris_wncd_t)

################################################################################
# For ewlc, wncd and wncmgrd needs access to files under /mnt/images/...these
# are related to AccessPoint images
################################################################################

type polaris_wlc_ap_images_t;
files_type(polaris_wlc_ap_images_t)

# wncd calls ewlc_get_ap_sw_version() to open/read
# /tmp/sw/rp0/0/0/rp_wlc/mount/mnt/images/ap.pri/version.info
# call-chain: main -> ewlc_app_context_init -> wncd_evlib_app_init_cb ->
# ewlc_capwapac_lib_init -> capwapac_init_default_config -> ewlc_get_ap_sw_version
polaris_wlc_ap_images_read(polaris_wncd_t)

polaris_odm_clnt2svr_mqipc_create(polaris_wncd_t)

# wncd works with AF_NETLINK NLMSG_APP_SIP ewlc_sip_netlink_sock_init
allow polaris_wncd_t self:netlink_socket create_socket_perms;

logging_send_syslog_msg(polaris_wncd_t)

# binds to mdns port from mdns_ipv4_socket_init function
corennet_udp_bind_mdns_port(polaris_wncd_t)

# bind CAPWAP control and data
corennet_udp_bind_polaris_capwap_ctr_port(polaris_wncd_t)
corennet_udp_bind_polaris_capwap_data_port(polaris_wncd_t)

# allow read/write/mmap access to awips file
gen_require(''
type polaris_awips_signature_file_t;
')
allow polaris_wncd_t polaris_awips_signature_file_t:file { map read open getattr unlink};
# allow read / write / unlink access to /bootflash/certs
polaris_wlc_ap_cert_manage(polaris_wncd_t)

# wncd ewlc-lisp interaction module, connect to lisp map-server on port 4342
corenets_tcp_connect_lisp_cons_control_port(polaris_wncd_t)

# binds to mdns bcp port from mdns bcp function
corenets_udp_bind_mdns_bcp_port(polaris_wncd_t)

#DB persistence
polaris_tlddbpersist_setup(polaris_wncd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswncd.te
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#

### <summary>Polaris ngwc_fed_debug Policy Rules.</summary>


### <summary>
## Connect to and send messages to /tmp/idope_svr and /tmp/shfwd_svr unix datagram sockets.
## </summary>
### <param name="domain">
## Domain allowed access.
## </param>
###

interface(`polaris_fed_debug_sock_write`,
  gen_require(`
      type polaris_fed_debug_sock_t;
      type polaris_ngwc_fed_debug_mgr_t;
      type tmp_t;
  `)
)

  allow $1 self:unix_stream_socket {create_socket_perms};
  allow $1 polaris_ngwc_fed_debug_mgr_t:unix_stream_socket {connectto};
  write_sock_files_pattern($1, tmp_t, polaris_fed_debug_sock_t)
)`
policy_module(polarispsd, 1.0);

gen_require(' 
    type polaris_psd_t;
');

polaris_btrace_data_manage(polaris_psd_t)
polaris_crft_data_manage(polaris_psd_t)
polaris_chasfs_manager(polaris_psd_t)
polaris_tdlresolve_read(polaris_psd_t)
polaris_tdlldb_list_dirs(polaris_psd_t)
polaris_cpld_read(polaris_psd_t)
polaris_flashlib_read(polaris_psd_t)
polaris_ripc_sman_ui_serv_connect(polaris_psd_t)
polaris_db_tdlldb_dir_use(polaris_psd_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_psd_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_psd_t)

# psd wants to run /usr/binos/bin/cfgwr command
corecmd_exec_bin(polaris_psd_t)
corecmd_exec_shell(polaris_psd_t)

# provide objstore access
polaris_disk_objstore_read(polaris_psd_t)

# work with /tmp files (/tmp/sh-thd-* )
type polaris_psd_tmp_t;
files_tmp_file(polaris_psd_tmp_t)
files_tmp_filetrans(polaris_psd_t, polaris_psd_tmp_t, file)
manage_files_pattern(polaris_psd_t, polaris_psd_tmp_t, polaris_psd_tmp_t)
polaris_obfl_data_read(polaris_psd_t)

allow polaris_psd_t self:capability { fsetid };

allow polaris_psd_t self:capability { dac_override chown };
allow polaris_psd_t self:netlink_route_socket rw_netlink_socket_perms;

logging_send_syslog_msg(polaris_psd_t)

# psd need detect which terminal to use as console, need read permission to ttyS*
# psd need read/write grub configure file /boot/grub/menu.*: read /boot/grub/menu.bak
# , generate /boot/grub/menu.list
# read access to bootflash for bin file loading
ifdef(`vxe_family',`
term_use_unallocated_ttys(polaris_psd_t)
polaris_legacy_grub_manage(polaris_psd_t)
polaris_bootflash_read(polaris_psd_t)
polaris_disk_varied_read(polaris_psd_t)
')
ifdef(`wlc_family',`
term_use_unallocated_ttys(polaris_psd_t)
bootloader_rw_config(polaris_psd_t)
polaris_disk_varied_read(polaris_psd_t)
')
ifdef(`vwlc_platform',`
polaris_legacy_grub_manage(polaris_psd_t)
polaris_bootflash_read(polaris_psd_t)
')

polaris_disk_csl_manage(polaris_psd_t)

fs_read_nsfs_files(polaris_psd_t)

polaris_dyncfg_tmp_read(polaris_psd_t)

polaris_read_packages_conf(polaris_psd_t)

# handling /tmp/restconf
type polaris_restconf_t;
files_tmp_file(polaris_restconf_t)

files_tmp_filetrans(polaris_psd_t, polaris_restconf_t, dir, "restconf")
polaris_restconf_manage(polaris_psd_t)

# handling /tmp/ncsshd_authorized_keys
type polaris_ncsshd_keys_t;
files_tmp_file(polaris_ncsshd_keys_t);
files_tmp_filetrans(polaris_psd_t, polaris_ncsshd_keys_t, dir, ".ncsshd_authorized_keys")
polaris_ncsshd_keys_manage(polaris_psd_t)

polaris_tmp_tdldb.persist_setup(polaris_psd_t)

polaris_tdldb.persist_setup(polaris_psd_t)

# write mem updates the grub config files
optional_policy('polaris_grubcfg_manage(polaris_psd_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispsd.te
No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#

### <summary>Polaris fpm Policy Rules.</summary>

###########################################
## <summary>
##      Write fpm /var/run socket file
## </summary>
## <param name="domain">
##      Domain allowed access.
## </param>
#
interface('polaris_fpm_var_sock_write',
  gen_require(‘
    type polaris_fpm_t;
    type polaris_fpm_var_run_t;
    type var_run_t;
  ’)
write_sock_files_pattern($1, var_run_t, polaris_fpm_var_run_t)
allow $1 polaris_fpm_t:unix_stream_socket { connectto };
’)

###########################################
## <summary>
## Manage mqipc fpm2fmrp shared memory file in /dev/shm directory
##</summary>
##<param name="domain">
## Domain allowed access.
##</summary>
##</param>
#
# interface('polaris_fpm2fmrp_mqipc_use',
gen_require(''
type polaris_fpm2fmrp_mqipc_t;
')
polaris_mqipc_use($1, polaris_fpm2fmrp_mqipc_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfpm.if
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#
# Oct 2020, Xin Xiang
#
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#
#
##<summary>Polaris Doppler Policy Rules.</summary>

###########################################################
## Work (read, write, ioctl) with /dev/dmamap
##</summary>
##<param name="domain">
## Domain allowed access.
##</summary>
##</param>
#
# interface('polaris_dmammap_dev_use',
gen_require(''
type device_t;
type polaris_dmammap_device_t;
')
write_chr_files_pattern($1, device_t, polaris_dmammap_device_t)
read_chr_files_pattern($1, device_t, polaris_dmammap_device_t)
allow $1 polaris_dmammap_device_t:chr_file map;
')
## <summary>
## Work (read, write, ioctl) with /dev/dmamap
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_dplr_dev_use',
  gen_require(''
    type device_t;
    type polaris_dplr_device_t;
  ')
  write_chr_files_pattern($1, device_t, polaris_dplr_device_t)
  read_chr_files_pattern($1, device_t, polaris_dplr_device_t)
  allow $1 polaris_dplr_device_t:chr_file map;
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdoppler.if
No license file was found, but licenses were detected in source scan.
#
# March 2017, Victor Kamensky
#
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#
/usr/bin/os/conf/pvp.sh -- gen_context(system_u:object_r:polaris_pvp_exec_t,s0)
/tmp/sw/rp/max_elastic_bays -- gen_context(system_u:object_r:polaris_pvp_tmp_t,s0)
/tmp/iosd_memory_share -- gen_context(system_u:object_r:polaris_pvp_tmp_t,s0)

/tmp/cc/0(/.*)? gen_context(system_u:object_r:polaris_pvp_tmp_t,s0)
/tmp/cc/*.pvp(/.*)? gen_context(system_u:object_r:polaris_pvp_tmp_t,s0)
/tmp/fp/pvp(/.*)? gen_context(system_u:object_r:polaris_pvp_tmp_t,s0)
/tmp/rp/pvp/oir/sw_lic_service(/.*)? gen_context(system_u:object_r:polaris_chasfs_t,s0)
/tmp/rp/rp/oir/sw_csl_service(/.*)? gen_context(system_u:object_r:polaris_chasfs_t,s0)
/tmp/rp/pvp/oir/rp_(.*)(/.*)? gen_context(system_u:object_r:polaris_chasfs_t,s0)
/tmp/rp/pvp/process_state(/.*)? gen_context(system_u:object_r:polaris_process_state_t,s0)

/tmp/rp/pvp/sai_process(/.*)? gen_context(system_u:object_r:polaris_pvp_sai_t,s0)
/tmp/fp/pvp/sai_process(/.*)? gen_context(system_u:object_r:polaris_pvp_sai_t,s0)
/tmp/cc/*.pvp(sai_process(/.*)? gen_context(system_u:object_r:polaris_pvp_sai_t,s0)
/tmp/rp/pvp/process_state(/.*)? gen_context(system_u:object_r:polaris_process_state_t,s0)
/tmp/fp/pvp/process_state(/.*)? gen_context(system_u:object_r:polaris_process_state_t,s0)
/tmp/cc/pvp/process_state(/.*)? gen_context(system_u:object_r:polaris_process_state_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispvp.fc
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#
# August 2017, Shawn Lu
#
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#

policy_module(polariswlc, 1.0);

# hanet driver used by vwlc, is there better place for it?
# hanet driver used by vwlc, is there better place for it?
type polaris_hanet_device_t;
device(polaris_hanet_device_t)

gen_require(''
  type polaris_wlc_ap_images_t;
type mnt_t;
  attribute polaris_extended_domain;
')

# transition when /mnt/images is created
filetrans_pattern(polaris_extended_domain, mnt_t, polaris_wlc_ap_images_t, dir, "images")

# epaN and epactrN devices
# epaN and epactrN devices
type polaris_epa_device_t;
device(polaris_epa_device_t)

# luna_fpgs device
# luna_fpgs device
type polaris_luna_mbfpga_device_t;
device(polaris_luna_mbfpga_device_t)

# astro device
# astro device
type polaris_astro_device_t;
device(polaris_astro_device_t)

# cpp_il device
# cpp_il device
type polaris_cpp_il_device_t;
device(polaris_cpp_il_device_t)

# oob_evfc device
# oob_evfc device
type polaris_oob_evfc_device_t;
device(polaris_oob_evfc_device_t)
# on vWLC all processes read grub_cisco_version in polaris_disk_varied_t
gen_require('attribute polaris_domain;')
polaris_disk_varied_search(polaris_domain)

# /dev/sfp-ktr device
type polaris_sfp_katar_device_t;
dev_node(polaris_sfp_katar_device_t)

# handle /tmp/vxe_disk XXX YYYY files
ifdef('vwlc_platform',('
    gen_require(''
        type unconfined_service_t;
    ')
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_mbr_v1")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_mbr_v2")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_mbr_v3")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_mbr_v4")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_gpt_v1")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_gpt_v2")
polaris_boot_tmp_filetrans(unconfined_service_t, file, "vxe_disk_gpt_v3")
polaris_boot_tmp_manage(unconfined_service_t)
')
type polaris_grubver_t;
polaris_pfile_type(polaris_grubver_t)

type polaris_grub_bios_t;
polaris_pfile_type(polaris_grub_bios_t)

# on vWLC, all processes read grubenv from EFI disk partition.
gen_require('attribute polaris_domain;')
polaris_vwlc_grub_efi_search(polaris_domain)

type polaris_vwlcinrtall_info_t;
polaris_pfile_type(polaris_vwlcinrtall_info_t)

gen_require(''
    type unconfined_service_t;
    type polaris_disk_varied_t;
')
# unconfined service create /boot/instll_info if does not exist yet
filetrans_pattern(unconfined_service_t, polaris_disk_varied_t, polaris_vwlcinrtall_info_t, file, ".install_info")
/tmp/sw/boot/rmonbifo(/.*)? gen_context(system_u:object_r:polaris_rmonbifo_tmp_t,s0)

policy_module(polarisnifmgr, 1.0);

gen_require(
    type polaris_nif_mgr_t;
')

polaris_ripc_sman_ui_serv_connect(polaris_nif_mgr_t)
polaris_btrace_data_manage(polaris_nif_mgr_t)
polaris_crft_data_manage(polaris_nif_mgr_t)
polaris_chasfs_manage(polaris_nif_mgr_t)
polaris_tdlresolve_read(polaris_nif_mgr_t)
polaris_tlddb_list_dirs(polaris_nif_mgr_t)
polaris_cpld_read(polaris_nif_mgr_t)
polaris_lua_read(polaris_nif_mgr_t)
polaris_flashlib_read(polaris_nif_mgr_t)

#if romvar is not set, Set Rommon env varaible needs write permission
polaris_flashlib_write(polaris_nif_mgr_t)

logging_send_syslog_msg(polaris_nif_mgr_t)

#if set out of band interface mac set_oobndif_mac
allow polaris_nif_mgr_t self:tcp_socket ioctl;

# communication between the nif manager and fed use directories under /tmp/sv
polaris_sv_tmp_use(polaris_nif_mgr_t)

#endif /dev/shm/sdm access
optional_policy('polaris_sdm_shm_manage(polaris_nif_mgr_t)
')

# open /dev/ttyS0 console in sco_sys_init_sw_params
term_use_unallocated_ttys(polaris_nif_mgr_t)

# allow create and write access to the /proc/*_sesa file
gen_require('type polaris_proc_sesa_t;
')
polaris_proc_sesa_create_write(polaris_nif_mgr_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnifmgr.te
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#
# April 2017, Victor Kamensky
#
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#

policy_module(polarisdmioptdatamgrd, 1.0);

gen_require('type polaris_dmi_opdatamgrd_t;
')
# allow to get getattr of /proc file system
domain_read_all_domains_state(polaris_dmi_opdatamgrd_t)

# work with /var/log/dmi/ files
type polaris_dmi_var_log_t;
logging_log_file(polaris_dmi_var_log_t)
manage_files_pattern(polaris_dmi_opdatamgrd_t, polaris_dmi_var_log_t, polaris_dmi_var_log_t)
manage_dirs_pattern(polaris_dmi_opdatamgrd_t, polaris_dmi_var_log_t, polaris_dmi_var_log_t)
logging_log_filetrans(polaris_dmi_opdatamgrd_t, polaris_dmi_var_log_t, dir, "dmi")
polaris_chasfs_manage(polaris_dmi_opdatamgrd_t)
polaris_btrace_data_manage(polaris_dmi_opdatamgrd_t)
polaris_cpld_read(polaris_dmi_opdatamgrd_t)
polaris_boot_tmp_read(polaris_dmi_opdatamgrd_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_dmi_opdatamgrd_t)

# this (opdatamgrd.sh) process is shell script need permission to execute shell
# and variety of small util commands under bin_t
corecmd_exec_shell(polaris_dmi_opdatamgrd_t)
corecmd_exec_bin(polaris_dmi_opdatamgrd_t)

# allow read of /etc/passwd
# passwd_file_t:file { getattr open read };  
auth_use_nsswitch(polaris_dmi_opdatamgrd_t)

# opdatamgrd.sh calls ps command
# ps needs access to /sys/devices/system/cpu/online
dev_read_sysfs(polaris_dmi_opdatamgrd_t)
# ps needs access to proc_t
kernel_read_system_state(polaris_dmi_opdatamgrd_t)

allow polaris_dmi_opdatamgrd_t self:capability { sys_resource dac_override };

# handling of /tmp/stream-parsers
type polaris_dmi_parser_t;
files_tmp_file(polaris_dmi_parser_t)
files_tmp_filetrans(polaris_dmi_opdatamgrd_t, polaris_dmi_parser_t, dir, "stream-parsers")
manage_dirs_pattern(polaris_dmi_opdatamgrd_t, tmp_t, polaris_dmi_parser_t)
manage_files_pattern(polaris_dmi_opdatamgrd_t, polaris_dmi_parser_t, polaris_dmi_parser_t)

mount_domtrans(polaris_dmi_opdatamgrd_t)

# confd_cli runs under our label
allow polaris_dmi_opdatamgrd_t self:tcp_socket create_socket_perms;
# runs ps that wants to have access to containers files
optional_policy(
  polaris_disk_vman_dir_list(polaris_dmi_opdatamgrd_t)
 )
polaris_sandbox_file_dir_list(polaris_dmi_opdatamgrd_t)
polaris_sandbox_file_getattr(polaris_dmi_opdatamgrd_t)

# runs find to search all 'parse.*' files
# find . -perm /111 -name parse.* -exec basename {} ;
# LOOK AT ME it seems that it does search on customer visible
# directories, can and whether customer supposed to be
# able give parse.* files to dmi opdatamgrd, could it
# be exploitied?
files_getattr_all_files(polaris_dmi_opdatamgrd_t)
files_getattr_all_dirs(polaris_dmi_opdatamgrd_t)

# access to /dev/pts/0
ssh_use_ptys(polaris_dmi_opdatamgrd_t)

# directly work with to /dev/ttyS1
term_use_unallocated_ttys(polaris_dmi_opdatamgrd_t)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmiopdatamgrd.te
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# #

## <summary>Polaris ngwc_fed Policy Rules.</summary>

###################################################
## <summary>
##     Connect to and send messages to /tmp/dbgmn_log_sv unit
## datagram socket.
## </summary>
## <param name="domain">
##     <summary>
##     Domain allowed access.
##     </summary>
## </param>
# interface('polaris_fed_sock_write',

allow $1 self:unix_stream_socket {create_socket_perms};
allow $1 polaris_ngwc_fed_t:unix_stream_socket {connectto};
write_sock_files_pattern($1, tmp_t, polaris_fed_sock_t)

 internationally

## <summary>
##      Allow the specified domain able to read fed /tmp files.
## </summary>
## <param name="type">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <param name="object">
##      <summary>
##      File name in /tmp that the fed domain creates and other domains
##      access.
##      </summary>
## </param>

interface('polaris_fed_tmp_files_read',
         gen_require(''
             type polaris_fed_tmp_t;
         ')
read_files_pattern($1, polaris_fed_tmp_t, polaris_fed_tmp_t)

 internationally

## <summary>
##      Allow to read and write /tmp/epc_ws/fed_to_wif_pipe file.
## </summary>
## <param name="domain">
##      <summary>
##      epc_ws_liaison and ngwc-fed pipe interaction.
##      </summary>
## </param>

# interface('polaris_fed_shm_file_read',
#       gen_require(''
#           type polaris_ngwc_fed_t;
#       ')

---------------------------------------------
allow $1 polaris_ngwc_fed_t:shm { associate unix_read unix_write write }

')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwcfed.if
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#
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#

# polarismobilityd file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismobilityd.fc
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#
# April 2017, Victor Kamensky
#
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#

policy_module(polarisdmivtyserverutild, 1.0);

gen_require(
    type polaris_dmi_vtyserverutild_t;
')
polaris_btrace_data_manage(polaris_dmi_vtyserverutild_t)
polaris_chasfs_manage(polaris_dmi_vtyserverutild_t)
polaris_tdlresolve_read(polaris_dmi_vtyserverutild_t)
polaris_tdlldb_list_dirs(polaris_dmi_vtyserverutild_t)
polaris_cpld_read(polaris_dmi_vtyserverutild_t)
polaris_flashlib_read(polaris_dmi_vtyserverutild_t)

allow polaris_dmi_vtyserverutild_t self:socket { connect create read write };

type polaris_dmi_vtyserverutild_tmp_t;
files_tmp_file(polaris_dmi_vtyserverutild_tmp_t)
files_tmp_filetrans(polaris_dmi_vtyserverutild_t, polaris_dmi_vtyserverutild_tmp_t, fifo_file, ".DMI_FIFO")
manage_fifo_files_pattern(polaris_dmi_vtyserverutild_t,
polaris_dmi_vtyserverutild_tmp_t,polaris_dmi_vtyserverutild_tmp_t)

logging_send_syslog_msg(polaris_dmi_vtyserverutild_t)

Found in path(s):

* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmivtyserverutild.te

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dnl
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dnl
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dnl
define(`mqipc_stem', `translit(patsubst($1, `-mqipc$', `'), `-', `_')')
define(`mqipc_label', `format(`polaris_%s_mqipc_t', mqipc_stem($1))')

Found in path(s):

* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_mqipc.m4

No license file was found, but licenses were detected in source scan.

#
# November 2020, Christine Hwang
#
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#

## <summary>Polaris Cabo GNSS Policy Rules.</summary>

######################################
## <summary>
## Work (read, write, ioctl) with /dev/ttyS1
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
#
interface(`polaris_cabo_gnss_dev_use', `;
        gen_require( 
            type device_t;
            type polaris_cabo_gnss_device_t;
        )
    write_chr_files_pattern($1, device_t, polaris_cabo_gnss_device_t)
    read_chr_files_pattern($1, device_t, polaris_cabo_gnss_device_t)
    allow $1 polaris_cabo_gnss_device_t::chr_file map;
policy_module(polaristservice, 1.0);

polaris_process_domain_template(tservice_telnet)

polaris_process_domain_template(tservice_ssh)

gen_require(
  type inetd_exec_t, inetd_t;
)
domtrans_pattern(polaris_tservice_telnet_t, inetd_exec_t, inetd_t)

polaris_chasfs_manage(polaris_tservice_telnet_t)
polaris_btrace_data_manage(polaris_tservice_telnet_t)
polaris_cpld_read(polaris_tservice_telnet_t)
polaris_boot_tmp_read(polaris_tservice_telnet_t)
polaris_rmonbifo_tmp_read(polaris_tservice_telnet_t)

corecmd_exec_shell(polaris_tservice_telnet_t)
corecmd_exec_bin(polaris_tservice_telnet_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_tservice_telnet_t)

dmidecode_domtrans(polaris_tservice_telnet_t)

allow polaris_tservice_telnet_t self:capability sys_resource;
kernel_read_system_state(polaris_tservice_telnet_t)

gen_require(
  type initrc_exec_t, initrc_t;
)
domtrans_pattern(polaris_tservice_telnet_t, initrc_exec_t, initrc_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_tservice_telnet_t)
# /bin/sh /usr/binos/conf/mcp_chvrf.sh eobc /usr/sbin/xinetd -f
# /tmp/chassis/local/rp/chasfs/rp/0/0/etc/telnet/xinetd_telnetd.conf
polaris_chvrf_domtrans(polaris_tservice_telnet_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristservice.te
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#
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#

## <summary>Polaris WLC Platform Policy Rules.</summary>

# Work (read, write, ioctl) with /dev/hanet
# <summary>
# Domain allowed access.
# </summary>

interface(`polaris_hanet_dev_use',`
  gen_require(`
    type device_t;
    type polaris_hanet_device_t;
  ')
  write_chr_files_pattern($1, device_t, polaris_hanet_device_t)
  read_chr_files_pattern($1, device_t, polaris_hanet_device_t)
  ')

# Work (read, write, ioctl) with /dev/epa[0-9]* and /dev/epactrl[0-9]*
# <summary>
# Domain allowed access.
# </summary>

#
interface('polaris.epa_dev_use',);
gen_require('    type device_t;
type polaris.epa_device_t;
')
    write_chr_files_pattern($1, device_t, polaris.epa_device_t)
    read_chr_files_pattern($1, device_t, polaris.epa_device_t)
    allow $1 polaris.epa_device_t:chr_file map;
')

###############################################################################
## <summary>
##      Work (read, write, ioctl) with /dev/luna_mbfpga device
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris.luna_mbfpga_dev_use',;
gen_require('    type device_t;
type polaris.luna_mbfpga_device_t;
')
    write_chr_files_pattern($1, device_t, polaris.luna_mbfpga_device_t)
    read_chr_files_pattern($1, device_t, polaris.luna_mbfpga_device_t)
')

###############################################################################
## <summary>
##      Work (read, write, ioctl) with /dev/astro device
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris.astro_dev_use',;
gen_require('    type device_t;
type polaris.astro_device_t;
')
    write_chr_files_pattern($1, device_t, polaris.astro_device_t)
    read_chr_files_pattern($1, device_t, polaris.astro_device_t)
')
## <summary>
## Work (read, write, ioctl) with /dev/cpp_il device
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_cpp_il_dev_use',
    gen_require(''
        type device_t;
        type polaris_cpp_il_device_t;
    ')
    write_chr_files_pattern($1, device_t, polaris_cpp_il_device_t)
    read_chr_files_pattern($1, device_t, polaris_cpp_il_device_t)
')

## <summary>
## Work (read, write, ioctl) with /dev/oob_evfc device
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_oob_evfc_dev_use',
    gen_require(''
        type device_t;
        type polaris_oob_evfc_device_t;
    ')
    write_chr_files_pattern($1, device_t, polaris_oob_evfc_device_t)
    read_chr_files_pattern($1, device_t, polaris_oob_evfc_device_t)
')

## <summary>
## Work (read, write, ioctl) with /dev/sfp-ktr device
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
interface('polaris_sfp_katar_dev_use',
    gen_require(
        type device_t;
        type polaris_sfp_katar_device_t;
    ),
    write_chr_files_pattern($1, device_t, polaris_sfp_katar_device_t)
    read_chr_files_pattern($1, device_t, polaris_sfp_katar_device_t)
)

######################################
## <summary>
## Read vWLC install info files
## </summary>
## <param name="domain">
##      <summary>
##          Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_vwlcininstall_info_read',
    gen_require(
        type polaris_vwlcininstall_info_t;
    ),
    read_files_pattern($1, polaris_vwlcininstall_info_t, polaris_vwlcininstall_info_t)
    list_dirs_pattern($1, polaris_vwlcininstall_info_t, polaris_vwlcininstall_info_t)
)

######################################
## <summary>
## Read /dev/vda1 device the efi partition
## </summary>
## <param name="domain">
##      <summary>
##              Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_vwlgrub_info_read',
    gen_require(
        type polaris_grubver_t;
        type polaris_grub_bios_t;
        type polaris_grub_efi_t;
    ),
    read_files_pattern($1, polaris_grubver_t, polaris_grubver_t)
    read_files_pattern($1, polaris_grub_bios_t, polaris_grub_bios_t)
    read_files_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
    list_dirs_pattern($1, polaris_grubver_t, polaris_grubver_t)
    list_dirs_pattern($1, polaris_grub_bios_t, polaris_grub_bios_t)
list_dirs_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t) 
')

######################################
## <summary>
## Search /dev/vda1 device the efi partition
## </summary>
## <param name="domain">
##      <summary>
##              Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_vwlc_grub_efi_search',
'gen_require(
'type polaris_grub_efi_t;
' )
search_dirs_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
')

######################################
## <summary>
## Work (read, write, ioctl) with /dev/vda1 device
## </summary>
## <param name="domain">
##      <summary>
##              Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_vwlc_grub_efi_use',
'gen_require(
'type polaris_grub_efi_t;
' )
write_chr_files_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
read_chr_files_pattern($1, polaris_grub_efi_t, polaris_grub_efi_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswlc.if
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dnl

define('database_stem', 'translit(patsubst($1, '_DB$', ''), 'A-Z', 'a-z'))
define('database_label', 'format('polaris_%s_db_tddlb_t', database_stem($1)))

define('database_use_map', 'defn(format("database_use_map[%s-%s]", "$1", "$2"))')
define('database_use_map_set', 'defn(format("database_use_map[%s-%s]", "$1", "$2", "$3"))')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_database_db.m4
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#
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#
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#

policy_module(polarisdmidmiauxthd, 1.0);

gen_require("
    type polaris_dmi_dmiauxthd_t;
  ")
polaris_btrace_data_manage(polaris_dmi_dmiauxthd_t)
polaris_crft_data_manage(polaris_dmi_dmiauxthd_t)
polaris_chasfs_manager(polaris_dmi_dmiauxthd_t)
polaris_tdlresolve_read(polaris_dmi_dmiauxthd_t)
polaris_tldldb_list_dirs(polaris_dmi_dmiauxthd_t)
polaris_cpld_read(polaris_dmi_dmiauxthd_t)
polaris_flashlib_read(polaris_dmi_dmiauxthd_t)
polaris_ripc_sman UISERV_CONNECT(polaris_dmi_dmiauxthd_t)
polaris_db_tddlb dir use(polaris_dmi_dmiauxthd_t)

# dmiauxthd creates and binds to /tmp/DmiAuth.socket unix socket
type polaris_dmi_dmiauxthd_tmp_t;
files_tmp_file(polaris_dmi_dmiauxthd_tmp_t)
files_tmp_filetrans(polaris_dmi_dmiauxthd_tmp_t, polaris_dmi_dmiauxthd_tmp_t, { sock_file fifo_file })
manage_sock_files_pattern(polaris_dmi_dmiauxthd_tmp_t, polaris_dmi_dmiauxthd_tmp_t, polaris_dmi_dmiauxthd_tmp_t)
manage_fifo_files_pattern(polaris_dmi_dmiauxthd_tmp_t, polaris_dmi_dmiauxthd_tmp_t, polaris_dmi_dmiauxthd_tmp_t)

# dmiauxthd creates diagnostic files in /tmp/netconf-yang-diag
type polaris_dmi_dmiauxthd_tmp_diags_t;
files_tmp_file(polaris_dmi_dmiauxthd_tmp_diags_t)
files_tmp_filetrans(polaris_dmi_dmiauxthd_tmp_diags_t, polaris_dmi_dmiauxthd_tmp_diags_t, dir, "netconf-yang-diag")
polaris_dmi_dmiauxthd_tmp_diags_manager(polaris_dmi_dmiauxthd_tmp_diags_t)
logging_send_syslog_msg(polaris_dmi_dmiauthd_t)

# read confd log file and push into btrace
polaris_confed_log_read(polaris_dmi_dmiauthd_t)

# from dmiilib iosp_connect through libiosp iosp_token_read_from_file
# iosp_token_read_from_file reads /tmp/rp/iosp_dmiauthd
polaris_dmiauthd_token_read(polaris_dmi_dmiauthd_t)

gen_require('    type polaris_confd_tmp_t;
')
# This is applicable to wireless platforms running in standby monitoring mode
# wherein dmiauthd create temporary files in /tmp/confd upon switchover and
# trigger ConfD restart.
manage_files_pattern(polaris_dmi_dmiauthd_t, polaris_confd_tmp_t, polaris_confd_tmp_t)
manage_dirs_pattern(polaris_dmi_dmiauthd_t, polaris_confd_tmp_t, polaris_confd_tmp_t)

##################################################################
# "show netconf-yang diagnostics [all | last | message]" invokes
# /usr/binos/conf/dmid_diag_logs.sh
##################################################################
polaris_utility_domain_template(dmid_diag_logs)
polaris_bexecute_domtrans(polaris_dmi_dmiauthd_t)
polaris_bexecute_domain(polaris_dmid_diag_logs_t, polaris_dmid_diag_logs_exec_t)

# signal sent during the show cmd
polaris_send_signal_to_bexecute(polaris_dmi_dmiauthd_t)

# read files in /tmp/netconf-yang-diag
polaris_dmiauthd_tmp_diags_read(polaris_dmid_diag_logs_t)

# need write/ioctl/getattr access for pipes
polaris_dmiauthd_use_fifo(polaris_dmid_diag_logs_t)
polaris_use_btrace_fifo(polaris_dmid_diag_logs_t)
polaris_btrace_data_manage(polaris_dmid_diag_logs_t)
polaris_chasfs_read(polaris_dmid_diag_logs_t)
polaris_cpld_read(polaris_dmid_diag_logs_t)
dev_read_sysfs(polaris_dmid_diag_logs_t)
auth_use_nsswitch(polaris_dmid_diag_logs_t)
polaris_boot_tmp_read(polaris_dmid_diag_logs_t)/fs_getattr_tmpfs(polaris_dmid_diag_logs_t)

# bash tmp files, such as /tmp/sh-thd-1599654988
type polaris_dmid_diag_logs_tmp_t;
files_tmp_file(polaris_dmid_diag_logs_tmp_t)
files_tmp_filetrans(polaris_dmid_diag_logs_t, polaris_dmid_diag_logs_tmp_t, file)
manage_files_pattern(polaris_dmid_diag_logs_t, polaris_dmid_diag_logs_tmp_t, polaris_dmid_diag_logs_tmp_t)

# execute /bin/sed
corecmd_exec_bin(polaris_dmid_diag_logs_t)

*****************************************************************************
# Allow diagnostics feature to create log file in bootflash
*****************************************************************************

# execute /bin/tar
corecmd_exec_bin(polaris_dmi_dmiauthd_t)
# tar reads /etc/passwd
auth_use_nsswitch(polaris_dmi_dmiauthd_t)
# create log file in bootflash
polaris_bootflash_manage(polaris_dmi_dmiauthd_t)

*****************************************************************************

allow polaris_dmi_dmiauthd_t self:capability sys_resource;

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmidmiauthd.te
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#
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#
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#

/opt/confd/bin/confd -- gen_context(system_u:object_r:polaris_confd_exec_t,s0)
/opt/confd/lib/confd/lib/core/confd/priv/mmap_schema --
gen_context(system_u:object_r:polaris_mmap_schema_exec_t,s0)
/usr/binos/bin/vip-confd-startup.sh -- gen_context(system_u:object_r:polaris_confd_exec_t,s0)
/usr/binos/conf/confd/confd/confd_script_cdb_backup.sh -- gen_context(system_u:object_r:polaris_confd_exec_t,s0)
/usr/binos/conf/confd_conf/confd/confd/confd_execute_confd_cli.sh -- gen_context(system_u:object_r:polaris_confd_cli_exec_t,s0)
/usr/binos/conf/confd_conf/confd/confd/confd/confd_conf/confd/confd_logs.sh -- gen_context(system_u:object_r:polaris_confd_exec_t,s0)
/var/confd0(/.*)? -- gen_context(system_u:object_r:polaris_confd_var_t,s0)
/dev/shm/confd(/.*)? -- gen_context(system_u:object_r:polaris_confd_shm_t,s0)
/tmp/confd(/.*)? -- gen_context(system_u:object_r:polaris_confd_tmp_t,s0)
/tmp/confd_cli(/.*)? -- gen_context(system_u:object_r:polaris_confd_cli_tmp_t,s0)
/tmp/confd_cli(/.*)? -- gen_context(system_u:object_r:polaris_confd_cli_tmp_t,s0)

/usr/bin/vconfd_script_*admin_tech.*.sh -- gen_context(system_u:object_r:polaris_admin_tech_exec_t,s0)
/var/tech(/.*)? gen_context(system_u:object_r:polaris_admin_tech_var_t,s0)
policy_module(polarisunconfined, 1.0);

### <desc>
### <p>
### IOSd runs in unconfined mode
### </p>
### </desc>

gen_tunable(polaris_unconfined_iosd, true)

### <desc>
### <p>
### All polaris processes except IOSd runs in unconfined mode
### </p>
### </desc>

gen_tunable(polaris_unconfined_all, true)

gen_require(
    type apmd_t;
    type auditd_t;
    type inetd_t;
    type init_t;
    type initrc_t;
    type journalctl_t;
    type rpcbind_t;
    type rpcd_t;
    type sshd_t;
    type syslogd_t;
    type telnetd_t;
    type udev_t;
)
type virtd_t;
    type virtlogd_t;
    type vmtools_t;
    type ifconfig_t;
    type setfiles_t;
    type iptables_t;
    type virsh_t;
    type svirt_t;
    type svirt_lxc_net_t;
    type virtd_lxc_t;
)

polaris_domain_maybe_unconfined(apmd_t)
polaris_domain_maybe_unconfined(auditd_t)
polaris_domain_maybe_unconfined(inetd_t)
polaris_domain_maybe_unconfined(init_t)
polaris_domain_maybe_unconfined(initrc_t)
polaris_domain_maybe_unconfined(journalctl_t)
polaris_domain_maybe_unconfined(rpcbind_t)
polaris_domain_maybe_unconfined(rpcd_t)
polaris_domain_maybe_unconfined(sshd_t)
polaris_domain_maybe_unconfined(tellogd_t)
polaris_domain_maybe_unconfined(telnetd_t)
polaris_domain_maybe_unconfined(udev_t)
polaris_domain_maybe_unconfined(virtd_t)
polaris_domain_maybe_unconfined(virtlogd_t)
polaris_domain_maybe_unconfined(vmttools_t)
polaris_domain_maybe_unconfined(ifconfig_t)
polaris_domain_maybe_unconfined(setfiles_t)
polaris_domain_maybe_unconfined(iptables_t)
polaris_domain_maybe_unconfined(virsh_t)
polaris_domain_maybe_unconfined(svirt_t)
polaris_domain_maybe_unconfined(svirt_lxc_net_t)
polaris_domain_maybe_unconfined(virtd_lxc_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisunconfined.te

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#
# July 2020, Victor Kamensky
#
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#
# /tmp/HTX-IOX(/.*)? gen_context(system_u:object_r:polaris_htx_iox_tmp_t,s0)

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# /dev/sppi_memif htx works with /dev/sppi_memif -c gen_context(system_u:object_r:polaris_sppi_memif_device_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarishtx.fc
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# # March 2017, Victor Kamensky # # Copyright (c) 2016-2019 by Cisco Systems, Inc. # All rights reserved #

/usr/bin/os/conf/periodic.sh -- gen_context(system_u:object_r:polaris_periodic_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisperiodic.fc
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policy_module(polarislua, 1.0);

##############################################################################
# Lua policy
##############################################################################
type polaris_lua_file_t;
files_type(polaris_lua_file_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarislua.te
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# # November 2020, Christine Hwang # # Copyright (c) 2017-2021 by Cisco Systems, Inc. # All rights reserved #

policy_module(polariscabognss, 1.0);
gen_require(
    type polaris_cabo_gnss_t;
)

polaris_btrace_data_manage(polaris_cabo_gnss_t)
polaris_chasfs_manage(polaris_cabo_gnss_t)
polaris_tdlresolve_read(polaris_cabo_gnss_t)
polaris_cpld_read(polaris_cabo_gnss_t)
polaris_ripc_sman_ui_serv_connect(polaris_cabo_gnss_t)

# Allow sysfs read for platform ID and
# r/w on /sys/class/gpio/export
polaris_sysfs_manage(polaris_cabo_gnss_t)
dev_manage_sysfs_dirs(polaris_cabo_gnss_t)

# Allow Cabo GNSS to access/modify to GPS GPIO
polaris_ggpio_dev_read_write(polaris_cabo_gnss_t)

# Allow Cabo GNSS access to /dev/pps0
dev_rw_realtime_clock(polaris_cabo_gnss_t)

# allow system time capability to check for system timeout
allow polaris_cabo_gnss_t self:capability sys_time;

# Label Cabo GNSS TTY device
type polaris_cabo_gnss_device_t;
dev_node(polaris_cabo_gnss_device_t)
polaris_cabo_gnss_dev_use(polaris_cabo_gnss_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscabognss.te
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dnl April 2018, Victor Kamensky
dnl
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dnl
dnl WLC Platform Max Bay Limits
max_bay_map_set(‘rp’, `per_bay’, 0)
max_bay_map_set(‘cc’, `per_bay’, 1)
max_bay_map_set(‘fp’, `per_bay’, 0)

max_bay_ripc_map_set(‘rp’, `per_bay’, 0)
max_bay_ripc_map_set(‘cc’, `per_bay’, 1)
max_bay_ripc_map_set("fp", 'per_bay', 0)

max_bay_ripc_map_set("rp", 'global', 0)
max_bay_ripc_map_set("cc", 'global', 1)
max_bay_ripc_map_set("fp", 'global', 0)

dnl in elastic scope each process has its own value

max_elastic_map_set("rp", 'elastic', BPROC_ODM, 1)
max_elastic_map_set("cc", 'elastic', BPROC_ODM, 1)
max_elastic_map_set("fp", 'elastic', BPROC_ODM, 1)

max_elastic_map_set("rp", 'elastic', BPROC_WNCD, 7)
max_elastic_map_set("cc", 'elastic', BPROC_WNCD, 7)
max_elastic_map_set("fp", 'elastic', BPROC_WNCD, 7)

max_elastic_ripc_map_set("rp", 'elastic', BPROC_ODM, 1)
max_elastic_ripc_map_set("cc", 'elastic', BPROC_ODM, 1)
max_elastic_ripc_map_set("fp", 'elastic', BPROC_ODM, 1)

max_elastic_ripc_map_set("rp", 'elastic', BPROC_WNCD, 7)
max_elastic_ripc_map_set("cc", 'elastic', BPROC_WNCD, 7)
max_elastic_ripc_map_set("fp", 'elastic', BPROC_WNCD, 7)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/wlcmaps.m4
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#
# August 2017, Shawn Lu
#
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#
## <summary>Polaris rogued Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrogued.if
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#
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#
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#
## <summary>Polaris flashcheck Policy Rules.</summary>
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisflashcheck.if
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#
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#

policy_module(polarissmd, 1.0);

gen_require(
    type polaris_smd_t;
    )

########################################################################
# mqipc manual, one that missing in platform tdl file
########################################################################

polaris_btrace_data_manage(polaris_smd_t)
polaris_crft_data_manage(polaris_smd_t)
polaris_chasfs_manage(polaris_smd_t)
polaris_tldresolve_read(polaris_smd_t)
polaris_tdlxDB_list_dirs(polaris_smd_t)
polaris_cpld_read(polaris_smd_t)
polaris_lua_read(polaris_smd_t)
polaris_flashlib_read(polaris_smd_t)

polaris_ripc_sman_ui_serv_connect(polaris_smd_t)

#if working with smd persistent/ disk files
    type polaris_smd_disk_t;
polaris_disk_type(polaris_smd_disk_t)

manage_files_pattern(polaris_smd_t, polaris_smd_disk_t, polaris_smd_disk_t)

polaris_db_tdlxDB_dir_use(polaris_smd_t)

#if access to persist tdlxdb (e.g. _dbpersist)
polaris_tdlxdbpersistence_setup(polaris_smd_t)

#if for /dev/shm/cerrno_dell
polaris_cerr_shm_manage(polaris_smd_t)

ifdef(’nyquist_platform’,

Open Source Used In BGP TE Controller Version 4.3.0 6572
gen_require(
    type polaris_bt_logger_smd_mqipc_t;
    
    # smd may start first and create this mqipc channel
    polaris_mqipc_create_name(polaris_smd_t, polaris_bt_logger_smd_mqipc_t, bt_logger_smd)
    
    polaris_lfts_dev_use(polaris_smd_t)
        allow polaris_smd_t self:capability { sys_resource net_bind_service };

    polaris_socketat_nsfs_read(polaris_smd_t)
        allow polaris_smd_t self:process setrlimit;

    corenet_tcp_bind_polaris_smd_devshell_port(polaris_smd_t)
    corenet_tcp_bind_generic_node(polaris_smd_t)
        allow polaris_smd_t self:tcp_socket { getattr setopt getopt bind create listen accept connect read write
            name_connect };
        allow polaris_smd_t self:capability { net_admin sys_admin };

        allow polaris_smd_t self:udp_socket { create_socket_perms recv_msg send_msg };
        # smutil_msg_event_cb_handler() uses netlink
        allow polaris_smd_t self:netlink_socket { bind create };

        # LOOK AT ME: now smd may open arbitrary port on forwarding VRF (16)
        # but in SELinux there is no way to differentiate between port spaces
        # accross VRFs or namespaces. For now let's grant smd_t access to all ports
        # regardless of VRF. In future investigate ways to be more restrictive
        corenet_udp_bind_generic_port(polaris_smd_t)
    corenet_udp_sendrecv_generic_port(polaris_smd_t)
        # LOOK AT ME: grants access to udp_bind on any node, but if we can
        # be more specific and bind only to forwarding VRF related interfaces
        corenet_udp_bind_generic_node(polaris_smd_t)

        # smd want to listent on http port 80 on VRF_FWD, for webauth code please see
        # smd/webauth/src/webauth_io.c
        corenet_tcp_bind_http_port(polaris_smd_t)

        allow polaris_smd_t self:capability dac_override;

    logging_send_syslog_msg(polaris_smd_t)

        allow polaris_smd_t self:capability net_raw;
        allow polaris_smd_t self:packet_socket { create_socket_perms recv_msg send_msg };

        # for access to disk html files (for webauth)
        polaris_persistent_read(polaris_smd_t)
# transition for dc_profile_dir to polaris_smd_disk_t

gen_require(
    type initrc_t;
')
polaris_bootflash_filetrans(initrc_t, polaris_smd_disk_t, dir, "dc_profile_dir")

# SANET is listening on http port(CSCvb41802)
# Hence, it needs to follow the same rule as nginx is using in polarisnginx.te
# FIXME: add interface to allow bind to port 1025-65535
corenet_tcp_bind_all_ports(polaris_smd_t)
polaris_issu_tmp_files_read(polaris_smd_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissmd.te
No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#

/usr/binos/conf/cedge-tanman.sh -- gen_context(system_u:object_r:polaris_cedge_tanman_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscedgetanman.fc
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

/usr/binos/conf/droputil.sh -- gen_context(system_u:object_r:polaris_droputil_exec_t,s0)
/tmp/rp/dropbox(/.*)? gen_context(system_u:object_r:polaris_droputil_tmp_t,s0)
/tmp/rp/droputil(/.*)? gen_context(system_u:object_r:polaris_droputil_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdroputil.fc
No license file was found, but licenses were detected in source scan.

#
policy_module(polarisvman, 1.0);

```
gen_require(`
    type polaris_vman_t;
`)
```
polaris_btrace_data_manage(polaris_vman_t)
polaris_crft_data_manage(polaris_vman_t)
polaris_chasfs_manage(polaris_vman_t)
polaris_tdlresolve_read(polaris_vman_t)
polaris_tldldb_list_dirs(polaris_vman_t)
polaris_cpld_read(polaris_vman_t)
polaris_flashlib_read(polaris_vman_t)
polaris_ripc_sman_ui_serv_connect(polaris_vman_t)
polaris_db_tldldb_dir_use(polaris_vman_t)

# allow read of /etc/passwd
   auth_use_nsswitch(polaris_vman_t)
   polaris_rmonbifo_tmp_read(polaris_vman_t)
polaris_boot_tmp_read(polaris_vman_t)
logging_send_syslog_msg(polaris_vman_t)

modutils_read_module_deps(polaris_vman_t)
modutils_read_module_config(polaris_vman_t)
modutils_manage_module_config(polaris_vman_t)
modutils_domtrans_insmod(polaris_vman_t)
files_read_kernel_modules(polaris_vman_t)
corecmd_exec_bin(polaris_vman_t)
corecmd_exec_shell(polaris_vman_t)

# ifconfig related, ifconfig is executed in its own context
   sysnet_domtrans_ifconfig(polaris_vman_t)

# VMAN calls vman_set_congestion_control_multiplex when the count
# of the bridge users reaches 2 and needs write permissions on
# contdev_multiplex
dev_rw_sysfs(polaris_vman_t)
fs_getattr_xattr_fs(polaris_vman_t)

virt_stream_connect(polaris_vman_t)
virt_read_pid_files(polaris_vman_t)

fs_rwlock_group_files(polaris_vman_t)
kernell_read_system_state(polaris_vman_t)
# allow vman to read /dev/pts/*
term_use_generic_ptys(polaris_vman_t)
# allow polaris_vman_t polaris_udev_tmp_files_t:file open;
polaris_udev_tmp_read(polaris_vman_t)
# allow vman to run brctl in it's own domain
brctl_domtrans(polaris_vman_t)
# allow vman to run /sbin/fsck in script
fstools_domtrans(polaris_vman_t)
# allow vman to mount rootfs on polaris_disk_vman_t
allow polaris_vman_t polaris_disk_vman_t:dir mounton;
fs_mount_xattr_fs(polaris_vman_t)
# allow vman have capability for modify owner of the file
allow polaris_vman_t self:capability { chown fowner fsetid };# allow vman to bind to unreserved tcp ports while it searches for
# port available to guest console to listen on
corenct_tcp_bind_unreserved_ports(polaris_vman_t)

# working with vman /var/ files
type polaris_var_vman_t;
files_tmp_file(polaris_var_vman_t)

files_var_filetrans(polaris_vman_t, polaris_var_vman_t, dir, "virtual-instance")
manage_files_pattern(polaris_vman_t, polaris_var_vman_t, polaris_var_vman_t)
manage_dirs_pattern(polaris_vman_t, polaris_var_vman_t, polaris_var_vman_t)
manage_sock_files_pattern(polaris_vman_t, polaris_var_vman_t, polaris_var_vman_t)

# working with vman persiststen files
type polaris_disk_vman_t;
polaris_disk_type(polaris_disk_vman_t)

gen_require(
    type polaris_disk_bootflash_t;
    type polaris_disk_harddisk_t;
')
filetrans_pattern(polaris_vman_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t }, polaris_vman_t, dir, "virtual-instance")
filetrans_pattern(polaris_vman_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t }, polaris_vman_t, file, "virtual-instance.conf")
filetrans_pattern(polaris_vman_t, { polaris_disk_bootflash_t polaris_disk_harddisk_t }, polaris_vman_t, dir, "vman_fdb")

# allow creation of /bootflash/virtual-instance.conf file
manage_files_pattern(polaris_vman_t, [ polaris_disk_bootflash_t polaris_disk_harddisk_t ], polaris_disk_vman_t)
# allow creation of /bootflash/virtual-instance and /bootflash/vman_fdb directories
manage_dirs_pattern(polaris_vman_t, [ polaris_disk_bootflash_t polaris_disk_harddisk_t ], polaris_disk_vman_t)
# vman can manage files inside of its own polaris_disk_vman_t directories
manage_files_pattern(polaris_vman_t, polaris_disk_vman_t, polaris_disk_vman_t)

# after all above transition we need to grant vman right to work with any
# persistent storage file since it needs to access and write .ova files
polaris_persistent_manage(polaris_vman_t)

# vman uses netlink socket to talk to lxc watchdog driver
# please see binos/vman/src/vman_lxc_wd.c
allow polaris_vman_t self:netlink_generic_socket { create_socket_perms sendto recvfrom};

# vman calls tipc-config which in turns wants to create AF_TIPC socket
allow polaris_vman_t self:socket create_socket_perms;

# vman uses 'ip netns exec 0 ifconfig -a' command which in turns switches
# network namespace and need access to /proc/pid/ns/net file
fs_read_nsfs_files(polaris_vman_t)

# this label is created to exchange log related information between container and host.
type polaris_vman_log_t;
# By making this label belong to polaris persistent storage combined with vman inheriting rights
# to manage polaris_disk via polaris_persistent_manage(), vman gains rights to manage below dirs.
polaris_disk_type(polaris_vman_log_t)
filetrans_pattern(polaris_vman_t, polaris_vman_tmp_t, polaris_vman_log_t, dir, "UtdIpsAlert-IOX"
filetrans_pattern(polaris_vman_t, polaris_vman_tmp_t, polaris_vman_log_t, dir, "UtdUrlf-IOX"
filetrans_pattern(polaris_vman_t, polaris_vman_tmp_t, polaris_vman_log_t, dir, "UtdAmp-IOX"
filetrans_pattern(polaris_vman_t, polaris_vman_tmp_t, polaris_vman_log_t, dir, "UtdTls-IOX"
filetrans_pattern(polaris_vman_t, polaris_vman_tmp_t, polaris_vman_log_t, dir, "UtdLogMappings-IOX"
allow polaris_vman_t polaris_vman_log_t:dir mounton;

# Allow vman to work with /bootflash/virtual-instance/UTD/rootfs
optional_policy(gen_require(
    type container_file_t;
)
  allow polaris_vman_t container_file_t:filesystem { getattr unmount };
)

# Allow vman/ioxman to work with /tmp/HTX-IOX
optional_policy(gen_require(
    type polaris_htx_iox_tmp_t;
)
  allow polaris_vman_t polaris_htx_iox_tmp_t:dir {getattr mounton open read };
)
# Allow vman to mount /tmp/binos-IOX
optional_policy(
    gen_require(
        type polaris_qfp_memif_t;
    ')
    allow polaris_vman_t polaris_qfp_memif_t:dir mounton;
)

# vman_init.sh operates on /tmp/vman files
 type polaris_vman_tmp_t;
 files_tmp_file(polaris_vman_tmp_t)
 files_tmp_filetrans(polaris_vman_t, polaris_vman_tmp_t, { file dir })
 polaris_systemd_tmpfiles_tmp_filetrans(polaris_vman_tmp_t, dir, "vman")
 manage_files_pattern(polaris_vman_t, polaris_vman_tmp_t,polaris_vman_tmp_t)
 manage_dirs_pattern(polaris_vman_t, polaris_vman_tmp_t,polaris_vman_tmp_t)

# allow vman to work with /tmp/xml
fs_remount_tmpfs(polaris_vman_t)
fs_unmount_tmpfs(polaris_vman_t)
fs_unmount_xattr_fs(polaris_vman_t)
allow polaris_vman_t polaris_vman_tmp_t:dir mounton;
optional_policy(
    polaris_cedge_xml_tmp_manage(polaris_vman_t)
)

# relabel /bootflash/virtual-instance/UTD/tmpstaging to /dev/loopX
gen_require(
    type iso9660_t;
')
allow polaris_vman_t iso9660_t:filesystem { relabelfrom }

# configure /proc/sys/net/ipv4/conf/dpbr_0/arp_announce
kernel_search_network_sysctl(polaris_vman_t)
kernellrw_net_sysctls(polaris_vman_t)
# configure e.g. /proc/sys/vm/nr_hugepages
kernel_rw_vm_sysctls(polaris_vman_t)

# need to do bind mount of /bootflash/SHARED-IOX
mount_domtrans(polaris_vman_t)

# vman accessing files under /tmp created by initrc like /tmp/gdev/md0/gdev-info
init_read_script_tmp_files(polaris_vman_t)

#DB persistence
polaris_tdldbpersist_setup(polaris_vman_t)

polaris_tmp_tdldb_persist_setup(polaris_vman_t)
gen_require(' 
  type initrc_t; 
')

files_tmp_filetrans(initrc_t, polaris_vman_tmp_t, file, "cgroup.log")

dmidecode_domtrans(polaris_vman_t)

# read /etc/libvirt/libvirt.conf
virt_read_config(polaris_vman_t)

# vman_cgroup_yaml.sh through prep_csr_kumo (binos_functions-pd) checks for 
# ovf-env.xml file existence in variety of directories includind 
# /cdrom0/ovf-env.xml
fs_read_iso9660_files(polaris_vman_t)

# allow vman to manage loop device: finding free /dev/loopN device
# note vman code iterated over all /dev/loop* devices and try to lock 
# them. As part of that iteration it tries /dev/loop_control 
# what it should do instead is to use /dev/loop_control to get free 
# device
dev_rw_loop_control(polaris_vman_t)

# PLEASE LOOK AT ME
# allow vman to read, write /dev/loopN devices that are 
# under fixed_disk_device_t label. It is pretty strong premission 
# and at this point it is only done for /dev/loopN devices. 
# Can we do better? i.e move /dev/loopN to some other label?
storage_manage_fixed_disk(polaris_vman_t)

# when /bootflash or /harddisk are 100% full
allow polaris_vman_t self:capability sys_resource;

# allow VMAN to move disk.img to the disk
allow polaris_vman_t self:process setfscreate;

# vman mounts directories on behalf of guest containers, it uses 
# specified context for guest directories, need permission to 
# relabel, mount, etc.
fs_relabelfrom_xattr_fs(polaris_vman_t)
virt_relabel_sandbox_filesystem(polaris_vman_t)
virt_mounton_sandbox_file(polaris_vman_t)
virt_manage_sandbox_files(polaris_vman_t)
gen_require(' 
  type svirt_sandbox_file_t; 
')
allow polaris_vman_t svirt_sandbox_file_t:filesystem mount;
allow polaris_vman_t self:capability dac_override;

dev_getattr_kvm_dev(polaris_vman_t)

dev_getattr_kvm_dev(polaris_vman_t)

allow polaris_vman_t self:capability dac_override;

dev_getattr_kvm_dev(polaris_vman_t)

# vman in getfs_info_by_mediatype function inspects files in /tmp/gdev

gen_require(
  type udev_tmp_t;  
')

corecmd_exec_bin(polaris_vman_shell_t)
gen_require('t
    type polaris_chvrf_t;
   ')
# inherited as stdin/sdtout from vman
polaris_vman_use_fifo(polaris_chvrf_t)

# vman calls code_sign_verify VmanPackage
polaris_code_verify_domtrans(polaris_vman_t)

# vm_net_dev_utilization reads /proc/2962/net/dev
kernel_read_network_state(polaris_vman_t)

polaris_iosd_vcpu_read(polaris_vman_t)

#/usr/binos/conf/cgroup_reports.sh
polaris_utility_domain_template(cgroup_reports)

polaris_bexecute_domain(polaris_cgroup_reports_t, polaris_cgroup_reports_exec_t)
polaris_bexecute_domtrans(polaris_cgroup_reports_t)
# inherited as stdin/sdtout from vman
polaris_vman_use_fifo(polaris_cgroup_reports_t)
corecmd_exec_bin(polaris_cgroup_reports_t)
auth_use_nsswitch(polaris_cgroup_reports_t)

fs_read_cgroup_files(polaris_cgroup_reports_t)
fs_list_cgroup_dirs(polaris_cgroup_reports_t)

# cgroup_reports.sh creates misc files under /tmp
type polaris_cgroup_reports_tmp_t;
files_type(polaris_cgroup_reports_tmp_t)
files_tmp_filetrans(polaris_cgroup_reports_t, polaris_cgroup_reports_tmp_t, file)
manage_files_pattern(polaris_cgroup_reports_t, polaris_cgroup_reports_tmp_t, polaris_cgroup_reports_tmp_t)
fs_getattr_tmpfs(polaris_cgroup_reports_t)

#/usr/binos/conf/vman_techsupport.sh
polaris_utility_domain_template(vman_tech)

polaris_bexecute_domain(polaris_vman_tech_t, polaris_vman_tech_exec_t)
polaris_bexecute_domtrans(polaris_vman_tech_t)
# inherited as stdin/sdtout from vman
polaris_vman_use_fifo(polaris_vman_tech_t)

# vman_techsupport.sh starts virsh -c qemu:///system list --all
gen_require('t
    type virsh_t;
    type virsh_exec_t;
domtrans_pattern(polaris_vman_tech_t, virsh_exec_t, virsh_t)

# starts ip link show
sysnet_domtrans_ifconfig(polaris_vman_tech_t)

# starts brctl show
brctl_domtrans(polaris_vman_tech_t)

corecmd_exec_bin(polaris_vman_tech_t)
auth_use_nsswitch(polaris_vman_tech_t)

polaris_proc_rmonbifo_read(polaris_vman_tech_t)
polaris_chasfs_read(polaris_vman_tech_t)
polaris_cpld_read(polaris_vman_tech_t)

# starts ps aux
kernel_read_system_state(polaris_vman_tech_t)
domain_read_all_domains_state(polaris_vman_tech_t)
dev_read_sysfs(polaris_vman_tech_t)
# getattr of stdin/stdout of misc processes
term_getattr_unallocated_ttys(polaris_vman_tech_t)
term_read_console(polaris_vman_tech_t)

# reads /bootflash/virtual-instance/
polaris_disk_vman_read(polaris_vman_tech_t)

# find /etc/libvirt/lxc -name *.xml -print
virt_read_config(polaris_vman_tech_t)
# no interface that lists virt_etc_rw_t dir
gen_require(
    type virt_etc_rw_t;
')
list_dirs_pattern(polaris_vman_tech_t, virt_etc_rw_t, virt_etc_rw_t)

# find /var/run/libvirt -name *.xml -maxdepth 2 -print
virt_read_pid_files(polaris_vman_tech_t)
# no interface that lists virt_var_run_t dir
gen_require(
    type virt_var_run_t;
')
list_dirs_pattern(polaris_vman_tech_t, virt_var_run_t, virt_var_run_t)

# no interface that lists virt_lxc_var_run_t dir
gen_require(
    type virt_lxc_var_run_t;
')
list_dirs_pattern(polaris_vman_tech_t, virt_lxc_var_run_t, virt_lxc_var_run_t)

# no interface that lists qemu_var_run_t dir
gen_require(
    type qemu_var_run_t;
)
list_dirs_pattern(polaris_vman_tech_t, qemu_var_run_t, qemu_var_run_t)
#allow read of /run/libvirt/qemu
read_files_pattern(polaris_vman_tech_t, qemu_var_run_t, qemu_var_run_t)

# by some strange reason /var/run/libvirt/network is under dnsmasq_var_run_t label
dnsmasq_read_pid_files(polaris_vman_tech_t)
# no interface that lists dnsmasq_var_run_t dir
gen_require(
    type dnsmasq_var_run_t;
)
list_dirs_pattern(polaris_vman_tech_t, dnsmasq_var_run_t, dnsmasq_var_run_t)
polaris_vman_var_read(polaris_vman_tech_t)

# cat /proc/net/dev
kernel_read_network_state(polaris_vman_tech_t)

# find /sys/class/net -name intsvc* -type d -print
dev_list_sysfs(polaris_vman_tech_t)

# grep over /varied/ovf-env.xml
polaris_disk_varied_read(polaris_vman_tech_t)

# writes into /tmp/vman_techsupport
polaris_vman_tmp_manage(polaris_vman_tech_t)

# find over /sys/fs/cgroup/memory/machine
fs_list_cgroup_dirs(polaris_vman_tech_t)
# cat /sys/fs/cgroup/memory/machine/memory.limit_in_bytes
fs_read_cgroup_files(polaris_vman_tech_t)

# runs df command
fs_getattr_xattr_fs(polaris_vman_tech_t)
fs_getattr_all_fs(polaris_vman_tech_t)
files_getattr_all_dirs(polaris_vman_tech_t)
# getattr over /run/netns/2
fs_read_nsfs_files(polaris_vman_tech_t)

# check existence of vman btrace file before passing it to btdecode
polaris_vman_bt_getattr(polaris_vman_tech_t)
# check existence of pman btrace file for vman before passing it to btdecode
polaris_pman_bt_getattr(polaris_vman_tech_t)

# vman_techsupport.sh creates misc files under /tmp
type polaris_vman_tech_tmp_t;
files_type(polaris_vman Tech_tmp_t)
files_tmp_filetrans(polaris_vman Tech_t, polaris_vman Tech_tmp_t, file)
manage_files_pattern(polaris_vman Tech_t, polaris_vman Tech_tmp_t, polaris_vman Tech_tmp_t)

#allow vman tech support to read container logs including listing dirs

gen_require(
    type virt_log_t;
')
list_dirs_pattern(polaris_vman Tech_t, virt_log_t, virt_log_t)
virt_read_log(polaris_vman Tech_t)

# allow vman to access /etc/passwd
auth_map_passwd(polaris_vman Shell_t)

#vman does lvm storage management e.g. vman_libvirt_strg_available_by_pool
lvm_domtrans(polaris_vman_t)

#allow read of pid files e.g. /run/udev/data/b7:34
udev_read_pid_files(polaris_vman_t)

#allow vman to connect to the WAAS container for serial vman_register_socket
polaris_waas_stream_connect(polaris_vman_t)

# allow vman to pgrep
# allow to get getattr of /proc file system
domain_read_all_domains_state(polaris_vman_t)

# allow vman to kill LXC container process that hasn't shutdown
# inspite of a shutdown command

gen_require(
    type virtd_lxc_t;
')
polaris_vman_kill_process(virtd_lxc_t)

# allow vman to rsync using ioxman_syslib.sh
rsync_entry_type(polaris_vman_t)
corenet_tcp_connect_rsync_port(polaris_vman_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisvman.te
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```
/tmp/.ncsshd_authorized_keys(/.*)? gen_context(system_u:object_r:polaris_ncsshd_keys_t,s0)
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispsd.fc

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```c
### <summary>Polaris Btrace Policy Rules.</summary>

```
 obfl policy
```

```
### <summary>
##      Read obfl files (under /obfl, /varied/obfl, etc)
### </summary>
```

```c
### <param name="domain">
###      Domain allowed access.
### </summary>
```

```c
### </param>
### <rolebase/>
#
interface('polaris_obfl_data_read',
  gen_require(''
    type polaris_obfl_data_t;
    type root_t;
  ')
  read_lnk_files_pattern($1, root_t, polaris_obfl_data_t)
  read_files_pattern($1, polaris_obfl_data_t, polaris_obfl_data_t)
  list_dirs_pattern($1, polaris_obfl_data_t, polaris_obfl_data_t)
  allow $1 polaris_obfl_data_t:file map;
')
```

```
### <summary>
##      Manage obfl files (under /obfl, /varied/obfl, etc
### </summary>
```
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolebase/>
#
interface('polaris_obfl_data_manage',`
   gen_require(`
      type polaris_obfl_data_t;
      type root_t;
      type var_t;
   `)

read_link_files_pattern($1, root_t, polaris_obfl_data_t)
manage_files_pattern($1, { var_t polaris_obfl_data_t }, polaris_obfl_data_t)
manage_dirs_pattern($1, { var_t polaris_obfl_data_t }, polaris_obfl_data_t)
allow $1 polaris_obfl_data_t:file map;
`)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisobfl.if
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#
## <summary>Polaris Btrace Policy Rules.</summary>

########################################################################################################
# RIPC policy
########################################################################################################

########################################################################################################
## <summary>Work with rpc
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolebase/>
interface('polaris_ripc',
    corenet_tcp_bind_generic_node($1)
    allow $1 self:tcp_socket { getattr setopt getopt bind create listen accept connect read write }
    # bpc would like to issue "setsockopt(sock, SOL_SOCKET, SO_VRF," , which requires
    # net_admin and sys_admin capabilities
    allow $1 self:capability { net_admin sys_admin }

    polaris_socketat_nsfs_read($1)
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisripc.if
No license file was found, but licenses were detected in source scan.

# # March 2017, Victor Kamensky
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#

/tmp/sw/boot(/.*)?     gen_context(system_u:object_r:polaris_boot_tmp_t,s0)
/tmp/sw/isos(/.*)?     gen_context(system_u:object_r:polaris_boot_tmp_t,s0)
/tmp/bootup_timestamp  gen_context(system_u:object_r:polaris_boot_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisboot.fc
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#

# polarisservicemgr file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisservicemgr.fc
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#
## <summary>Polaris polarisboothelper Policy Rules.</summary>

### <summary>
##      Read any regular file/directory from /tmp/udev.
### </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_udev_tmp_read',`
   gen_require(
       type polaris_udev_tmp_files_t;
   `)
  read_files_pattern($1, polaris_udev_tmp_files_t, polaris_udev_tmp_files_t)
  list_dirs_pattern($1, polaris_udev_tmp_files_t, polaris_udev_tmp_files_t)
`)

### <summary>
##      Manage any regular file/directory from /tmp/udev.
### </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_udev_tmp_manage',`
   gen_require(
       type polaris_udev_tmp_files_t;
   `)
  manage_dirs_pattern($1, polaris_udev_tmp_files_t, polaris_udev_tmp_files_t)
  manage_files_pattern($1, polaris_udev_tmp_files_t, polaris_udev_tmp_files_t)
`)

### <summary>
##      Listdir of any regular directory from /tmp/udev.
### </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
# interface('polaris_udev_tmp_list_dirs';
    gen_require('        type polaris_udev_tmp_files_t;
    ')
    list_dirs_pattern($1, polaris_udev_tmp_files_t, polaris_udev_tmp_files_t)
')

######################################################################
## <summary>
##     Watch udev_tmp_files directories and files
## </summary>
## <param name="domain">
##     <summary>
##     Domain allowed access.
##     </summary>
## </param>
## <rolebase/>
#
# interface('polaris_udev_tmp_watch';
    gen_require('        type polaris_udev_tmp_files_t;
    ')
    allow $1 polaris_udev_tmp_files_t:{dir file} watch;
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisboothelper.if
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#
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#
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#
/usr/cpp/bin/cpp_driver -- gen_context(system_u:object_r:polaris_cpp_driver_exec_t,s0)
/usr/cpp/bin/cpp_driver_ledp -- gen_context(system_u:object_r:polaris_cpp_driver_exec_t,s0)
/usr/cpp/bin/cpp_driver_us_ledp -- gen_context(system_u:object_r:polaris_cpp_driver_exec_t,s0)
/usr/cpp/bin/cpp_driver_vwlc -- gen_context(system_u:object_r:polaris_cpp_driver_exec_t,s0)
/usr/cpp/bin/cpp_driver_vwlc_ledp -- gen_context(system_u:object_r:polaris_cpp_driver_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppdriver.fc
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#
# March 2017, Victor Kamensky
#
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#

/usr/bin/os/conf/mcp_monitor_process_batchmode.sh --
gen_context(system_u:object_r:polaris_monitor_process_exec_t,s0)
/usr/bin/os/conf/pkg_summary.sh -- gen_context(system_u:object_r:polaris_pkg_summary_exec_t,s0)
/usr/bin/os/conf/pkg_to_tree.sh -- gen_context(system_u:object_r:polaris_pkg_to_tree_exec_t,s0)
/tmp/myhostname gen_context(system_u:object_r:polaris_hm_tmp_t,s0)
/tmp/show_provision_temp(\.*).? gen_context(system_u:object_r:polaris_show_provision_tmp_t,s0)
/tmp/fs_lock_bootflash gen_context(system_u:object_r:polaris_cli_fs_cmds_tmp_t,s0)
# used by "sh pla so filesystem bootflash: de" CLI
/usr/bin/os/conf/mcp_cli_fs cmds.sh -- gen_context(system_u:object_r:polaris_cli_fs_cmds_exec_t,s0)
# used by "show platform software yang-management process monitor" CLI
/usr/bin/os/conf/mcp_monitor_dmi_proc.sh --
gen_context(system_u:object_r:polaris_monitor_dmi_process_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarishm.fc
No license file was found, but licenses were detected in source scan.

#
# August 2017, Shawn Lu
#
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#
## <summary>Polaris odm Policy Rules.</summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <summary>Mqipc channel file label.

## <param name="mqipc_label">
## Mqipc channel in sub directory and multiple servers on TDL
## channel is not supported by autogen code. ODM odm_clnt2svr_data
## channel is one of those. Allow domain to be one server on it.
## ODM elastic value is 2 now, add more if need in the future.
## </param>

## <summary>Polaris odm Policy Rules.</summary>
interface('polaris_odm_clnt2svr_mqipc_create',
gen_require('type polaris_odm_client2server_data_mqipc_t;
'})
polaris_mqipc_create_name_dir('$1', polaris_odm_client2server_data_mqipc_t, odm_clnt2svr_data-b1)
polaris_mqipc_create_name_dir('$1', polaris_odm_client2server_data_mqipc_t, odm_clnt2svr_data-b0)
polaris_mqipc_create_name_dir('$1', polaris_odm_client2server_data_mqipc_t, odm_clnt2svr_data)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisodm.if
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#
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#

## <summary>Polaris install_mgr Policy Rules.</summary>

************************************************************
## <summary>
## Read /tmp/sw/inst_tmp_1 files and directories
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
## </param>
#
interface('polaris_install_mgr_tmp_read',
gen_require('type polaris_install_mgr_tmp_t;
'})
list_dirs_pattern('$1', polaris_install_mgr_tmp_t, polaris_install_mgr_tmp_t)
read_files_pattern('$1', polaris_install_mgr_tmp_t, polaris_install_mgr_tmp_t)
read_lnk_files_pattern('$1', polaris_install_mgr_tmp_t, polaris_install_mgr_tmp_t)
')

************************************************************
## <summary>
## Read/Write /.installer  files and directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_install_disk_manage',
    gen_require(
        type polaris_disk_bootflash_t;
        type polaris_disk_install_t;
    )
)

filetrans_pattern(polaris_install_mgr_t,polaris_disk_bootflash_t, polaris_disk_install_t, dir, ".installer")
filetrans_pattern(polaris_install_mgr_t,polaris_disk_bootflash_t, polaris_disk_install_t, fifo_file, "inot_fifo")
manage_dirs_pattern($1, {polaris_disk_bootflash_t polaris_disk_install_t}, polaris_disk_install_t)
manage_files_pattern($1, polaris_disk_install_t, polaris_disk_install_t)
manage_fifo_files_pattern($1, polaris_disk_install_t, polaris_disk_install_t)
')

###########################################################################
## <summary>
##      Read /bootflash/.installer  files and directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_install_disk_read',
    gen_require(
        type polaris_disk_install_t;
    )
)

read_files_pattern($1, polaris_disk_install_t, polaris_disk_install_t)
')

###########################################################################
## <summary>
##      Read copylog files (location varies by platform)
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolebase/>
#
interface('polaris_read_user_file',
    gen_require(
        type polaris_user_file_t;
        type device_t;
    )
)

read_blk_files_pattern($1, device_t, polaris_user_file_t)
read_files_pattern($1, polaris_user_file_t, polaris_user_file_t)
read_lnk_files_pattern($1, polaris_user_file_t, polaris_user_file_t)

#######################################
## <summary>
##      getattr for copylog files (location varies by platform)
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## </rolebase/>
#
interface('polaris_user_file_getattr',
    gen_require(
        type polaris_user_file_t;
        type device_t;
    )
)

getattr_files_pattern($1, polaris_user_file_t, polaris_user_file_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisinstallmgr.if
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#

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisjvm.fc
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dnl
dnl April 2018, Victor Kamensky
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Crankshaft (Overlord, Utah, Goldbeach, Neptune, TSN and Supernova) Platform Max Bay Limits

max_bay_map_set(rp, `per_bay', 0)
max_bay_map_set(cc, `per_bay', 19)
max_bay_map_set(fp, `per_bay', 0)

max_bay_ripc_map_set(rp, `per_bay', 0)
max_bay_ripc_map_set(cc, `per_bay', 19)
max_bay_ripc_map_set(fp, `per_bay', 0)

max_bay_map_set(rp, `global', 0)
max_bay_map_set(cc, `global', 19)
max_bay_map_set(fp, `global', 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/crankshaftmaps.m4

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#
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#

/usr/bin/vconfd_script_reboot\sh -- gen\_context(system\_u:object\_r:polaris\_vconfd\_reboot\_exec\_t\_s0)
/usr/bin/vconfd_script_if\_reset\sh -- gen\_context(system\_u:object\_r:polaris\_vconfd\_ifreset\_exec\_t\_s0)
/usr/bin/vconfd_script_get\_config\sh -- gen\_context(system\_u:object\_r:polaris\_vconfd\_cfg\_exec\_t\_s0)
/usr/bin/vconfd_script_vmanage\_list\_stats\sh --
gen\_context(system\_u:object\_r:polaris\_vconfd\_history\_exec\_t\_s0)
/usr/bin/vconfd_script_vmanage\_clear\_stats\sh --
gen\_context(system\_u:object\_r:polaris\_vconfd\_history\_exec\_t\_s0)
/usr/bin/vconfd_script_activate\sh -- gen\_context(system\_u:object\_r:polaris\_vconfd\_software\_exec\_t\_s0)
/usr/bin/mcp\_upgrade\_wrapper\sh -- gen\_context(system\_u:object\_r:polaris\_vconfd\_software\_exec\_t\_s0)
/usr/bin/vconfd_script_nms\_action\sh -- gen\_context(system\_u:object\_r:polaris\_vconfd\_nms\_exec\_t\_s0)
/usr/bin/vconfd_script_add\_chassis\_numbers\_to\_ztp\sh --
gen\_context(system\_u:object\_r:polaris\_vconfd\_device\_exec\_t\_s0)
/usr/bin/vconfd_script_remove\_chassis\_numbers\_from\_ztp\sh --
gen\_context(system\_u:object\_r:polaris\_vconfd\_device\_exec\_t\_s0)
/usr/bin/vconfd_script_upload\_chassis\_number\_file\sh --
gen\_context(system\_u:object\_r:polaris\_vconfd\_device\_exec\_t\_s0)
/usr/bin/reset-conf -- gen\_context(system\_u:object\_r:polaris\_vconfd\_reset\_exec\_t\_s0)
/usr/bin/reset-logs -- gen\_context(system\_u:object\_r:polaris\_vconfd\_reset\_exec\_t\_s0)
/usr/bin/patch\sh -- gen\_context(system\_u:object\_r:polaris\_vconfd\_software\_exec\_t\_s0)
Open Source Used In BGP TE Controller Version 4.3.0

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscedge.fc

No license file was found, but licenses were detected in source scan.
policy_module(polaristdlresolve, 1.0);

# TDLresolve policy

gen_require(`
    attribute polaris_extended_domain;
')

type polaris_tdlresolve_t;
files_type(polaris_tdlresolve_t)

files_tmp_filetrans(polaris_extended_domain, polaris_tdlresolve_t, dir, "tdlresolve")
# tdl_boottime.sh uses /tmp/tdlresolve_tmp for some temp files
# which are moved into /tmp/tdlresolve latter
files_tmp_filetrans(polaris_extended_domain, polaris_tdlresolve_t, dir, "tdlresolve_tmp")

type polaris_global_service_t;
files_type(polaris_global_service_t);

# rsync policy

gen_require(`
    type rsync_t;
    type polaris_btrace_base_t;
')
#tdl_cleanup_epochs.sh uses btrace
allow rsync_t polaris_btrace_base_t:file map;
#rsync invokes tdl_cleanup_epochs.sh as part of this set /proc/[pid]/oom_score_adj is done
allow rsync_t self:capability sys_resource;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristdlresolve.te
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policy_module(polarisqfp, 1.0);

polaris_process_domain_template(qfp)

polaris_cpp_process(polaris_qfp_t)
polaris_cpp_dev_use(polaris_qfp_t)
polaris_btrace_data_manage(polaris_qfp_t)
polaris_crft_data_manage(polaris_qfp_t)
polaris_chasfs_manage(polaris_qfp_t)
polaris_lsmpi_dev_use(polaris_qfp_t)
polaris_persistent_list_dirs(polaris_qfp_t);

# allow for hot add on azure
kernel_read_irq_sysctls(polaris_iordbd_t)
kernel_rw_irq_sysctls(polaris_iordbd_t)

# allow read variety of system information from sysfs, as well as write
# into configuration of some pcie devices
# type=AVC msg=audit(1479597040.739:218): avc: denied { write } for  pid=30997 comm="ucode_ctl_rx"
# name="config" dev="sysfs" ino=22363 scontext=system_u:system_r:polaris_qfp_t:s0
# tcontext=system_u:object_r:sysfs_t:s0 tclass=file
dev_rw_sysfs(polaris_qfp_t)

# allow to send message to /dev/log
logging_send_syslog_msg(polaris_qfp_t)

# allow access to uio devices like /dev/uio0
dev_rw_userio_dev(polaris_qfp_t)

# Platforms with QAT v1.7 need map permission also
# qae device (/dev/icp_adf_ctl)
type polaris_icp_device_t;
dev_node(polaris_icp_device_t)

allow polaris_qfp_t userio_device_t:chr_file map;

# allow to read /proc/meminfo
kernel_read_system_state(polaris_qfp_t)

# qfp FIA (Feature Invocation Array) resides in /dev/shm/cpp_ucode_dram
# Those are set of instructions assembled by cpp control plane and passed
# to qfp to execute.
polaris_cpp_tmpfs_exec(polaris_qfp_t)

# qfp /var/run pid file
type polaris_qfp_var_run_t;
files_pid_file(polaris_qfp_var_run_t)
manage_files_pattern(polaris_qfp_t, polaris_qfp_var_run_t, polaris_qfp_var_run_t)
manage_dirs_pattern(polaris_qfp_t, polaris_qfp_var_run_t, polaris_qfp_var_run_t)
files_pid_filetrans(polaris_qfp_t, polaris_qfp_var_run_t, { file dir })
# mmap /var/run/dpdk/rte/config
allow polaris_qfp_t polaris_qfp_var_run_t:file map;

# qfp memif directory and file
type polaris_qfp_memif_t;
files_tmp_file(polaris_qfp_memif_t);
# qfp memif interface for binos clients in /tmp/memif
files_tmp_filetrans(polaris_qfp_t, polaris_qfp_memif_t, dir, "memif")
# creates /tmp/binos-IOX/memif
files_tmp_filetrans(polaris_qfp_t, polaris_qfp_memif_t, dir, "binos-IOX")
polaris_qfp_memif_manage(polaris_qfp_t)
# qfp memif interface for container in /bootflash/SHARED-IOX/memif
polaris_disk_type(polaris_qfp_memif_t)
gen_require(''
    type polaris_disk_bootflash_t;
')
filetrans_pattern(polaris_qfp_t, polaris_disk_bootflash_t, polaris_qfp_memif_t, dir, "memif")

# work with /bootflash/SHARED-IOX/memif/memif-dp-svr
polaris_utdl_container_dgram_send(polaris_qfp_t)

# work (create/open/read/write) with hugetlbs files
fs_manage_hugetlbs_dirs(polaris_qfp_t)
fs_rw_hugetlbs_files(polaris_qfp_t)
gen_require(''
    type hugetlbs_t;
')
allow polaris_qfp_t hugetlbs_t:file create;
# dpdk may unlinks unneeded pages in unmap_unneeded_hugepages function
allow polaris_qfp_t hugetlbs_t:file unlink;

allow polaris_qfp_t self:capability { sys_rawio sys_nice sys_admin };
allow polaris_qfp_t self:process setsched;

# is_nic_netmap_capable function, which is used by vnic_cfg_port, needs socket to
# work with interface parameters
allow polaris_qfp_t self:udp_socket create_socket_perms;

ifdef('crankshaft_family','
polaris_icc_broken_relocations(polaris_qfp_t)
')

# access to /dev/dash_xxx devices on cranshaft platforms
optional_policy('
polaris_dash_dev_use(polaris_qfp_t)
')

# netmap device (/dev/netmap)
type polaris_netmap_device_t;
dev_node(polaris_netmap_device_t)
polaris_netmap_dev_use(polaris_qfp_t)

# access to /dev/icc_XXX device on crankshaft platforms
optional_policy(
    polaris_icp_dev_use(polaris_qfp_t)
')

# netmap device (/dev/svc_eng_puntNN)
type polaris_sep_device_t;
dev_node(polaris_sep_device_t)
polaris_svc_eng_punt_dev_use(polaris_qfp_t)

# transition and access to /var/log/cdal-tsn-info.log
ifdef('tsn_platform',
    polaris_qfp_log_manage("cdal-tsn-info.log")
')

# transition and access to /var/log/cdal-tsn-info.log
ifdef('blackheart_platform',
    polaris_qfp_log_manage("cdal-tsn-info.log")
')

# adventus needs access to /sys/devices/platform/cpn-110-master/cpn-110-master
# for boot configuration
# transition and access to /var/log/cdal-tsn-info.log
ifdef('aventus_platform',
gen_require(
    type syslogd_t;
) polaris_qfp_log_manage("cdal-tsn-info.log")
polaris_ggpio_dev_read_write(polaris_qfp_t)
polaris_ggpio_dev_read_write(syslogd_t)
')

# transition and access to /var/log/cdal-tsn-info.log
ifdef('cabot_platform',
    polaris_qfp_log_manage("cdal-tsn-info.log")
')

# transition and access to /var/log/cdal-tsn-info.log
#ifdef('cabo_platform',
    polaris_qfp_log_manage("cdal-tsn-info.log")
')
ifdef('supernova_platform',
    polaris_qfp_logManage("cdal-tns-info.log")
)

#ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

#ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

#ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

#ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

#ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

#ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)

# LOOK AT ME: qfp process links libcrypto.so.1.0.0 which has DT_TEXTREL
# that should be addressed by CSCvj99896, once that is fixed remove below
# under CSCvj99905.
gen_require(
    type lib_t;
    ')

allow polaris_qfp_t lib_t:file execmod;

ifdef('supernova_platform',
    polaris_qfp_log_manage("cdal-tns-info.log")
)
auth_use_nsswitch(polaris_qfp_t)

# CSR & C8KV use infiniband and tun/tap devices for Azure
type polaris_infiniband_device_t;
dev_node(polaris_infiniband_device_t)

polaris_infiniband_dev_use(polaris_qfp_t)

kernel_request_load_module(polaris_qfp_t)
allow polaris_qfp_t self:netlink_rdma_socket { bind create setopt };
allow polaris_qfp_t self:capability { ipc_lock net_admin net_raw };
allow polaris_qfp_t self:netlink_route_socket rw_netlink_socket_perms;
allow polaris_qfp_t self:tun_socket { create relabelfrom relabelto };
corenet_rw_tun_tap_dev(polaris_qfp_t)

# CSR Azure IO model requires read access
gen_require(
    type proc_net_t;
)
allow polaris_qfp_t proc_net_t:file { read };

# manage MLX NIC socket files in /var/tmp/net_ml5*
type polaris_qfp_var_tmp_t;
files_tmp_file(polaris_qfp_var_tmp_t);
files_tmp_filetrans(polaris_qfp_t, polaris_qfp_var_tmp_t, { sock_file })
manage_sock_files_pattern(polaris_qfp_t, polaris_qfp_var_tmp_t, polaris_qfp_var_tmp_t)

# rm from coreutils-8.30 wants to know filesystem type
fs_getattr_xattr_fs(polaris_qfp_t)

# allow create of dir /bootflash/SHARED-IOX on first install of VM
create_dirs_pattern(polaris_qfp_t, polaris_disk_bootflash_t, polaris_disk_bootflash_t)

polaris_cpld_read(polaris_qfp_t, polaris_sysfs_cpld_t, polaris_sysfs_cpld_t)

# tsn needs access to /sys/devices/platform/cpn-110-master/cpn-110-master
# for boot configuration
ifdef('tsn_platform',
    polaris_ggpio_dev_read_write(polaris_qfp_t)
')

# blackheart needs access to /sys/devices/platform/cpn-110-master/cpn-110-master
# for boot configuration
ifdef('blackheart_platform',
    polaris_ggpio_dev_read_write(polaris_qfp_t)
')
# sparrow needs access to /sys/devices/platform/cpn-110-master/cpn-110-master
# for boot configuration
# Also needs access to cdal-tsn-info.log
ifdef(`sparrow_platform',`
  polaris_qfp_log_manage("cdal-tsn-info.log")
  polaris_ggpio_dev_read_write(polaris_qfp_t)
')

# ucode also needs access to ttyUSB4
ifdef(`cabo_platform',`
  term_use_usb_ttys(polaris_qfp_t)
')

# qfp starts /usr/binos/bin/net_hotremove-vxe.sh
init_read_script_files(polaris_qfp_t)

# access to /dev/dash_xxx devices on cranshaft platforms
optional_policy(
  polaris_htx_dgram_send(polaris_qfp_t)
')

# net_hotremove-vxe.sh that works with /tmp/iodb
polaris_iodb_tmp_manage(polaris_qfp_t)
# net_hotremove-vxe.sh sends signal to iodbd.sh
gen_require(
  type polaris_iodb_t;
  allow polaris_qfp_t polaris_iodb_t:process signal;
)

# net_hotremove-vxe.sh reads /proc/sys/vm/nr_hugepages
kernel_read_vm_sysctls(polaris_qfp_t)

# long running helper script iodbd.sh
polaris_process_domain_template(iodbd)

# iodbd.sh started by /etc/init.d/binos that runs under initrc_t
gen_require(
  type initrc_t;
  polaris_iodbdomtrans(initrc_t)
)

polaris_boot_tmp_read(polaris_iodbdom_t)
polaris_chasfs_manage(polaris_iodbdom_t)
polaris_cpld_read(polaris_iodbdom_t)
polaris_rmonbifo_tmp_read(polaris_iodbdom_t)

auth_use_nsswitch(polaris_iodb_t)
corecmd_exec_bin(polaris_iodb_t)
# hot add interfaces virtio/sriov
dev_manage_sysfs_dirs(polaris_iodb_t)
polaris_sysfs_manage(polaris_iodb_t)

# write into sysfs file like /sys/devices/pci0000:00/0000:00:03.2/config
dev_rw_sysfs(polaris_iodb_t)

# read/write /run/dpdk/rte/config
manage_files_pattern(polaris_iodb_t, polaris_qfp_var_run_t, polaris_qfp_var_run_t)

# lspci reads /etc/modprobe.d
modutils_read_module_config(polaris_iodb_t)
# lspci reads /lib/modules/5.4.40/modules.softdep
files_read_kernel_modules(polaris_iodb_t)
files_map_kernel_modules(polaris_iodb_t)

# runs dmidecode
dmidecode_domtrans(polaris_iodb_t)
# dmidecode when run in this context needs access initrc stdin/stdout
gen_require(
    type dmidecode_t;
)
init_rw_stream_sockets(dmidecode_t)

# calls ethtool -i intsvc0
sysnet_domtrans_ifconfig(polaris_iodb_t)

# reads /etc/rc.d/init.d/binos_functions-pd-iodb
init_read_script_files(polaris_iodb_t)

# read /proc/sys/vm/nr_hugepages
kernel_read_vm_sysctls(polaris_iodb_t)

# cat /sys/class/net/intsvc0/address
dev_read_sysfs(polaris_iodb_t)

# read /proc/cmdline
kernel_read_system_state(polaris_iodb_t)

polaris_iodb_tmp_manage(polaris_iodb_t)

type polaris_iodb_tmp_t;
files_tmp_file(polaris_iodb_tmp_t)

# /tmp/iodb is created by /etc/init.d/binos that runs under initrc_t
gen_require(
    type initrc_t;
files_tmp_filetrans(initrc_t, polaris_iodb_tmp_t, dir, "iodb")
polaris_iodb_tmp_manage(initrc_t)

# udev_t can drop entries into /tmp/iodb to process
gen_require(
    type udev_t;
')
polaris_iodb_tmp_manage(udev_t)

# Radium and Thallium need to check rommon version when initializing static
# interface table (access /proc/rmonbifo).
optional_policy(
    polaris_proc_rmonbifo_read(polaris_qfp_t)
')

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-- March 2017, Victor Kamensky
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# All rights reserved
#

policy_module(polarisngwctblmgr, 1.0);

gen_require(
    type polaris_ngwc_tbl_mgr_t;
')
polaris_btrace_data_manage(polaris_ngwc_tbl_mgr_t)
polaris_crft_data_manage(polaris_ngwc_tbl_mgr_t)
polaris_chasfs_manage(polaris_ngwc_tbl_mgr_t)
polaris_tdlresolve_read(polaris_ngwc_tbl_mgr_t)
polaris_tdlldb_list_dirs(polaris_ngwc_tbl_mgr_t)
polaris_cpld_read(polaris_ngwc_tbl_mgr_t)
polaris_lua_read(polaris_ngwc_tbl_mgr_t)
polaris_flashlib_read(polaris_ngwc_tbl_mgr_t)
polaris_ripc_sman_ui_serv_connect(polaris_ngwc_tbl_mgr_t)

allow polaris_ngwc_tbl_mgr_t self: capability dac_override;
polaris_dyncfg_tmp_read(polaris_ngwc_tbl_mgr_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngwctblmgr.te
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#
# March 2017, Victor Kamensky
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#

#define(’polaris_ripc_service_server_aux’, ’dnl
polaris_ripc_$2_bind($3)
polaris_ripc($3)
’)
#define(’polaris_ripc_service_server_full’, ’dnl
polaris_ripc_service_server_aux(ripc_label($1), ripc_stem($1), process_label($2), $4, $5)
’)
#define(’polaris_ripc_service_server’, ’dnl
ifelse(ripc_type_map($1), ’, ’polaris_ripc_service_server_full($1, $2, $3, $4, $5)
')
ripc_type_map_set(ripc_label($1), process_label($2))
 define('polaris_rpic_service_client_aux',"dnl
polaris_rpic($3)
polaris_rpic_$2_connect($3)
"
)

 define('polaris_rpic_service_client',"dnl
polaris_rpic_service_client_aux(ripc_label($1), ripc_stem($1), process_label($2))dnl
"
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/polaris_ipc_rpic_te.m4

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# # August 2017, Victor Kamensky
# #
# # Copyright (c) 2017-2021 by Cisco Systems, Inc.
# # All rights reserved
# #

/usr/bin/os/conf/audit_log.sh -- gen_context(system_u:object_r:polaris_audit_log_exec_t,s0)
/usr/bin/os/conf/audit_snapshot.sh -- gen_context(system_u:object_r:polaris_audit_log_exec_t,s0)
/tmp/package_biv_sums -- gen_context(system_u:object_r:polaris_kgv_data_t,s0)
/usr/bin/code_sign_verify -- gen_context(system_u:object_r:polaris_code_verify_exec_t,s0)
/usr/sbin/boot_verify_package -- gen_context(system_u:object_r:polaris_code_verify_exec_t,s0)
/usr/sbin/kgv_update -- gen_context(system_u:object_r:polaris_code_verify_exec_t,s0)
/dev/shm/sem\updatepcr8d_msg_sem gen_context(system_u:object_r:polaris_code_verify_tmpfs_t,s0)

# /dev/aikido
/dev/aikido -c gen_context(system_u:object_r:polaris_aikido_device_t,s0)

/usr/bin/os/conf/mcp_upgrade_hwprg.sh gen_context(system_u:object_r:polaris_hw_upgrade_exec_t,s0)
/usr/bin/os/conf/mcp_upgrade_hwprg_fpga.sh gen_context(system_u:object_r:polaris_hw_upgrade_exec_t,s0)
/usr/bin/os/conf/mcp_upgrade_hwprg_cpld.sh gen_context(system_u:object_r:polaris_hw_upgrade_exec_t,s0)
/usr/bin/os/conf/mcp_upgrade_hwprg_cmds.sh gen_context(system_u:object_r:polaris_hw_upgrade_exec_t,s0)
/usr/bin/os/conf/mcp_upgrade_hwprg_utils.sh gen_context(system_u:object_r:polaris_hw_upgrade_exec_t,s0)
/usr/bin/os/bin/tam_fw_upgrade gen_context(system_u:object_r:polaris_hw_upgrade_exec_t,s0)

/usr/bin/os/conf/mcp_upgrade_rommon.sh gen_context(system_u:object_r:polaris_rom_upgrade_exec_t,s0)
/usr/bin/os/conf/mcp_upgrade_rommon_cmds.sh gen_context(system_u:object_r:polaris_rom_upgrade_exec_t,s0)
/usr/bin/os/conf/mcp_upgrade_rommon_helper.sh gen_context(system_u:object_r:polaris_rom_upgrade_exec_t,s0)
/usr/bin/os/conf/mcp_upgrade_rommon_x86.sh gen_context(system_u:object_r:polaris_rom_upgrade_exec_t,s0)

/dev/scansta -c gen_context(system_u:object_r:polaris_scansta_device_t,s0)

---

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Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristws.fc

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#
# June 2020, Cuiyan Ma
#
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#

policy_module(polarisiissucompcheck, 1.0);
polaris_process_domain_template(issu_comp_check)

corecmd_exec_bin(polaris_issu_comp_check_t)
corecmd_exec_shell(polaris_issu_comp_check_t)
polaris_chasfs_manage(polaris_issu_comp_check_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_issu_comp_check_t)

# For reading tracekey from /tmp/tmppub/tracekey_cache/usr/bin/rotee
polaris_btrace_tmppub_read(polaris_issu_comp_check_t)

# For reading /sys/devices/platform/cpld/platform_type
polaris_cpld_read(polaris_issu_comp_check_t)

# For reading /tmp/sw/boot/pkginfo
polaris_boot_tmp_read(polaris_issu_comp_check_t)

# For ls on /tmp/ufs/crashinfo
optional_policy(`
polaris_ncd_tmp_read(polaris_issu_comp_check_t)
`)

# work with /tmp files
type polaris_issu_comp_check_tmp_t;
files_tmp_file(polaris_issu_comp_check_tmp_t)
manage_dirs_pattern(polaris_issu_comp_check_tmp_t, tmp_t, polaris_issu_comp_check_tmp_t)
manage_files_pattern(polaris_issu_comp_check_tmp_t, polaris_issu_comp_check_tmp_t, polaris_issu_comp_check_tmp_t)
files_tmp_filetrans(polaris_issu_comp_check_tmp_t, polaris_issu_comp_check_tmp_t, { file dir })

# For using push_using_rsync
polaris_chvrf_domtrans(polaris_issu_comp_check_t)

gen_require(`
type rsync_t;

')

rsync_entry_domtrans(polaris_issu_comp_check_t, rsync_t)
polaris_manage_rsync_tmplog_dir(polaris_issu_comp_check_t)

# rsync inherits issu_comp_check.sh's stdout/stderr fifo files
allow rsync_t polaris_issu_comp_check_t:fifo_file write;

allow polaris_issu_comp_check_t self:capability sys_resource;

# reads /tmp/remote_sw_verinfo.txt
gen_require(
        type rsync_tmp_t;
    )

read_files_pattern(polaris_issu_comp_check_t, rsync_tmp_t, rsync_tmp_t)

# use of errmsg.sh
polaris_script_errmsg_use(polaris_issu_comp_check_t)

# hwutil modifies /sys/bus/i2c/drivers/pca9548/1-0076/reg_control
# TODO: label sysfs so that reg control gets its own label
dev_rw_sysfs(polaris_issu_comp_check_t)

# allow locking of /tmp/sysctrl_i2c.lck
# TODO: this file probably deserves its own label when created by cm_rp
polaris_cm_rp_tmp_manage(polaris_issu_comp_check_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisissucompcheck.te
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#
# April 2017, Victor Kamensky
#
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#

## <summary>Polaris dmi_opdatamgrd Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisdmiopdatamgrd.if
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#
# May 2017, Victor Kamensky
#
# Copyright (c) 2017-2019 by Cisco Systems, Inc.
policy_module(polarispttcd, 1.0);

generate(policy_module)

gen_require(`
    type polaris_pttcd_t;
    
    polaris_btrace_data_manage(polaris_pttcd_t)
polaris_crft_data_manage(polaris_pttcd_t)
polaris_chasfs_manage(polaris_pttcd_t)
polaris_tdlresolve_read(polaris_pttcd_t)
polaris_tdlldb_list_dirs(polaris_pttcd_t)
polaris_lua_read(polaris_pttcd_t)
polaris_flashlib_read(polaris_pttcd_t)

auth_use_nsswitch(polaris_pttcd_t)
polaris_cpld_read(polaris_pttcd_t)

allow polaris_pttcd_t self:netlink_route_socket r_netlink_socket_perms;

polaris_disk_bootflash_search(polaris_pttcd_t)
polaris_bootflash_manage(polaris_pttcd_t)
polaris_persistent_getattr(polaris_pttcd_t)

type polaris_pttcd_tmp_t;
files_tmp_file(polaris_pttcd_tmp_t)
polaris_systemd_tmpfiles_tmp_filetrans(polaris_pttcd_tmp_t, dir, "interceptor")

gen_require(`
    type polaris_btrace_tmppub_t;
    
    manage_dirs_pattern(polaris_pttcd_tmp_t, { polaris_pttcd_tmp_t polaris_btrace_tmppub_t }, polaris_pttcd_tmp_t)
manage_files_pattern(polaris_pttcd_tmp_t, { polaris_pttcd_tmp_t polaris_btrace_tmppub_t }, polaris_pttcd_tmp_t)
manage_lnk_files_pattern(polaris_pttcd_tmp_t, { polaris_pttcd_tmp_t polaris_btrace_tmppub_t }, polaris_pttcd_tmp_t)

allow polaris_pttcd_t self:tcp_socket create_stream_socket_perms;
allow polaris_pttcd_t self:udp_socket create_socket_perms;

corenet_tcp_bind_generic_node(polaris_pttcd_t)
corenet_tcp_bind_polaris_pttcd_port(polaris_pttcd_t)
corenet_tcp_connect_polaris_pttcd_port(polaris_pttcd_t)
corenet_udp_sendrecv_polaris_pttcd_port(polaris_pttcd_t)

sysnet_read_config(polaris_pttcd_t)

allow polaris_pttcd_t self:capability sys_resource;
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Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispttcd.te

No license file was found, but licenses were detected in source scan.

#
# August 2017, Shawn Lu
#
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#

policy_module(polarisrrmmgr, 1.0);

gen_require(
   type polaris_rrm_mgr_t;
)

polaris_btrace_data_manage(polaris_rrm_mgr_t)
polaris_chasfs_manage(polaris_rrm_mgr_t)
polaris_tdlresolve_read(polaris_rrm_mgr_t)
polaris_tdlldb_list_dirs(polaris_rrm_mgr_t)
polaris_cpld_read(polaris_rrm_mgr_t)
polaris_lua_read(polaris_rrm_mgr_t)
polaris_flashlib_read(polaris_rrm_mgr_t)
polaris_ripc_sman_ui_serv_connect(polaris_rrm_mgr_t)
polaris_db_tdlldb_dir_use(polaris_rrm_mgr_t)

# allow to use setrlimit
allow polaris_rrm_mgr_t self:process setrlimit;
allow polaris_rrm_mgr_t self:capability sys_resource;
allow polaris_rrm_mgr_t self:capability dac_override;

# stuff related to vrf support of the socket
polaris_lfts_dev_use(polaris_rrm_mgr_t)
polaris_socketat_nsfs_read(polaris_rrm_mgr_t)

# allow to open udp socket on port 12134
corenet_udp_bind_polaris_rrm_mgr_port(polaris_rrm_mgr_t)
corenet_udp_bind_generic_node(polaris_rrm_mgr_t)
allow polaris_rrm_mgr_t self:udp_socket { create_socket_perms recv_msg send_msg };
corenet_udp_bind_polaris_rrm_clnt_port(polaris_rrm_mgr_t)
polaris_odm_clnt2svr_mqipc_create(polaris_rrm_mgr_t)

# access "/bootflash/dbpersist"
polaris_tdldbpersist_setup(polaris_rrm_mgr_t)

# access /tmp/rp/tdldb/persistent-config/ dir and files in this dir
polaris_tmp_tdldb.persist_setup(polaris_rrm_mgr_t)

logging_send_syslog_msg(polaris_rrm_mgr_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrrmmgr.te
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#
# April 2017, Victor Kamensky
#
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#

policy_module(polariscyan, 1.0);

# dyncfg_setup.sh runs under cmcmd label
polaris_process_domain_template(dyncfg)
polaris_btrace_data_manage(polaris_dyncfg_t)
polaris_cpld_read(polaris_dyncfg_t)
polaris_lua_read(polaris_dyncfg_t)
polaris_cpld_dev_use(polaris_dyncfg_t)
polaris_rmonbifo.tmp_read(polaris_dyncfg_t)
polaris_chasfs_read(polaris_dyncfg_t)

# this script works with /tmp/dyncfg files
type polaris_dyncfg_tmp_t;
files_tmp_file(polaris_dyncfg_tmp_t)

files_tmp_filetrans(polaris_dyncfg_t, polaris_dyncfg_tmp_t, dir, "cyan")
files_tmp_filetrans(polaris_dyncfg_t, polaris_dyncfg_tmp_t, file)

manage_files_pattern(polaris_dyncfg_t, polaris_dyncfg_tmp_t, polaris_dyncfg_tmp_t, dir, "cyan")
manage_dirs_pattern(polaris_dyncfg_t, polaris_dyncfg_tmp_t, polaris_dyncfg_tmp_t, polaris_dyncfg_tmp_t)
manage_link_files_pattern(polaris_dyncfg_t, polaris_dyncfg_tmp_t, polaris_dyncfg_tmp_t, polaris_dyncfg_tmp_t)

corecmd_exec_bin(polaris_dyncfg_t)
corecmd_exec_shell(polaris_dyncfg_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_dyncfg_t)
# allow to read /proc/meminfo
kernel_read_system_state(polaris_dyncfg_t)

# dyncfg_setup calls luajit and luajit needs execute JIT generated code
allow polaris_dyncfg_t self:process execmem;

# allow objstore access
polaris_disk_objstore_read(polaris_dyncfg_t)

type polaris_dyncfg_log_t;
files_tmp_file(polaris_dyncfg_log_t)

gen_require('
    attribute polaris_domain;
')

filetrans_pattern(polaris_domain, polaris_dyncfg_tmp_t, polaris_dyncfg_log_t, file, "cyan.log")
filetrans_pattern(polaris_domain, polaris_dyncfg_tmp_t, polaris_dyncfg_log_t, file, "cyan_runtime.log")
files_tmp_filetrans(polaris_domain, polaris_dyncfg_log_t, file, "cyan.lock")
manage_files_pattern(polaris_domain, polaris_dyncfg_tmp_t, polaris_dyncfg_log_t)

polaris_dyncfg_tmp_read(polaris_domain)

# on utah need to get model info
optional_policy('
    polaris_dash_dev_use(polaris_dyncfg_t)
')

#access to /dev/dash_fpga device on fugazi platform
ifdef(`fugazi_platform',`
    polaris_dash_dev_mcp_use(polaris_dyncfg_t)
')

# allow search and read under /tmp/boot directory
polaris_boot_tmp_read(polaris_dyncfg_t)

logging_send_syslog_msg(polaris_dyncfg_t)

# dyncfg needs access to idprom. Idprom is accessed differently depending on
# platform

# on utah idprom is in quack chip: hw_esg_read_midplane_idprom
# on platforms with idprom in quack chip need access to
# quack device as part of hw_esg_read_midplane_idprom call.
ifdef(`crankshaft_family',`
    polaris_quack_dev_use(polaris_dyncfg_t)
')
ifdef(`starfleet_platform',`
polaris_quack_dev_use(polaris_dyncfg_t)
}

# on 1ng idprom is i2c device in sysfs like:
# /sys/devices/pci0000:00/0000:00:1f.3/i2c-0/i2c-1/1-0056/eeeprom
# on ultra it is still emulated by i2c driver like:
# /sys/devices/i2c-0/i2c-1/1-0056/eeeprom
dev_rw_sysfs(polaris_dyncfg_t)

dev_rw_sysfs(polaris_dyncfg_t)

# on nyquist and 1ng idprom value retrieved by flashlib and needs dac_override
allow polaris_dyncfg_t self:capability dac_override;
polaris_flashlib_read(polaris_dyncfg_t)

# LOOK AT ME on quake even rommon var read operation needs write access
# i.e flashutil -c getvar -N MODEL_NUM does open with O_RDWR
ifdef(`quake_platform',`
polaris_flashlib_write(polaris_dyncfg_t)
')

# In chassis_attrs.lua method THIS.WIRELESS checks whether wireless package is installed
# by opening (why open, not stat) wncmrd binary.
optional_policy(`
    gen_require(`
    type polaris_wncmrd_exec_t;
    ')
    read_files_pattern(polaris_dyncfg_t, bin_t, polaris_wncmrd_exec_t)
')

# lua/cyan/vwlc_chassis_attrs.lua needs to read /bootflash/rommon_vars file on vwlc
ifdef(`wlc_family',`
polaris_bootflash_read(polaris_dyncfg_t)
')

# lua/cyan/vwlc_chassis_attrs.lua needs to read /boot/vcpu_template file on vwlc
ifdef(`wlc_family',`
polaris_disk_varied_read(polaris_dyncfg_t)
')

# on macallan passport SUP card idprom is in act2 chip.
# hw_passport_read_midplane_idprom invoked from cyan_init
# reads /dev/act2 device.
ifdef(`ngwc_family',`
polaris_act2_dev_use(polaris_dyncfg_t)
')

ifdef(`passport_platform',`
# open /dev/ttyS0 console in hw_passport_read_midplane_idprom, invoked by
# cyaninit
term_use_unallocated_ttys(polaris_dyncfg_t)

')

# during wlc subpackage install cyan_init.sh called from
# C9800-Wireless_startup_script.sh script and output redirected
# into some install_tmp file
ifdef(`ngwc_family',`
polaris_install_tmp_log_write(polaris_dyncfg_t)
')

# /dev/aikido access
polaris_aikido_dev_use(polaris_dyncfg_t)

gen_require(
    type rsync_t;
)

corenet_tcp_connect_rsync_port(polaris_dyncfg_t)

ifdef(`sumatra_platform',`
    # LOOK AT ME: After direct usage of /dev/mem is removed (CSCvw80796)
    # /dev/mem
    polaris_dev_mem_use(polaris_dyncfg_t)
')

    # For Cabo, allow for stronger permissions to access env_var
    ifdef(`cabo_platform',`
        polaris_proc_rmonbifo_read(polaris_dyncfg_t)
')

    # For Cabo, also allow access to i2c-0
    ifdef(`cabo_platform',`
        polaris_i2c_use(polaris_dyncfg_t)
')

    # /dev/i2c-0 access
    ifdef(`petra_platform',`
        polaris_i2c_use(polaris_dyncfg_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscyan.te
No license file was found, but licenses were detected in source scan.

#
# August 2017, Victor Kamensky
policy_module(polarisflashcheck, 1.0);

gen_require(
    type polaris_flashcheck_t;
')

# allow read of /etc/passwd
auth_use_nsswitch(polaris_flashcheck_t)

corecmd_exec_bin(polaris_flashcheck_t)

# allow to read /proc/meminfo
kernel_read_system_state(polaris_flashcheck_t)

# uses pidof
domain_read_all_domains_state(polaris_flashcheck_t)
dev_read_sysfs(polaris_flashcheck_t)

# df on "/" needs fs_t:filesystem getattr
fs_getattr_xattr_fs(polaris_flashcheck_t)

polaris_btrace_data_manage(polaris_flashcheck_t)
polaris_chasfs_manage(polaris_flashcheck_t)
polaris_cpld_read(polaris_flashcheck_t)
polaris_read_debug_conf(polaris_flashcheck_t)
polaris_boot_tmp_read(polaris_flashcheck_t)
logging_send_syslog_msg(polaris_flashcheck_t)

# directly output to /dev/ttyS0
term_use_unallocated_ttys(polaris_flashcheck_t)

polaris_bootflash_read(polaris_flashcheck_t)

allow polaris_flashcheck_t self:capability { sys_resource dac_override };

# pidof needs below
allow polaris_flashcheck_t self:capability sys_ptrace;

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_flashcheck_t)
# access of crashinfo dir for flash_check.sh, it does source of pglobals.sh
# which needs access to /crashinfo
polaris_disk_crashinfo_getattr(polaris_flashcheck_t)

# this is for NFS access mounted in a dir of ncd context
optional_policy(
    polaris_ncd_tmp_read(polaris_flashcheck_t)
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisflashcheck.te
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#
# June 2017, Victor Kamensky
#
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#
#
## <summary>Polaris caf Policy Rules.</summary>

######################################
## <summary>
##      Read /bootflash/iox/ files or harddisk IOX files
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_iox_files_read',
    gen_require(
        type polaris_iox_files_t;
        type polaris_disk_bootflash_t;
        type polaris_disk_harddisk_t;
        type polaris_iox_shared_files_t;
        type polaris_iox_alt_hdd_files_t;
    )
)

read_files_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_iox_files_t)
list_dirs_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_iox_files_t)
    allow $1 polaris_iox_files_t:file map;
')
## <summary>
## Manage /bootflash/iox/ files or harddisk IOX files
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
#interface(`polaris_iox_files_manage',`
gen_require(`
    type polaris_iox_files_t;
    type polaris_disk_bootflash_t;
    type polaris_disk_harddisk_t;
    type polaris_iox_shared_files_t;
    type polaris_iox_alt_hdd_files_t;
')

manage_files_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_iox_files_t)
manage_dirs_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_iox_files_t)
manage_lnk_files_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_iox_files_t)
allow $1 polaris_iox_files_t:file map;

')

## <summary>
## List /bootflash/iox/ dir or hardisk IOX dir
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
#interface(`polaris_iox_dir_list',`
gen_require(`
    type polaris_iox_files_t;
    type polaris_disk_bootflash_t;
    type polaris_disk_harddisk_t;
    type httpd_var_run_t;
    type polaris_caf_var_run_t;
')

manage_files_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_iox_files_t)
manage_dirs_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_iox_files_t)
manage_lnk_files_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_iox_files_t)
allow $1 polaris_iox_files_t:file map;
type polaris_iox_shared_files_t;
    type polaris_iox_alt_hdd_files_t;

)

list_dirs_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_iox_files_t)
    list_dirs_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, httpd_var_run_t)
    list_dirs_pattern($1, { polaris_iox_files_t polaris_disk_bootflash_t polaris_disk_harddisk_t polaris_iox_shared_files_t polaris_iox_alt_hdd_files_t }, polaris_caf_var_run_t)

')

#################################################
### <summary>
###      Search /bootflash/iox/ dir or harddisk IOX
### </summary>
### <param name="domain">
###      <summary>
###      Domain allowed access.
###      </summary>
### </param>
#
# interface('polaris_iox_dir_search',
#             gen_require(
#       type polaris_iox_files_t;
#               type polaris_iox_shared_files_t;
#             )
#

search_dirs_pattern($1, polaris_iox_files_t, polaris_iox_files_t)
')

#################################################
### <summary>
###      Read files like /guestshell/guestshell_set_netns.sh
### </summary>
### <param name="domain">
###      <summary>
###      Domain allowed access.
###      </summary>
### </param>
#
# interface('polaris_guestshell_files_read',
#             gen_require(
#       type polaris_guestshell_t;
#               type polaris_iox_shared_files_t;
#             )
#)
read_files_pattern($1, { polaris_guestshell_t polaris_iox_shared_files_t }, polaris_guestshell_t)
read_link_files_pattern($1, { polaris_guestshell_t polaris_iox_shared_files_t }, polaris_guestshell_t)
')

########################################
## <summary>
##      Execute files with polaris_guestshell_exec_t type
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolecap/>
#
interface(`polaris_guestshell_exec_files_exec',`
   gen_require(`
      type polaris_guestshell_exec_t;
   ')
   exec_files_pattern($1, polaris_guestshell_exec_t, polaris_guestshell_exec_t)
')

########################################
## <summary>
##      Manage /var/run/netns/guestshell files
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolebase/>
#
interface(`polaris_guestshell_var_run_files_manage',`
   gen_require(`
      type polaris_guestshell_var_run_t;
      type var_run_t;
   ')
   manage_files_pattern($1, { polaris_guestshell_var_run_t var_run_t }, polaris_guestshell_var_run_t)
   manage_dirs_pattern($1, { polaris_guestshell_var_run_t var_run_t }, polaris_guestshell_var_run_t)
')

########################################
## <summary>
##      Read CAF tmp files
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_caf_tmp_files_read',
gen_require(
    type polaris_caf_tmp_files_t;
')
    read_files_pattern($1, polaris_caf_tmp_files_t, polaris_caf_tmp_files_t)
    read_lnk_files_pattern($1, polaris_caf_tmp_files_t, polaris_caf_tmp_files_t)
    list_dirs_pattern($1, polaris_caf_tmp_files_t, polaris_caf_tmp_files_t)
')

######################################
## <summary>
##      Manage CAF tmp files
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_caf_tmp_files_manage',
gen_require(
    type polaris_caf_tmp_files_t;
')
    manage_files_pattern($1, polaris_caf_tmp_files_t, polaris_caf_tmp_files_t)
    manage_dirs_pattern($1, polaris_caf_tmp_files_t, polaris_caf_tmp_files_t)
')

######################################
## <summary>
##      Getattr CAF tmp files
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface('polaris_caf_tmp_files_getattr',
gen_require(
    type polaris_caf_tmp_files_t;
')
    setattr_files_pattern($1, polaris_caf_tmp_files_t, polaris_caf_tmp_files_t)
### <summary>
### Read CAF files. Typically at /opt/cisco/caf/
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
interface('polaris_caf_files_read',
    gen_require(
        type polaris_caf_files_t
    )
)
read_files_pattern($1, polaris_caf_files_t, polaris_caf_files_t)
read_lnk_files_pattern($1, polaris_caf_files_t, polaris_caf_files_t)
list_dirs_pattern($1, polaris_caf_files_t, polaris_caf_files_t)
')

### <summary>
### Manage .../guestshell/rootfs_mnt/cisco/cisco_cli/ This files are used to communicate between guestshell container
### iosd, and shell_exec.sh
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
### <rolebase/>
#
interface('polaris_caf_var_run_files_manage',
    optional_policy(
        gen_require(
            type polaris_caf_var_run_t
        )
    )
)
manage_files_pattern($1, polaris_caf_var_run_t, polaris_caf_var_run_t)
manage_dirs_pattern($1, polaris_caf_var_run_t, polaris_caf_var_run_t)
')
interface('polaris_guestshell_key_read',
    gen_require(
        type etc_t;
        type polaris_guestshell_ssh_key_t;
    )
)
read_files_pattern($1, etc_t, polaris_guestshell_ssh_key_t)
')

interface('polaris_caf_local_core_files_manage',
    optional_policy(
        gen_require(
            type polaris_caf_core_files_t;
        )
    )
    manage_files_pattern($1, polaris_caf_core_files_t, polaris_caf_core_files_t)
    manage_dirs_pattern($1, polaris_caf_core_files_t, polaris_caf_core_files_t)
    manage_lnk_files_pattern($1, polaris_caf_core_files_t, polaris_caf_core_files_t)
')
')

interface('polaris_guestshell_key_read',
    gen_require(
        type etc_t;
        type polaris_guestshell_ssh_key_t;
    )
)
read_files_pattern($1, etc_t, polaris_guestshell_ssh_key_t)
')
```plaintext
## Domain allowed access.
## </summary>
## </param>
## <rolebase/>
#
# interface(`polaris_iox_alt_hdd_manage`,
optional_policy(`
gen_require(`
    type polaris_disk_bootflash_t;
    type polaris_disk_harddisk_t;
    type polaris_iox_alt_hdd_files_t;
 })

manage_files_pattern($1, polaris_iox_alt_hdd_files_t, polaris_iox_alt_hdd_files_t)
manage_dirs_pattern($1, polaris_iox_alt_hdd_files_t, polaris_iox_alt_hdd_files_t)
`
"
###
### Getattr alternate harddisk files
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
#
# interface(`polaris_iox_alt_hdd_getattr`,
gen_require(`
    type polaris_iox_alt_hdd_files_t;
 })

allow $1 polaris_iox_alt_hdd_files_t:filesystem getattr;
`
"
###
### Manage tty device link files. Typically at /dev/
### </summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>
#
# interface(`polaris_caf_tty_lnk_manage`,
gen_require(`
```
```
type polaris_caf_tty_file_t;

create_lnk_files_pattern($1, polaris_caf_tty_file_t, polaris_caf_tty_file_t)
read_lnk_files_pattern($1, polaris_caf_tty_file_t, polaris_caf_tty_file_t)
delete_lnk_files_pattern($1, polaris_caf_tty_file_t, polaris_caf_tty_file_t)

######################################
## <summary>
##      Manage tty device chr files.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_caf_chr_file_read',`
    gen_require(`
        type devpts_t;
    `)
)

setattr_chr_files_pattern($1, devpts_t, devpts_t)
read_chr_files_pattern($1, devpts_t, devpts_t)

######################################
## <summary>
##	Execute caf in the polaris_caf domain.
## </summary>
## <param name="domain">
##	<summary>
##	Domain allowed to transition.
##
## </param>
#
interface(`polaris_caf_domtrans',`
    gen_require(`
        type polaris_caf_t, polaris_caf_exec_t;
    `)
)
domtrans_pattern($1, polaris_caf_exec_t, polaris_caf_t)

######################################
## <summary>
##      Provide process signal perms.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed to transition.
##      </summary>
## </param>
#
### <summary>
### <param name="domain">
###  <summary>
###  Domain allowed access.
###  </summary>
###  </param>
#
interface(‘polaris_caf_proc_signal_perms’,
    gen_require(
        type polaris_caf_t;
    )
    allow $1 polaris_caf_t:process sigkill;
)

#######################################
### <summary>
###  Write/read /tmp/ioxss_up file
###  </summary>
### <param name="domain">
###  <summary>
###  Domain allowed access.
###  </summary>
###  </param>
#
interface(‘polaris_ioxss_rp_tmp_manage’,
    gen_require(
        type polaris_ioxss_rp_tmp_t;
    )
    manage_files_pattern($1,{polaris_ioxss_rp_tmp_t }, polaris_ioxss_rp_tmp_t)
)

#######################################
### <summary>
###  Getattr of iosd_portal_app_lipc socket file
###  </summary>
### <param name="domain">
###  <summary>
###  Domain allowed access.
###  </summary>
###  </param>
### <rolebase/>
#
interface(‘polaris_iosd_portal_app_lipc_getattr’,
    gen_require(
        type polaris_iosd_portal_app_lipc_t;
    )
)
getattr_sock_files_pattern($1, polaris_iosd_portal_app_lipe_t, polaris_iosd_portal_app_lipe_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscaf.if
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# March 2017, Victor Kamensky
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#

/usr/cpp/bin/cpp_cp_svr -- gen_context(system_u:object_r:polaris_cpp_cp_exec_t,s0)
/usr/cpp/bin/cpp_cp_svr_ledp -- gen_context(system_u:object_r:polaris_cpp_cp_exec_t,s0)
/usr/cpp/bin/cpp_cp_svr_us_ledp -- gen_context(system_u:object_r:polaris_cpp_cp_exec_t,s0)
/usr/cpp/bin/cpp_cp_svr_vwlc -- gen_context(system_u:object_r:polaris_cpp_cp_exec_t,s0)
/usr/cpp/bin/cpp_cp_svr_vwlc_ledp -- gen_context(system_u:object_r:polaris_cpp_cp_exec_t,s0)
/usr/binos/conf/geo_ipv4_db -- gen_context(system_u:object_r:polaris_geodb_files_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscppcp.fc
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#

# polarisnifmgr file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnifmgr.fc
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#
# November 2017, Victor Kamensky
#
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#

policy_module(polarisgnmib, 1.0);

gen_require('
type polaris_gnmib_t;

polaris_btrace_data_manage(polaris_gnmib_t)
polaris_crft_data_manage(polaris_gnmib_t)
polaris_chasfs_manage(polaris_gnmib_t)
polaris_tdlresolve_read(polaris_gnmib_t)
polaris_tdlldb_list_dirs(polaris_gnmib_t)
polaris_cpld_read(polaris_gnmib_t)
polaris_lua_read(polaris_gnmib_t)
polaris_flashlib_read(polaris_gnmib_t)
polaris_db_tdlldb_dir_use(polaris_gnmib_t)

optional_policy(
  # deals with /dev/shm/confd setup (schema and pid)
polaris_confd_shm_setup(polaris_gnmib_t)
  # and allow read shared schema
polaris_confd_shared_schema_read(polaris_gnmib_t)
  # from evconfd_dynamic_load
polaris_confd_shared_schema_watch(polaris_gnmib_t)
  # read /proc/confd_pid/exe file
polaris_confd_read(polaris_gnmib_t)
)

allow polaris_gnmib_t self:capability dac_override;

logging_send_syslog_msg(polaris_gnmib_t)

# create ndbutil directory under /var/lock
polaris_ndbutil_create(polaris_gnmib_t)
polaris_ndbutil_lock_template(polaris_gnmib_t, gnmib, ".l.schema_use.gnmib")

# grpc library through sysconf accesses /sys/devices/system/cpu
# to get number of CPUs
dev_read_sysfs(polaris_gnmib_t)

# gnmib uses multiple (configurable) tcp ports for secure and insecure mode
corenet_tcp_bind_generic_port(polaris_gnmib_t)
allow polaris_gnmib_t self:tcp_socket { shutdown };
corenet_tcp_connect_all_ports(polaris_gnmib_t)

# iosp_token_read_from_file reads /tmp/rp/iosp_gnmib
polaris_gnmib_token_read(polaris_gnmib_t)

# gnmib creates /var/tmp/gnmib.pid
type polaris_gnmib_var_t;
files_tmp_file(polaris_gnmib_var_t);
files_tmp_filetrans(polaris_gnmib_t, polaris_gnmib_var_t, file, "gnmib.pid");
manage_files_pattern(polaris_gnmib_t, polaris_gnmib_var_t, polaris_gnmib_var_t)
manage_dirs_pattern(polaris_gnmib_t, polaris_gnmib_var_t, polaris_gnmib_var_t)
manage_link_files_pattern(polaris_gnmib_t, polaris_gnmib_var_t, polaris_gnmib_var_t)

# read access to /dev/random
dev_read_rand(polaris_gnmib_t)

kernel_read_net_sysctls(polaris_gnmib_t)

type polaris_gnmib_gnoi_images_t;
files_type(polaris_gnmib_gnoi_images_t);
polaris_bootflash_filetrans(polaris_gnmib_t, polaris_gnmib_gnoi_images_t, file,);
manage_files_pattern(polaris_gnmib_t, polaris_disk_bootflash_t, polaris_gnmib_gnoi_images_t)

# need to execute install engine scripts
polaris_install_engine_domtrans(polaris_gnmib_t)

# need access to shell to execute install scripts
corecmd_exec_shell(polaris_gnmib_t)
corecmd_exec_bin(polaris_gnmib_t)

# install script needs rmonbifo
polaris_rmonbifo_tmp_read(polaris_gnmib_t)

# not sure why this is needed
auth_map_passwd(polaris_gnmib_t)

#DB persistence
polaris_tlddbpersist_setup(polaris_gnmib_t)
polaris_tmp_tlddb_persist_setup(polaris_gnmib_t)

allow polaris_gnmib_t self:capability sys_resource;

# needed to fstat and check space when transferring image for os.proto install rpc
fs_getattr_xattr_fs(polaris_gnmib_t)

# needed by gnmib ui because uipeer heartbeat timer accesses TDL epoch files
polaris_issu_tmp_files_read(polaris_gnmib_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisgnmib.te
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#
# October 2019, Patrick O'Halloran
#
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#

/usr/binos/conf/mcp_crf_request.sh -- gen_context(system_u:object_r:polaris_crf_request_exec_t,s0)

#NGWC - nyquist, edison, bigbang
/mnt/sd3/user/.CRFT(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/mnt/sd3/user/.CRFT/[0-9]*(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/mnt/sd3/user/.CRFT/archive(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)

#NGWC - macallan, starfleet
/flash1/user/.CRFT(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/flash1/user/.CRFT/[0-9]*(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/flash1/user/.CRFT/archive(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)

#MCP, QWLC
/vol/harddisk/.CRFT(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/vol/harddisk/.CRFT/[0-9]*(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/vol/harddisk/.CRFT/archive(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)

#VXE, WLC, CRANKSHAFT, MCP
/bootflash/.CRFT(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/bootflash/.CRFT/[0-9]*(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/bootflash/.CRFT/archive(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)

#CRANKSHAFT - blackheart, sparrow
/flash1/.CRFT(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/flash1/.CRFT/[0-9]*(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/flash1/.CRFT/archive(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)

#PETRA - petra
# USER is a reserved selinux keyword - escape it like this
/flash10/USE\[R\]/.CRFT(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/flash10/USE\[R\]/.CRFT/[0-9]*(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)
/flash10/USE\[R\]/.CRFT/archive(/.*)?  gen_context(system_u:object_r:polaris_crf_data_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscrft.fc
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Open Source Used In BGP TE Controller Version 4.3.0 6629
# polariscmm file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmm.fc
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#
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#

### <summary>Polaris install Policy Rules.</summary>

#################################################################
### <summary>
### Read polaris_sw_data_t, effectively path to read polaris
### base image packages
### </summary>
### <param name="domain">
### Domain allowed access.
### </summary>
### </param>
#
interface(`polaris_sw_data_read`,
  gen_require(
    type polaris_sw_data_t;
    type tmp_t;
    
    read_files_pattern($1, { tmp_t polaris_sw_data_t }, polaris_sw_data_t)
    read_lnk_files_pattern($1, { tmp_t polaris_sw_data_t }, polaris_sw_data_t)
    list_dirs_pattern($1, { tmp_t polaris_sw_data_t }, polaris_sw_data_t)
  )
)

#################################################################
### <summary>
### Map polaris_sw_data_t, effectively path to map polaris
### base image packages
### </summary>
### <param name="domain">
### Domain allowed access.
### </summary>
### </param>
#
interface(`polaris_sw_data_map`,

gen_require(
    type polaris_sw_data_t;
)
    allow $1 polaris_sw_data_t:file map;
')


########################################
## <summary>
##	Manage polaris_sw_data_t, effectively path to set up polaris
## base image packages house holding
## </summary>
## <param name="domain">
##	<summary>
##	Domain allowed access.
##	</summary>
## </param>
#
interface(`polaris_sw_data_manage',
    gen_require(
        type polaris_sw_data_t;
        type tmp_t;
    )
    manage_files_pattern($1, { tmp_t polaris_sw_data_t }, polaris_sw_data_t)
    manage_lnk_files_pattern($1, { tmp_t polaris_sw_data_t }, polaris_sw_data_t)
    manage_dirs_pattern($1, { tmp_t polaris_sw_data_t }, polaris_sw_data_t)
    allow $1 polaris_sw_data_t:dir mounton;
')


########################################
## <summary>
##	Read polaris_patch_data_t, effectively path to read polaris
## smu patch or optional packages
## </summary>
## <param name="domain">
##	<summary>
##	Domain allowed access.
##	</summary>
## </param>
#
interface(`polaris_patch_data_read',
    gen_require(
        type polaris_patch_data_t;
        type tmp_t;
    )
    read_files_pattern($1, { tmp_t polaris_patch_data_t }, polaris_patch_data_t)
    read_lnk_files_pattern($1, { tmp_t polaris_patch_data_t }, polaris_patch_data_t)
    list_dirs_pattern($1, { tmp_t polaris_patch_data_t }, polaris_patch_data_t)
')

  #################################################################
  ## <summary>
  ## Manage polaris_patch_data_t, effectively path to set up polaris
  ## smu patch or optional packages house holding
  ## </summary>
  ## <param name="domain">
  ## <summary>
  ## Domain allowed access.
  ## </summary>
  ## </param>
  #
  interface('polaris_patch_data_manage',
  gen_require(
  type polaris_patch_data_t;
  type tmp_t;
  )
  manage_files_pattern($1, { tmp_t polaris_patch_data_t }, polaris_patch_data_t)
  manage_link_files_pattern($1, { tmp_t polaris_patch_data_t }, polaris_patch_data_t)
  manage_dirs_pattern($1, { tmp_t polaris_patch_data_t }, polaris_patch_data_t)
  ')

  #################################################################
  ## <summary>
  ## Watch patch_data directories
  ## </summary>
  ## <param name="domain">
  ## <summary>
  ## Domain allowed access.
  ## </summary>
  ## </param>
  ## <rolebase/>
  #
  interface('polaris_patch_data_watch',
  gen_require(
  type polaris_patch_data_t;
  )
  allow $1 polaris_patch_data_t:dir watch;
  ')

  #################################################################
  ## <summary>
  ## Write into tmp files created by install_show.sh
  ## </summary>
  ## <param name="domain">
  ## <summary>
  ## Domain allowed to transition.
  ## </summary>
  ## </param>
 interface('polaris_install_show_tmp_write',
    type polaris_install_show_tmp_t;
    type tmp_t;
    )
    write_files_pattern($1, { tmp_t polaris_install_show_tmp_t }, polaris_install_show_tmp_t)
    )

 interface('polaris_install_show_tmp_read',
    type polaris_install_show_tmp_t;
    type tmp_t;
    )
    read_files_pattern($1, { tmp_t polaris_install_show_tmp_t }, polaris_install_show_tmp_t)
    )

 interface('polaris_install_show_tmp_manage',
    type polaris_install_show_tmp_t;
    )
    manage_dirs_pattern($1, polaris_install_show_tmp_t, polaris_install_show_tmp_t)
    manage_files_pattern($1, polaris_install_show_tmp_t, polaris_install_show_tmp_t)
    manage_lnk_files_pattern($1, polaris_install_show_tmp_t, polaris_install_show_tmp_t)
    )
## <summary>
## Manage /bootflash/.issu_loc_lock files
## TODO: provfunc.sh and hman have reference to /bootflash/$ISSU_LOCAL_LOCK_FILE.
## For now, I am keeping manage_dirs_pattern for polaris_disk_bootflash_t.
## Need to re-visit so that callers to this macro do not have write-permission
to all of bootflash..
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_issu_files_manage',
    gen_require(
        type polaris_issu_files_t;
        type polaris_disk_bootflash_t;
    )
)

filetrans_pattern($1, polaris_disk_bootflash_t, polaris_issu_files_t, file, ".issu_loc_lock")
manage_files_pattern($1, polaris_issu_files_t, polaris_issu_files_t)
manage_dirs_pattern($1, polaris_disk_bootflash_t, polaris_issu_files_t)
)

## <summary>
## Manage ISSU tmp files, allowing to record and
## check upgrade progress
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_issu_tmp_files_manage',
    gen_require(
        type polaris_issu_tmp_files_t;
        type tmp_t;
    )
)

manage_files_pattern($1, { tmp_t polaris_issu_tmp_files_t }, polaris_issu_tmp_files_t)
manage_link_files_pattern($1, { tmp_t polaris_issu_tmp_files_t }, polaris_issu_tmp_files_t)
manage_dirs_pattern($1, { tmp_t polaris_issu_tmp_files_t }, polaris_issu_tmp_files_t)
)
### <summary>
### Write/read any regular file/directory from /bootflash/.install
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
# interface('polaris_disk_install_manage',
  gen_require(
    type polaris_disk_install_t;
  )
  manage_dirs_pattern($1, polaris_disk_install_t, polaris_disk_install_t)
  manage_files_pattern($1, polaris_disk_install_t, polaris_disk_install_t)
  manage_lnk_files_pattern($1, polaris_disk_install_t, polaris_disk_install_t)
  allow $1 polaris_disk_install_t:dir watch;
')

### <summary>
### Read any regular file/directory from /bootflash/.install
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
# interface('polaris_disk_install_read',
  gen_require(
    type polaris_disk_install_t;
  )
  search_dirs_pattern($1, polaris_disk_install_t, polaris_disk_install_t)
  read_files_pattern($1, polaris_disk_install_t, polaris_disk_install_t)
  read_lnk_files_pattern($1, polaris_disk_install_t, polaris_disk_install_t)
  allow $1 polaris_disk_install_t:dir {watch read};
')

### <summary>
### Get attributes of any regular file/directory from /bootflash/.install
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
## </param>
#
interface(`polaris_disk_install_fs_getattr',
    gen_require(
        type polaris_disk_install_t;
    )
    allow $1 polaris_disk_install_t:filesystem getattr;
)

######################################
## <summary>
## Manage /tmp/installer files and directories
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_install_tmp_manage',
    gen_require(
        type polaris_install_tmp_t;
    )
    manage_dirs_pattern($1, polaris_install_tmp_t, polaris_install_tmp_t)
    manage_files_pattern($1, polaris_install_tmp_t, polaris_install_tmp_t)
    manage_lnk_files_pattern($1, polaris_install_tmp_t, polaris_install_tmp_t)
    manage_fifo_files_pattern($1, polaris_install_tmp_t, polaris_install_tmp_t)
)

######################################
## <summary>
## Read /tmp/installer files and directories
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_install_tmp_read',
    gen_require(
        type polaris_install_tmp_t;
    )
    list_dirs_pattern($1, polaris_install_tmp_t, polaris_install_tmp_t)
    read_files_pattern($1, polaris_install_tmp_t, polaris_install_tmp_t)
    read_lnk_files_pattern($1, polaris_install_tmp_t, polaris_install_tmp_t)
    allow $1 polaris_install_tmp_t:dir watch;
    allow $1 polaris_install_tmp_t:file map;
```c
interface("polaris_install_engine_domtrans",
    gen_require(
        type polaris_install_engine_t, polaris_install_engine_exec_t;
        ')
)

domtrans_pattern($1, polaris_install_engine_exec_t, polaris_install_engine_t)
')

interface("polaris_install_tmp_log_write",
    gen_require(
        type polaris_install_tmp_log_t;
        ')
)

write_files_pattern($1, polaris_install_tmp_log_t, polaris_install_tmp_log_t)
')
```

```c
interface("polaris_install_selinux_domtrans",
    gen_require(
        type polaris_install_selinux_t;
        ')''
)
```

```c
interface("polaris_install_selinux_domtrans",
    gen_require(
        type polaris_install_selinux_t;
        ')''
)
```
gen_require('type polaris_install_selinux_t, polaris_install_selinux_exec_t;')

domtrans_pattern($1, polaris_install_selinux_exec_t, polaris_install_selinux_t)
')

########################################################################
## <summary>
##      Execute wireless install related scripts in its own domain.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed to transition.
##      </summary>
## </param>
#
interface('polaris_install_wireless_domtrans',
  gen_require('type polaris_install_wireless_t, polaris_install_wireless_exec_t;')
)

domtrans_pattern($1, polaris_install_wireless_exec_t, polaris_install_wireless_t)
')

########################################################################
## <summary>
##      Execute install show scripts in its own domain.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed to transition.
##      </summary>
## </param>
#
interface('polaris_install_show_domtrans',
  gen_require('type polaris_install_show_t, polaris_install_show_exec_t;')
)

domtrans_pattern($1, polaris_install_show_exec_t, polaris_install_show_t)
')

########################################################################
##      Allow the specified domain to manage KGV data files
## I.e under /tmp/pkg_cs_debug created by function verify_pkg
## common scripts file.
interface('polaris_pkg_cs_debug_manage',
    gen_require(
        type polaris_pkg_cs_debug_t;
    
    files_tmp_filetrans($1, polaris_pkg_cs_debug_t, dir, "pkg_cs_debug")
    fs_tmpfs_filetrans($1, polaris_pkg_cs_debug_t, dir, "pkg_cs_debug")
    manage_dirs_pattern($1, polaris_pkg_cs_debug_t, polaris_pkg_cs_debug_t)
    manage_files_pattern($1, polaris_pkg_cs_debug_t, polaris_pkg_cs_debug_t)
    })

######################################
## <summary>
##      Manage /file which is generated on "flock -u file /tmp/sysctrl_i2c.lck"
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_i2c_lock_file_manage',
    gen_require(
        type polaris_i2c_lock_file_t;
    
    manage_dirs_pattern($1, polaris_i2c_lock_file_t, polaris_i2c_lock_file_t)
    manage_files_pattern($1, polaris_i2c_lock_file_t, polaris_i2c_lock_file_t)
    })

######################################
## <summary>
##      write /tmp/installer files and directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed to transition.
##      </summary>
## </param>
#
interface('polaris_install_tmp_write',
    gen_require(
        type polaris_install_tmp_t;
write_files_pattern($1, polaris_install_tmp_t, polaris_install_tmp_t)
allow $1 polaris_install_tmp_t:dir watch;

### <summary>
## Read/Write /images files and directories
## <summary>
## <param name="domain">
## Domain allowed access.
## </param>

interface(`polaris_install_images_manage',
  gen_require(`
    type polaris_install_images_t;
  ')

manage_dirs_pattern($1, polaris_install_images_t, polaris_install_images_t)
manage_files_pattern($1, polaris_install_images_t, polaris_install_images_t)

### <summary>
## Read ISSU tmp files
## <summary>
## <param name="domain">
## Domain allowed access.
## </param>

interface(`polaris_issu_tmp_files_read',
  gen_require(`
    type polaris_issu_tmp_files_t;
    type tmp_t;
  ')

list_dirs_pattern($1, { tmp_t polaris_issu_tmp_files_t }, polaris_issu_tmp_files_t)
read_files_pattern($1, { tmp_t polaris_issu_tmp_files_t }, polaris_issu_tmp_files_t)
read_lnk_files_pattern($1, { tmp_t polaris_issu_tmp_files_t }, polaris_issu_tmp_files_t)
allow $1 polaris_issu_tmp_files_t:file map;

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisinstall.if
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# August 2017, Shawn Lu
#
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#

policy_module(polarisodm, 1.0);

gen_require('  
      type polaris_odm_t;
')

polaris_btrace_data_manage(polaris_odm_t)
polaris_crft_data_manage(polaris_odm_t)
polaris_chasfs_manage(polaris_odm_t)
polaris_tdlresolve_read(polaris_odm_t)
polaris_tdlldb_list_dirs(polaris_odm_t)
polaris_cpld_read(polaris_odm_t)
polaris_lua_read(polaris_odm_t)
polaris_flashlib_read(polaris_odm_t)

polaris_ripc_sman_ui_serv_connect(polaris_odm_t)

polaris_db_tdlldb_dir_use(polaris_odm_t)

# allow setrlimit
allow polaris_odm_t self:capability sys_resource;
allow polaris_odm_t self:process setrlimit;
allow polaris_odm_t self:capability dac_override;

# odm_svr2clnt_data uses subdirectory for channels needs explicit rule
# to allow it. ODM elastic value is 2 now, add more if need in the
# future.
gen_require('  
      type polaris_odm_server2client_data_mqipc_t;
')
polaris_mqipc_create_name_dir(polaris_odm_t, polaris_odm_server2client_data_mqipc_t, odm_svr2clnt_data-b1)
polaris_mqipc_create_name_dir(polaris_odm_t, polaris_odm_server2client_data_mqipc_t, odm_svr2clnt_data-b0)
polaris_mqipc_create_name_dir(polaris_odm_t, polaris_odm_server2client_data_mqipc_t, odm_svr2clnt_data)

logging_send_syslog_msg(polaris_odm_t)

Found in path(s):
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#

## <summary>Polaris polarisreflector Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisreflector.if

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#
# June 2017, Victor Kamensky
#
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#

policy_module(polariscontainer, 1.0);

# polaris_default_container_t type for not labeled container
polaris_container_domain_template(default)

# polaris_utd_container_t type for snort container
polaris_container_domain_template(utd)
polaris_utd_container(polaris_utd_container_t)

# polaris_utdl_container_t type for snort container, that has
# legacy configuration, need more permissions
polaris_container_domain_template(utdl)
polaris_utd_container(polaris_utdl_container_t)

# manage /tmp/xml/[Utd*] dirs
polaris_vman_log_files_manage(polaris_utdl_container_t)
optional_policy(
    polaris_cedge_xml_tmp_manage(polaris_utdl_container_t)
)

allow polaris_utdl_container_t ramfs_t:file map;

polaris_iox_container_watch(polaris_utdl_container_t)

# work with memif
optional_policy(


polaris_qfp_dgram_send(polaris_utdl_container_t)
)

# creates /tmp/HTX-IOX/sw-htx-service
optional_policy(
    polaris_htx_iox_tmp_manage(polaris_utdl_container_t)
)

optional_policy(
    polaris_htx_use_client_socket(polaris_utdl_container_t)
)

# allow container to work with /tmp/binos-IOX
optional_policy(
    polaris_qfp_memif_manage(polaris_utdl_container_t)
)

# snort works with /dev/shm/SPO_DAQ_MMAP_OBJ_
fs_exec_tmpfs_files(polaris_utdl_container_t)

# allow container to work with /tmp/xml/* files
optional_policy(
    polaris_vman_tmp_manage(polaris_utdl_container_t)
)

gen_require(
    type container_file_t;
')
polaris_disk_type(container_file_t)

# legacy utd (snort) container in /etc/init.d/rc.local does unconditional
# mount of ramfs on /tmp/snortlogs
fs_mount_ramfs(polaris_utdl_container_t)

# legacy utd (snort) container in /etc/init.d/rc.local does unconditional
# mount of tmpfs on /dev/shm
fs_mount_tmpfs(polaris_utdl_container_t)
fs_manage_tmpfs_dirs(polaris_utdl_container_t)
fs_manage_tmpfs_files(polaris_utdl_container_t)
fs_manage_tmpfs_symlinks(polaris_utdl_container_t)

# Allow ramfs access to utd container
fs_manage_ramfs_dirs(polaris_utdl_container_t)
fs Manage_ramfs_files(polaris_utdl_container_t)

# Allow link file access from cron to crond
kernel_read_state(polaris_utdl_container_t)

# Allow Snort
allow polaris_utdl_container_t self:packet_socket map;
# polaris_container_domain_template(iox)

fs_mount_tmpfs(polaris_iox_container_t)
fs_manage_tmpfs_dirs(polaris_iox_container_t)
fs_manage_tmpfs_files(polaris_iox_container_t)
fs_manage_tmpfs_symlinks(polaris_iox_container_t)
fs_manage_tmpfs_sockets(polaris_iox_container_t)

fs_mounton_tmpfs(polaris_iox_container_t)

fs_read_nsfs_files(polaris_iox_container_t)

polaris_caf_var_run_files_manage(polaris_iox_container_t)

allow polaris_iox_container_t tmpfs_t:filesystem { remount };
# If in this case iox_container process does not have its own TDL proc_def entry,
# therefore we use autogenerated polaris_lipc_iosd_portal_app_write macro/interface.
# Marking this policy optional, so that if platform TDL does not have proper service defined
# then polaris_lipc_iosd_portal_app_write won't be generated, but container policy still would compile.
optional_policy(
    gen_require(
        type polaris_iosd_t;
    )
    polaris_lipc_iosd_portal_app_write(polaris_iox_container_t, polaris_iosd_t)
)

docker_exec_lib(polaris_iox_container_t)
fs_exec_hugtlbfs_files(polaris_iox_container_t)
kern_read_ring_buffer(polaris_iox_container_t)
dev_read_sysfs(polaris_iox_container_t)
polaris_iox_container_watch(polaris_iox_container_t)

# polaris_sdavc_container_t type for SDAVC container, that has
# legacy configuration, need more permissions

polaris_container_domain_template(sdavc)
polaris_utd_container(polaris_sdavc_container_t)

# manage /tmp/xml/{SDAVC*} dirs
polaris_vman_log_files_manage(polaris_sdavc_container_t)

# legacy SDAVC containder in /etc/init.d/rc.local does unconditional
# mount of tmpfs on /dev/shm
fs_mount_tmpfs(polaris_sdavc_container_t)

# container systemd mounton tmpfs_t & tmpf_st management
fs_mounton_tmpfs(polaris_sdavc_container_t)
fs_manage_tmpfs_dirs(polaris_sdavc_container_t)
fs_manage_tmpfs_files(polaris_sdavc_container_t)
fs_manage_tmpfs_symlinks(polaris_sdavc_container_t)
fs_manage_tmpfs.Sockets(polaris_sdavc_container_t)
manage_fifo_files_pattern(polaris_sdavc_container_t, tmpfs_t, tmpfs_t)
# container systemd file mmaps tmpfs_t, i.e /usr/lib/systemd/systemd-journald
allow polaris_sdavc_container_t tmpfs_t:file map;
# Add watch on tmpfs_t/container_t dir/files
polaris_iox_container_watch(polaris_sdavc_container_t)

# map/mount/write hugtlbfs files
gen_require(
    type hugetlbfs_t;
')
allow polaris_sdavc_container_t hugetlbfs_t:filesystem mount;
alow polaris_sdavc_container_t hugetlbfs_t:file map;
fs_manage_hugetlbfs_dirs(polaris_sdavc_container_t)

# Allow syslog_mod operation on kernel_t
kernel_clear_ring_buffer(polaris_sdavc_container_t)

# Allow tcpdump
allow polaris_sdavc_container_t self:packet_socket map;
allow polaris_utdl_container_t self:packet_socket map;

# Add in the docker files labels to polaris_disk_type
gen_require(''
    type container_var_lib_t;
    type container_share_t;
    type container_log_t;
')
polaris_disk_type(container_var_lib_t)
polaris_disk_type(container_share_t)
polaris_disk_type(container_log_t)

# polaris_waas_container_t type for WAAS KVM
polaris_kvm_domain_template(waas)

# Allow rw block files access to /dev/lvm_raid
storage_dontaudit_write_fixed_disk(polaris_waas_container_t)
storage_dontaudit_read_fixed_disk(polaris_waas_container_t)
# Manage hugetlbfs files/dirs
fs_manage_hugetlbfs_dirs(polaris_waas_container_t)
manage_files_pattern(polaris_waas_container_t, hugetlbfs_t, hugetlbfs_t)
fs_exec_hugetlbfs_files(polaris_waas_container_t)

# Allow access of /dev/kvm device
dev_rw_kvm(polaris_waas_container_t)

# Allow domain to search/write to virlogd_t
polaris_vman_virtlog_allow(polaris_waas_container_t)

# Allow for guest-share
gen_require(''
    type polaris_iox_shared_files_t;
')
manage_files_pattern(polaris_iox_container_t, polaris_iox_shared_files_t, polaris_iox_shared_files_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscontainer.te
No license file was found, but licenses were detected in source scan.
<summary>Polaris polarispvp Policy Rules.</summary>

## <summary>
## Execute a domain transition to run pvp.
## </summary>

interface(`polaris_pvp_domtrans',``
    gen_require(`
        type polaris_pvp_t, polaris_pvp_exec_t;
    `)
)

domtrans_pattern($1, polaris_pvp_exec_t, polaris_pvp_t)
`)

## <summary>
## Manage pvp temporary files and directories in /tmp.
## </summary>

interface(`polaris_pvp_manage_tmp_files',``
    gen_require(`
        type polaris_pvp_tmp_t;
    `)
)

manage_files_pattern($1, polaris_pvp_tmp_t, polaris_pvp_tmp_t)
manage_dirs_pattern($1, polaris_pvp_tmp_t, polaris_pvp_tmp_t)
manage_fifo_files_pattern($1, polaris_pvp_tmp_t, polaris_pvp_tmp_t)
`)

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"#<summary>Polaris polarispvp Policy Rules.</summary>"
## <summary>
## Manage pvp process_state files and directories in /tmp/[rp|fp|cc]/pvp/process_state.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>

interface(`polaris_pvp_manage_process_state_files',`

manage_files_pattern($1, polaris_process_state_t, polaris_process_state_t)
')

########################################
## <summary>
## Getattr dirs pvp temporary files and directories in /tmp.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>

# interface(`polaris_pvp_getattrs_tmp_dirs',`

gendir_pattern($1, tmp_t, polaris_pvp_tmp_t)
')

########################################
## <summary>
## Read from pvp stdin. Should be granted to scripts spawned from pvp with domain transition. pvp stdin (0) points to fifo file like /tmp/rp/pvp/work/inot_fifo
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>

# interface(`polaris_pvp_readfrom_pvp_stdin',`

gendir($1, int, int, int)
')
#

interface('polaris_pvp_stdin_read',
  gen_require(
    type polaris_pvp_tmp_t;
  )
)

read_fifo_files_pattern($1, polaris_pvp_tmp_t, polaris_pvp_tmp_t)
)

#######################################################
## <summary>
## Read pvp temporary files and directories in /tmp.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#

interface('polaris_pvp_read_tmp_files',
  gen_require(
    type tmp_t;
    type polaris_pvp_tmp_t;
  )
)

rw_files_pattern($1, { tmp_t polaris_pvp_tmp_t }, polaris_pvp_tmp_t)
)

#######################################################
## <summary>
## Read pvp SAI files under /tmp/[rp|fp|cc/*]/pvp/sai_process.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#

interface('polaris_pvp_read_sai_files',
  gen_require(
    type polaris_pvp_sai_t;
  )
)

read_files_pattern($1, polaris_pvp_sai_t, polaris_pvp_sai_t)
list_dirs_pattern($1, polaris_pvp_sai_t, polaris_pvp_sai_t)
allow $1 polaris_pvp_sai_t:dir watch;
)
### <summary>
## Delete pvp SAI dirs and files under /tmp/[rp|fp|cc/*]/pvp/sai_process.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
# interface(`polaris_pvp_delete_sai_files',`
gen_require(
    type polaris_pvp_sai_t;
')
allow $1 polaris_pvp_sai_t:dir { remove_name rmdir write };
allow $1 polaris_pvp_sai_t:file unlink;
')

### <summary>
## Watch pvp process_state directories
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <rolebase/>
#
# interface(`polaris_process_state_watch',`
gen_require(
    type polaris_process_state_t;
')
allow $1 polaris_process_state_t:dir watch;
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispvp.if
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#
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#
policy_module(polarisrmonbifo, 1.0);

# Polaris Rmonbifo Driver policy

# note polaris_proc_rmonbifo_t is defined in kernel/kernel.te, since genfscon
# statements could be only in base policy

type polaris_rmonbifo_tmp_t;
files_type(polaris_rmonbifo_tmp_t)

polaris_systemd_tmpfiles_tmp_filetrans(polaris_rmonbifo_tmp_t, dir, "rmonbifo")

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisrmonbifo.te
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#

/bootflash/sdavc(/.*)? gen_context(system_u:object_r:polaris_sdavc_proxy_files_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissdavcproxy.fc
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#

# polarisodm file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisodm.fc
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#

/usr/binos/conf/auto_upgrade_client.sh -- gen_context(system_u:object_r:polaris_autoupgrade_exec_t,s0)
/usr/binos/conf/auto_upgrade_helper.sh -- gen_context(system_u:object_r:polaris_autoupgrade_exec_t,s0)
/usr/binos/conf/auto_upgrade_trigger.sh -- gen_context(system_u:object_r:polaris_autoupgrade_exec_t,s0)
/usr/binos/conf/auto_upgrade_client_helper.sh -- gen_context(system_u:object_r:polaris_autoupgrade_exec_t,s0)
/tmp/etc/installer    gen_context(system_u:object_r:polaris_autoupgrade_tmp_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisautoupgrade.fc
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#
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#
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#

# polariswstatsd file contexts place holder

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswstatsd.fc
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#
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#
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#

/usr/binos/conf/bexecute.sh -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/bin/bexecute -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
# still exists for backward compatibility
/tmp/etc/bexecute -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/conf/bexec.sh -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/conf/brelay.sh -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/bin/brelay -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/conf/ioxcon.sh -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/conf/runin.sh -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/conf/runin_exec_proc.sh -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/conf/runin.sh -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/conf/in.telnetd.sh -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
/usr/binos/conf/brelay_console.sh -- gen_context(system_u:object_r:polaris_bconsole_exec_t,s0)
/usr/binos/conf/bexecute.sh -- gen_context(system_u:object_r:polaris_bexecute_exec_t,s0)
# mcp_chvrf.sh used by some systemd units to switch vrf (ip namespace)
# of xinetd that drives brelay service
/usr/bin/os/conf/mcp_chvrf.sh -- gen_context(system_u:object_r:polaris_chvrf_exec_t,s0)

# used by "request platform software system shell" CLI
/usr/bin/os/conf/mcp_record_shell.sh -- gen_context(system_u:object_r:polaris_platform_shell_exec_t,s0)
/usr/bin/os/conf/mcp_shell.sh -- gen_context(system_u:object_r:polaris_shell_exec_t,s0)

# used by "sh pla so process memory r0 name iosd maps" CLI
/usr/bin/os/conf/mcp_process_maps.sh -- gen_context(system_u:object_r:polaris_process_maps_exec_t,s0)

# used by "req platform software console attach switch standby R0" CLI
/usr/bin/os/conf/mcp_console_attach.sh -- gen_context(system_u:object_r:polaris_mcp_console_attach_exec_t,s0)
/usr/bin/bin/ioucon -- gen_context(system_u:object_r:polaris_ioucon_exec_t,s0)

# ngio_module_session.sh used by "hw-module session" CLI
/usr/bin/os/conf/ngio_module_session.sh -- gen_context(system_u:object_r:polaris_ngio_module_session_exec_t,s0)

#used by "upgrade rom-monitor capsule primary switch 1 R0" CLI
/usr/bin/os/conf/cat9k-primary-capsule-upgrade.sh --
gen_context(system_u:object_r:polaris_capsule_upgrade_exec_t,s0)

/usr/bin/os/conf/cat9k-capsule-upgrade.sh -- gen_context(system_u:object_r:polaris_capsule_upgrade_exec_t,s0)

/mnt/sd3/user/capsule-upgrade.log -- gen_context(system_u:object_r:polaris_capsule_upgrade_log_t,s0)
/usr/bin/os/conf/mcp_dmesg_service.sh -- gen_context(system_u:object_r:polaris_mcp_dmesg_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbexecute.fc
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#
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#
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#
## <summary>Polaris wncd Policy Rules.</summary>

##################################################
## <summary>
##     Read files under /mnt/images/...these are related to AccessPoint images
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##</summary>

Open Source Used In BGP TE Controller Version 4.3.0 6653
## <summary>
##      Interface('polaris_wlc_ap_images_read',
##      gen_require(' type polaris_wlc_ap_images_t;
##  ')
##
## read_files_pattern($1, polaris_wlc_ap_images_t, polaris_wlc_ap_images_t)
## read_link_files_pattern($1, polaris_wlc_ap_images_t, polaris_wlc_ap_images_t)
## list_dirs_pattern($1, polaris_wlc_ap_images_t, polaris_wlc_ap_images_t)
## allow $1 polaris_wlc_ap_images_t:file map;
## ')
##</summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>

## <summary>
##      Interface('polaris_wlc_ap_images_manage',
##      gen_require(' type polaris_wlc_ap_images_t;
##      type mnt_t;
##  ')
##
## manage_files_pattern($1, polaris_wlc_ap_images_t, polaris_wlc_ap_images_t)
## manage_link_files_pattern($1, polaris_wlc_ap_images_t, polaris_wlc_ap_images_t)
## manage_dirs_pattern($1, polaris_wlc_ap_images_t, polaris_wlc_ap_images_t)
##
## # transition when /mnt/images is created
## filetrans_pattern($1, mnt_t, polaris_wlc_ap_images_t, dir, "images")
## ')
##
Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariswned.if
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#
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#
## <summary>Polaris esg_tam_cfg Policy Rules.</summary>

### Getattr dirs pvp temporary directories in /tmp.

```plaintext
interface('polaris_tam_getattrs_tmp_dirs',
    gen_require(
        type tmp_t,
        type polaris_tam_tmp_t;
    )
)

getattr_dirs_pattern($1, tmp_t, polaris_tam_tmp_t)
)
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisesgtamcfg.if
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## <summary>Polaris MQIPC Policy Rules.</summary>

### Make specified domain as one of mqipc types.

```plaintext
interface('polaris_mqipc',
    gen_require(
        type mqipc_t;
    )
)

generate_mqipc_pattern($1, $2, $3)
)
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisesgtamcfg.if
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interface('polaris_mqipc_type',
    gen_require(
        attribute polaris_mqipc;
    )
    typeattribute $1 polaris_mqipc;
    files_type($1)
    )

#######################################
## <summary>
##      Manage mqipc shared memory file in /dev/shm directory
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <param name="mqipc_label">
##      <summary>
##      Mqipc file label.
##      </summary>
## </param>
#
## interface('polaris_mqipc_create_name',
    gen_require(
        type tmpfs_t;
        type tmp_t;
    )
    manage_files_pattern($1, tmpfs_t, $2)
    allow $1 $2:file map;
    type_transition $1 tmpfs_t : file $2 "mq.-$3";
    manage_fifo_files_pattern($1, tmp_t, $2)
    type_transition $1 tmp_t : fifo_file $2 "mq_ene_fifo.-$3";
    type_transition $1 tmp_t : fifo_file $2 "mq_fnf_fifo.-$3";
    fs_getattr_tmpfs($1)
    )

#######################################
## <summary>
##      Manage mqipc shared memory file in /dev/shm/dir directory
## where dir is also derived from object parameter used as stem. It
## should be used only in cases where mqipc server operates with
## chanell under subdirectory. TDL autogeneration does not pick up
## this so interface call should be added explicitely.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <param name="mqipc_label">
##      <summary>
##      Database file label.
##      </summary>
## </param>
## <param name="object">
##      <summary>
##      Mqipc file name stem. It is used to derive set of file names
##      used by MQIPC.
##      </summary>
## </param>
#
# interface('polaris_mqipc_create_name_dir',
  gen_require('`
type tmpfs_t;
  type tmp_t;
')
  manage_files_pattern($1, { tmpfs_t $2 }, $2)
  allow $1 $2:file map;
  manage_dirs_pattern($1, tmpfs_t, $2)
  type_transition $1 tmpfs_t : { file dir } $2 "mq.-$3";
  manage_fifo_files_pattern($1, { tmp_t $2 }, $2)
  type_transition $1 tmp_t : fifo_file $2 "mq_ene_fifo.-$3";
  type_transition $1 tmp_t : fifo_file $2 "mq_fnf_fifo.-$3"
  fs_getattr_tmpfs($1)
')

########################################################################
## <summary>
##      Manage mqipc shared memory file in /dev/shm directory
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <param name="mqipc_label">
##      <summary>
##      Mqipc channel file label.
##      </summary>
## </param>
#
interface('polaris_mqipc_use',
gen_require(
type tmpfs_t;
')
    read_files_pattern($1, { tmpfs_t $2 }, $2)
    write_files_pattern($1, { tmpfs_t $2 }, $2)
    read_fifo_files_pattern($1, { tmp_t $2 }, $2)
    write_fifo_files_pattern($1, { tmp_t $2 }, $2)
    fs_getattr_tmpfs($1)
    allow $1 $2:file map;
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarismqipc.if
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#
# March 2017, Victor Kamensky
#
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#

## <summary>Polaris issu_stack Policy Rules.</summary>

####################################################
## <summary>
##      Manage tmp files created by issu_stack.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
## <rolecap/>
#
interface('polaris_issu_stack_tmp_manage',
gen_require(
type polaris_issu_stack_tmp_t;
')
    manage_files_pattern($1, polaris_issu_stack_tmp_t, polaris_issu_stack_tmp_t)
    manage_link_files_pattern($1, polaris_issu_stack_tmp_t, polaris_issu_stack_tmp_t)
')

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#
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#

## <summary>Polaris Tmp Boot Policy Rules.</summary>

# /tmp/sw/boot policy

## <summary>
##      Read /tmp/sw/boot files. Does not cover rmonbifo file under
## /tmp/sw/boot/rmonbifo. For those use polaris_rmonbifo_tmp_read interface
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_boot_tmp_read',
    gen_require(`
    type polaris_boot_tmp_t;
    ')
        read_files_pattern($1, polaris_boot_tmp_t, polaris_boot_tmp_t)
    ')

## <summary>
##      Write /tmp/sw/boot files.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface(`polaris_boot_tmp_write',
    gen_require(`
    type polaris_boot_tmp_t;
    ')

write_files_pattern($1, polaris_boot_tmp_t, polaris_boot_tmp_t)
')

'******************************************************************************
## <summary>
## Map any polaris_boot_tmp_t file, needed during install.
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
#
# interface('polaris_boot_tmp_map',
  gen_require(
    type polaris_boot_tmp_t;
  )
  allow $1 polaris_boot_tmp_t:file map;
')

'******************************************************************************
## <summary>
## Manage /tmp/sw/boot files.
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
#
# interface('polaris_boot_tmp_manage',
  gen_require(
    type polaris_boot_tmp_t;
  )
  manage_files_pattern($1, polaris_boot_tmp_t, polaris_boot_tmp_t)
')

'******************************************************************************
## <summary>
## Create an polaris_boot_tmp_t object
## in tmpfs_t, tmp_t directories.
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </summary>
## <param>
## <param name="object">
##<summary>
##The object class of the object being created.
##</summary>
## </param>
## <param name="name" optional="true">
##<summary>
##The name of the object being created.
##</summary>
## </param>
#
interface('polaris_boot_tmp_filetrans',
  gen_require(
  type polaris_boot_tmp_t;
   )
   fs_tmpfs_filetrans($1, polaris_boot_tmp_t, $2, $3)
   files_tmp_filetrans($1, polaris_boot_tmp_t, $2, $3)
   )

########################################
## <summary>
## Manage partition disk device that contains rommon image.
##</summary>
##<param name="domain">
##<summary>
##Domain allowed access.
##</summary>
## </param>
#
interface('polaris_rommon_device_manage',
   gen_require(
   type device_t;
   type polaris_rommon_device_t;
   )
   manage_blk_files_pattern($1, device_t, polaris_rommon_device_t)
   manage_chr_files_pattern($1, device_t, polaris_rommon_device_t)
   )

########################################
## <summary>
## Read partition disk device that contains rommon image.
##</summary>
##<param name="domain">
##<summary>
##Domain allowed access.
##</summary>
## </param>
#
interface('polaris_rommon_device_read',
  gen_require(
    type device_t;
    type polaris_rommon_device_t;
  )
  read_blk_files_pattern($1, device_t, polaris_rommon_device_t)
  read_chr_files_pattern($1, device_t, polaris_rommon_device_t)
)

###########################################################################
## <summary>
## Manage /bootflash/.prst_sync/reload_info
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_boot_file_manage',
  gen_require(
    type polaris_boot_file_t;
  )
  manage_files_pattern($1, polaris_boot_file_t, polaris_boot_file_t)
)

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisboot.if
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#
# February 2020, Victor Kamensky
#
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#

policy_module(polariscedgetanman, 1.0);

# why /usr/binos/conf/cedge-tanman.sh is not described in TDL?
polaris_process_domain_template(cedge_tanman)

polaris_boot_tmp_read(polaris_cedge_tanman_t)
polaris_chasfs_read(polaris_cedge_tanman_t)
polaris_cpld_read(polaris_cedge_tanman_t)
polaris_read_debug_conf(polaris_cedge_tanman_t)
polaris_use_btrace_fifo(polaris_cedge_tanman_t)

corecmd_exec_bin(polaris_cedge_tanman_t)
corecmd_exec_shell(polaris_cedge_tanman_t)
auth_use_nsswitch(polaris_cedge_tanman_t)

# /tmp/tan handling

type polaris_cedge_tanman_tmp_t;
files_tmp_file(polaris_cedge_tanman_tmp_t)
gen_require('  
type tmp_t;
')
manage_dirs_pattern(polaris_cedge_tanman_t, tmp_t, polaris_cedge_tanman_tmp_t)
manage_fifo_files_pattern(polaris_cedge_tanman_t, polaris_cedge_tanman_tmp_t, polaris_cedge_tanman_tmp_t)
files_tmp_filetrans(polaris_cedge_tanman_t, polaris_cedge_tanman_tmp_t, dir, "tan")

# calls du -sk /tmp/xml/System
fs_getattr_tmpfs(polaris_cedge_tanman_t)

# work with /tmp/xml
polaris_cedge_xml_tmp_manage(polaris_cedge_tanman_t)

# work with /tmp/tmp
polaris_cedge_tmp_manage(polaris_cedge_tanman_t)

polaris_btrace_tmppub_read(polaris_cedge_tanman_t)

allow polaris_cedge_tanman_t self:capability sys_resource;

# calls nice
allow polaris_cedge_tanman_t self:process setsched;

# runs inotifywait -mrq --format %f: -e moved_to /bootflash/tracelogs
# and removes files in /bootflash/tracelogs
polaris_btrace_persistent_data_manage(polaris_cedge_tanman_t)

# runs ps -eaf
# ps needs access to proc_t
kernel_read_system_state(polaris_cedge_tanman_t)
# ps needs access to state of all domains
domain_read_all_domains_state(polaris_cedge_tanman_t)
# "ps" needs read access to /sys/devices/system/cpu/online
# "ps" needs read access to /proc/uptime
dev_read_sysfs(polaris_cedge_tanman_t)

# watch over /bootflash/tracelogs
polaris_btrace_data_watch(polaris_cedge_tanman_t)
# watches over /tmp for /tmp/booted appearence

```c
gen_require(' type tmp_t;
')
allow polaris_cedge_tanman_t tmp_t:dir watch;
```

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscedgetanman.te
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# # Aug 2020, Sridhar
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#

## <summary>Polaris tlscd process Policy Rules.</summary>

```c
##<summary>
## Allow the specified domain to manage UDS socket
## files. I.e /tmp/tlscd/
##</summary>
##<param name="domain">
## <summary>
## Domain allowed access.
## </summary>
##</param>
#
interface('polaris_tlscd_uds_manage',`
   gen_require(' type polaris_tlscd_uds_t;
')

   manage_sock_files_pattern($1, polaris_tlscd_uds_t, polaris_tlscd_uds_t)
')
```

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristlscd.if
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dnl
dnl Copyright (c) 2020 by Cisco Systems, Inc.
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dnl
dnl Same as Nyquist
dnl
dnl Nyquist Platform Max Bay Limits
max_bay_map_set(`rp', `per_bay', 0)
max_bay_map_set(`cc', `per_bay', 0)
max_bay_map_set(`fp', `per_bay', 0)

dnl in elastic scope each process has its own value
max_elastic_map_set(`rp', `elastic', BPROC_ODM, 0)
max_elastic_map_set(`cc', `elastic', BPROC_ODM, 0)
max_elastic_map_set(`fp', `elastic', BPROC_ODM, 0)

max_elastic_map_set(`rp', `elastic', BPROC_WNCD, 0)
max_elastic_map_set(`cc', `elastic', BPROC_WNCD, 0)
max_elastic_map_set(`fp', `elastic', BPROC_WNCD, 0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/msmaps.m4
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#
# September 2017, Victor Kamensky
#
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#

### <summary>Polaris polarisonconfined Policy Rules.</summary>

uenta polaris_storage_unconfined_type;

typeattribute $1 polaris_storage_unconfined_type;
##Mark domain unconfined, if polaris_unconfined build macro is defined. Or if polaris_unconfined_conditional macro is defined make domain unconfined only if polaris_unconfined_all SELinux boolean is set on.

### <summary>
### <param name="domain">
### Domain allowed access.
### </summary>
### </param>
#
# interface('polaris_domain_maybe_unconfined',`
  ifdef('polaris_unconfined',`
    unconfined_domain($1)
  ')
  ifdef('polaris_unconfined_conditional',`
    polaris_domain_storage_unconfined_type($1)
    tunable_policy('polaris_unconfined_all',`
      polaris_unconfined_domain($1)
    ')
  ')
#implicitly confined domain being made permissive permissive $1;
')

################################
##Mark iosd domain unconfined, if polaris_iosd_unconfined build macro is defined. Or if polaris_iosd_unconfined_conditional macro is defined make domain unconfined only if polaris_unconfined_iosd SELinux boolean is set on.

### <summary>
### <param name="domain">
### Domain allowed access.
### </summary>
### </param>
#
# interface('polaris_iosd_maybe_unconfined',`
  ifdef('polaris_iosd_unconfined',`
    unconfined_domain($1)
  ')
  ifdef('polaris_iosd_unconfined_conditional',`
    polaris_domain_storage_unconfined_type($1)
    polaris_ipsd_domain($1)
  ')
#implicitly confined domain being made permissive permissive $1;
')
tunable_policy('polaris_unconfined_iosd',
      polaris_unconfined_domain($1)
   )
)
)

##############################################################################
## <summary>
## Unconfined access to kernel module resources.
## Like kernel_unconfined but without typeattribute use.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_kernel_unconfined',
gen_require('attribute proc_type;
    attribute sysctl_type;
    type kernel_t;
    type unlabeled_t;
    type proc_kcore_t;
    type proc_kmsg_t;
   ')

    allow $1 { proc_type - proc_kcore_t - proc_kmsg_t } :{ file } ~entrypoint;
    allow $1 { proc_type - proc_kcore_t - proc_kmsg_t }:{ dir lnk_file } *
;

    allow $1 sysctl_type:{ file } ~entrypoint;
    allow $1 sysctl_type:{ dir lnk_file } *
;

    allow $1 kernel_t:system *;

    allow $1 unlabeled_t:{ dir lnk_file sock_file fifo_file chr_file blk_file } *
;
    allow $1 unlabeled_t:file ~entrypoint;
    allow $1 unlabeled_t:filesystem *;
    allow $1 unlabeled_t:association *
;
    allow $1 unlabeled_t:packet *
;
    allow $1 unlabeled_t:process ~{ ptrace transition dyntransition execmem execstack execheap }
;
# LOOK AT ME
# kernel_load_module($1)
')
## <summary>
## Unconfined access to network objects.
## Like corenet_unconfined but without typeattribute use.
## </summary>
## <param name="domain">
## The domain allowed access.
## </param>
#
#
interface(`polaris_corenet_unconfined`,
   gen_require(
      attribute node_type;
      attribute netif_type;
      attribute packet_type;
      attribute port_type;
   )
   allow $1 node_type:node *
   allow $1 netif_type:netif *
   allow $1 packet_type:packet *
   allow $1 port_type:dccp_socket { send_msg recv_msg name_connect }
   allow $1 port_type:tcp_socket { send_msg recv_msg name_connect }
   allow $1 port_type:udp_socket { send_msg recv_msg }
   # Bind to any network address.
   allow $1 port_type:{ dccp_socket tcp_socket udp_socket rawip_socket } name_bind;
   allow $1 node_type:{ dccp_socket tcp_socket udp_socket rawip_socket } node_bind;
)

## <summary>
## Unconfined access to devices.
## Like dev_unconfined but without typeattribute use.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
#
interface(`polaris_dev_unconfined`,
   gen_require(
      attribute device_node;
      type memory_device_t;
      type mtrr_device_t;
   )
   allow $1 device_node:device *
   allow $1 memory_device_t:memory *
   allow $1 mtrr_device_t:mtrr *
   # Bind to any device.
   allow $1 device_node:device *
   allow $1 memory_device_t:memory *
   allow $1 mtrr_device_t:mtrr *
)
allow $1 self:capability sys_rawio;
allow $1 { device_node - memory_device_t } : [ blk_file lnk_file ] *;
allow $1 { device_node - memory_device_t } : [ file chr_file ] ~ { execmod entrypoint };
allow $1 mtrr_device_t:file ~ { execmod entrypoint };
dev_getattr_all($1)

########################################
## <summary>
## Unconfined access to domains.
## Like domain_unconfined but without typeattribute use.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(polaris_domain_unconfined);
gen_require(
    attribute domain;
)

# Use/sendto/connectto sockets created by any domain.
allow $1 domain: [ socket_class_set socket key_socket ] *;

allow $1 domain: system all_system_perms;
# Use descriptors and pipes created by any domain.
allow $1 domain: fd use;
allow $1 domain: fifo_file rw_file_perms;

allow $1 $1: dbus send_msg;

# Act upon any other process.
allow $1 domain: process ~ { ptrace transition dyntransition execmem execstack execheap setcurrent };
allow $1 domain: process ptrace;

# Create/access any System V IPC objects.
allow $1 domain: [ sem msgq shm ] *;
allow $1 domain: msg { send receive };

# For /proc/pid
allow $1 domain: dir list_dir_perms;
allow $1 domain: file rw_file_perms;
allow $1 domain:lnk_file { read_lnk_file_perms ioctl lock };

# act on all domains keys
allow $1 domain:key *;

# pass constraints
# typeattribute $1 can_change_object_identity;
# typeattribute $1 set_curr_context;
# typeattribute $1 process_uncond_exempt;

# mcs_process_set_categories($1)

# userdom_filetrans_home_content($1)
')

############################################################
## <summary>
## Unconfined access to files.
## Like files_unconfined but without typeattribute use.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_files_unconfined',
gen_require(`
attribute file_type;
type shadow_t;
')

# Create/access any file in a labeled filesystem:
allow $1 { file_type - shadow_t }:{ file chr_file } ~{ execmod entrypoint relabelto };
allow $1 file_type:{ dir lnk_file sock_file fifo_file blk_file } *;
allow $1 file_type:service *;

# Mount/unmount any filesystem with the context= option.
allow $1 file_type:filesystem all_filesystem_perms;
')

############################################################
## <summary>
## Unconfined access to filesystems
## Like fs_unconfined but without typeattribute use.
## </summary>
## <param name="domain">

## Domain allowed access.

```c
interface(`polaris_fs_unconfined',
gen_require(`
    attribute filesystem_type;
')

allow $1 filesystem_type:filesystem all_filesystem_perms;

# Create/access other files. fs_type is to pick up various
# pseudo filesystem types that are applied to both the filesystem
# and its files.
allow $1 filesystem_type:{ file } ~entrypoint;
allow $1 filesystem_type:{ dir lnk_file sock_file fifo_file chr_file blk_file } *

########################################
## Unconfined access to the SELinux kernel security server.
## Like selinux_unconfined but without typeattribute use.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_selinux_unconfined',
gen_require(`
    attribute boolean_type;
    type security_t;
    type secure_mode_policyload_t;
')

# use SELinuxfs
allow $1 security_t:dir list_dir_perms;
allow $1 security_t:file rw_file_perms;
allow $1 boolean_type:file read_file_perms;
allow $1 { boolean_type -secure_mode_policyload_t }:file write_file_perms;

# Access the security API.
allow $1 security_t:security ~{ load_policy setenforce setbool setsecparam }

ifdef(`distro_rhel4',`
```
# needed for systems without audit support
auditallow $1 security_t:security setbool;
')

#selinux_set_all_booleans($1)
#selinux_load_policy($1)
#selinux_set_parameters($1)
#selinux_set_enforce_mode($1)
')

########################################
## <summary>
##	Make the specified domain unconfined.
## </summary>
## <param name="domain">
##<summary>
##	Domain to make unconfined.
## </summary>
## </param>
#
# interface('polaris_unconfined_domain',
gen_require(''
class dbus all_dbus_perms;
class nscd all_nscd_perms;
class passwd all_passwd_perms;
')

# Use any Linux capability.
allow $1 self:capability ~{ sys_module };
allow $1 self:capability2 ~{ mac_admin mac_override };
allow $1 self:fifo_file { manage_fifo_file_perms relabelfrom relabelto };

# Transition to myself, to make get_ordered_context_list happy.
allow $1 self:process { dyntransition transition };

# Write access is for setting attributes under /proc/self/attr.
allow $1 self:file rw_file_perms;
allow $1 self:dir rw_dir_perms;

# Userland object managers
allow $1 self:nscd all_nscd_perms;
allow $1 self:dbus all_dbus_perms;
allow $1 self:passwd all_passwd_perms;
allow $1 self:association all_association_perms;
allow $1 self:socket_class_set create_socket_perms;
polaris_kernel_unconfined($1)
polaris_corenet_unconfined($1)
polaris_dev_unconfined($1)
polaris_domain_unconfined($1)
polaris_files_unconfined($1)
polaris_fs_unconfined($1)
polaris_selinux_unconfined($1)

systemd_config_all_services($1)

    # in unconfined_domain_noaudit its under not deny_execmem
    allow $1 self:process execmem;

    #domain_mmap_low($1)
    #
    #ubac_process_exempt($1)
    #
    #optional_policy('
    #auth_unconfined($1)
    #')
    #
    #optional_policy'
    ## Communicate via dbusd.
    #dbus_system_bus_unconfined($1)
    #dbus_unconfined($1)
    #')
    #
    #optional_policy'
    #ipsec_setcontext_default_spd($1)
    #ipsec_match_default_spd($1)
    #')
    #
    #optional_policy'
    #nscd_unconfined($1)
    #')
    #
    #optional_policy'
    #seutil_create_bin_policy($1)
    #seutil_relabelto_bin_policy($1)
    #')
    #
    #optional_policy'
    #storage_unconfined($1)
    #')
    #
    #optional_policy'
    #xserver_unconfined($1)
### <summary>
### Make the specified domain able to work with cpp /tmp/cpp_ifdev_rep and
### /tmp/cpp_ifdev_req pipe files.
### </summary>
### <param name="type">
### <summary>
### Domain allowed access.
### </summary>
### </param>
#
interface(`polaris_unconfined_service_fifo_file_manage',`
    gen_require(`
        type unconfined_service_t;
    `)
    manage_fifo_files_pattern($1, unconfined_service_t, unconfined_service_t)
`)

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* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisunconfined.if
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#
# March 2019, Shikhar Dogra
#
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#
policy_module(polarisfmancc, 1.0);

gen_require(`
    type polaris_fman_cc_t;
`)

polaris_btrace_data_manage(polaris_fman_cc_t)
polaris_crft_data_manage(polaris_fman_cc_t)
polaris_chasfs.manage(polaris_fman_cc_t)
polaris_tdlresolve_read(polaris_fman_cc_t)
polaris_tddlb_list_dirs(polaris_fman_cc_t)
polaris_cpld_read(polaris_fman_cc_t)
polaris_lua_read(polaris_fman_cc_t)
polaris_flashlib_read(polaris_fman_cc_t)
polaris_cpld_dev_use(polaris_fman_cc_t)
# allow to send message to /dev/log
logging_send_syslog_msg(polaris_fman_cc_t)

# ISR Nightwatch module accesses libraries compiled with icc
polaris_icc_broken_relocations(polaris_fman_cc_t)

# cpp bleeds into switching platforms through fman_fp and fed
# apparently even on nyquist fed creates /tmp/cpp_anon_db
polaris_cpp_process(polaris_fman_cc_t)
polaris_cpp_tmp_files_use(polaris_fman_cc_t)

type polaris_iosd_fmanrp_mqipc_t;
polaris_mqipc_type(polaris_iosd_fmanrp_mqipc_t)
polaris_mqipc_create_name(polaris_fman_cc_t, polaris_iosd_fmanrp_mqipc_t, iosd-thr-fmanrp-R0:0)
polaris_mqipc_create_name(polaris_fman_cc_t, polaris_iosd_fmanrp_mqipc_t, iosd-thr-fmanrp-R0:0-cc0)
polaris_mqipc_create_name(polaris_fman_cc_t, polaris_iosd_fmanrp_mqipc_t, iosd-thr-fmanrp-R0:0-cc1)
polaris_mqipc_create_name(polaris_fman_cc_t, polaris_iosd_fmanrp_mqipc_t, iosd-thr-fmanrp-R0:0-cc2)
polaris_mqipc_create_name(polaris_fman_cc_t, polaris_iosd_fmanrp_mqipc_t, iosd-thr-fmanrp-R0:0-cc3)
polaris_mqipc_create_name(polaris_fman_cc_t, polaris_iosd_fmanrp_mqipc_t, iosd-thr-fmanrp-R0:0-cc4)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfmancc.te
No license file was found, but licenses were detected in source scan.

dnl
dnl May 2020, Swati Kumari
dnl
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dnl
dnl rpx86 Platform Max Bay Limits
max_bay_map_set('rp', 'per_bay', 0)
max_bay_map_set('cc', 'per_bay', 5)
max_bay_map_set('fp', 'per_bay', 2)

min_bay_ripc_map_set('rp', 'per_bay', 0)
min_bay_ripc_map_set('cc', 'per_bay', 1)
min_bay_ripc_map_set('fp', 'per_bay', 0)

max_bay_ripc_map_set('rp', 'per_bay', 2)
max_bay_ripc_map_set('cc', 'per_bay', 6)
max_bay_ripc_map_set('fp', 'per_bay', 2)

min_bay_ripc_map_set('rp', 'global', 0)
min_bay_ripc_map_set('cc', 'global', 1)
min_bay_ripc_map_set('fp', 'global', 0)
max_bay_ripc_map_set('rp', `global', 2)
max_bay_ripc_map_set('cc', `global', 6)
max_bay_ripc_map_set('fp', `global', 2)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/m4/rpx86maps.m4
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

## <summary>Polaris polarispsvp Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispsvp.if
No license file was found, but licenses were detected in source scan.

#
# September 2017, Victor Kamensky
#
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#

/tmp/tmppub(/.*)?  gen_context(system_u:object_r:polaris_btrace_tmmpub_t,s0)

# btrace utility to rotate logs
/usr/binos/bin/btman_rotate_immediate -- gen_context(system_u:object_r:polaris_btman_exec_t,s0)

# btrace utility to dump meta data
/usr/binos/bin/dump_btrace_meta  -- gen_context(system_u:object_r:polaris_btman_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisbtman.fc
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
policy_module(polarisnvram, 1.0);

#########################################################################
# NVRAM
#########################################################################

ifdef(`ngwc_family`,
  # suppose that in edison case nvram is not in partition
  type polaris_nvram_file_t;
  files_type(polaris_nvram_file_t)
  # allow nvram file reside on persistent storage
  polaris_pfile_type(polaris_nvram_file_t)
')

ifdef(`blackheart_platform`,
  gen_require(
    type polaris_nvram_file_t;
    type polaris_iosd_t;
  ')
  files_type(polaris_nvram_file_t)
  # allow nvram file reside on persistent storage
  polaris_pfile_type(polaris_nvram_file_t)
  allow polaris_iosd_t polaris_nvram_file_t:filesystem getattr;
')

ifdef(`sparrow_platform`,
  gen_require(
    type polaris_nvram_file_t;
    type polaris_iosd_t;
  ')
  files_type(polaris_nvram_file_t)
  # allow nvram file reside on persistent storage
  polaris_pfile_type(polaris_nvram_file_t)
  allow polaris_iosd_t polaris_nvram_file_t:filesystem getattr;
')

ifdef(`aventus_platform`,
  gen_require(
    type polaris_nvram_file_t;
    type polaris_iosd_t;
  ')
  files_type(polaris_nvram_file_t)
  # allow nvram file reside on persistent storage
  polaris_pfile_type(polaris_nvram_file_t)
  allow polaris_iosd_t polaris_nvram_file_t:filesystem getattr;
')

ifdef(`cabo_platform`,
  gen_require(
    type polaris_nvram_file_t;
    type polaris_iosd_t;
  ')
  files_type(polaris_nvram_file_t)
  # allow nvram file reside on persistent storage
  polaris_pfile_type(polaris_nvram_file_t)
  allow polaris_iosd_t polaris_nvram_file_t:filesystem getattr;
')
gen_require(
    type polaris_nvram_file_t;
    type polaris_iosd_t;
) 
files_type(polaris_nvram_file_t)
# allow nvram file reside on persistent storage
polaris_pfile_type(polaris_nvram_file_t)
allow polaris_iosd_t polaris_nvram_file_t:filesystem getattr;
)

ifdef('petra_platform,'
    type polaris_nvram_file_t;
    files_type(polaris_nvram_file_t)
    # suppose that in edison case nvram is not in partition
    gen_require(
        type polaris_iosd_t;
    )
    # allow nvram file reside on persistent storage
    polaris_pfile_type(polaris_nvram_file_t)
    allow polaris_iosd_t polaris_nvram_file_t:filesystem getattr;
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisnvram.te
No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#

## <summary>Polaris cxp Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaris cxp.if
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#

policy_module(polarischasfs, 1.0);
# Chasfs policy

```c
gen_require('attribute domain;
')

type polaris_chasfs_t;
files_type(polaris_chasfs_t)

files_tmp_filetrans(domain, polaris_chasfs_t, dir, "chassis")
files_tmp_filetrans(domain, polaris_chasfs_t, lnk_file, "chasfs")

# LOOK AT ME: on ultra /tmp/cc/chasfs is created as directory, but
# on other platforms it is symbolic to /tmp/chassis/local/cc/chasfs
# as it happens for rp and fp. Would it be better to fix ultra
# script(s)?
files_tmp_filetrans(domain, polaris_chasfs_t, dir, "chasfs")

# cpld-symlink.service, creates /tmp/chassis while /tmp is
# still tmpfs_t, ie before systemd-tmpfiles runs and had a
# chance to set tmp_t label on /tmp

gen_require('type initrc_t;
')
fs_tmpfs_filetrans(initrc_t, polaris_chasfs_t, dir, "chassis")
init_script_tmp_filetrans(domain, polaris_chasfs_t, dir, "chasfs")

# chasync

polaris_process_domain_template(chasync)

corecmd_exec_bin(polaris_chasync_t)

# allow read of /etc/group and /etc/passwd
auth_use_nsswitch(polaris_chasync_t)

polaris_btrace_data_manage(polaris_chasync_t)
polaris_chasfs_manage(polaris_chasync_t)
polaris_cpld_read(polaris_chasync_t)
polaris_boot_tmp_read(polaris_chasync_t)
polaris_read_debug_conf(polaris_chasync_t)
polaris_rmonbifo_tmp_read(polaris_chasync_t)
polaris_proc_rmonbifo_read(polaris_chasync_t)
polaris_disk_bootflash_read_lnk(polaris_chasync_t)
```
polaris_disk_harddisk_read_lnk(polaris_chasync_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_chasync_t)

allow polaris_chasync_t self:capability sys_resource;
allow polaris_chasync_t self:process setpgid;

# access of crashinfo dir for the domain
polaris_disk_crashinfo_getattr(polaris_chasync_t)

# allow access of /tmp/rp/chasync for the polaris chasync_t domain to
# create/write/read dirs/files with domain specific context
type polaris_chasync_tmp_t;
files_type(polaris_chasync_tmp_t)

files_tmp_file(polaris_chasync_tmp_t)
files_tmp_file(polaris_chasync_tmp_t)
files_tmp_filetrans(polaris_chasync_t, polaris_chasync_tmp_t, dir, "chasync")
manage_files_pattern(polaris_chasync_t, polaris_chasync_tmp_t, polaris_chasync_tmp_t)
manage_dirs_pattern(polaris_chasync_t, polaris_chasync_tmp_t, polaris_chasync_tmp_t)
manage_fifo_files_pattern(polaris_chasync_t, polaris_chasync_tmp_t, polaris_chasync_tmp_t)

# allow creation/access of temporary files created by chasync.sh like
# /tmp/sh-thd-1499428203 etc
files_tmp_filetrans(polaris_chasync_t, polaris_chasync_tmp_t, file)
manage_files_pattern(polaris_chasync_t, polaris_chasync_tmp_t, polaris_chasync_tmp_t)

fs_getattr_tmpfs(polaris_chasync_t)

# access of flash util for the domain
polaris_flashlib_read(polaris_chasync_t)

# read /proc/cmdline
kernel_read_system_state(polaris_chasync_t)

gen_require('type rsync_t; type init_t; type rsync_tmp_t;')
rsync_entry_domtrans(polaris_chasync_t, rsync_t)
allow rsync_t polaris_chasync_t:process sigchld;
# file descriptor leak when rsync is called
allow rsync_t init_t:unix_stream_socket ioctl;

# upon exec rsync inherits chasync's stdout/stderr fifo files
allow rsync_t polaris_chasync_t:fifo_file { getattr write ;}
# in chasync_prepost_rsync.sh, CHASYNC_PID_DIR (rsync pid files) is deleted by rsync
fs_getattr_tmpfs(rsync_t)
# allow file:map for rsync_tmp_t
allow rsync_t rsync_tmp_t:file map;
dev_getattr_generic_blk_files(rsync_t)
dev_getattr_loop_control(rsync_t)

# need access to /usr/bin/mount
mount_entry_type(rsync_t)

# need access to dev/sda1
storage_getattr_fixed_disk_dev(rsync_t)
ifdef('ngwc_family',

#Read and write RPC sysctls
kernel_rw_rpc_sysctls(rsync_t)
mount_domtrans(rsync_t)
fstools_domtrans(rsync_t)

#Create/read/write on fixed device disk nodes
storage_manage_fixed_disk(rsync_t)
#stat -f -L -c %T /mnt/usb0
polaris_getattr_removable(rsync_t)
storage_filetrans_all_named_dev(rsync_t)
')

#============= polaris_dyncfg ==============
polaris_dyncfg_tmp_read(rsync_t)

#============= polaris_chasync_t ==============
polaris_btrace_persistent_data_search(polaris_chasync_t)
#chasync.sh code executes mv command
allow polaris_chasync_t self:process { setfscreate };
#chasync.sh code executes ping command to check if ping works before trying rsync for the first time
netutils_domtrans_ping(polaris_chasync_t)

#chasync.sh code in wlc saves logs during cleanup to /var/log/chasync
type polaris_chasync_log_t:
logging_log_file(polaris_chasync_log_t)
manage_files_pattern(polaris_chasync_log_t, polaris_chasync_log_t, polaris_chasync_log_t)
manage_dirs_pattern(polaris_chasync_log_t, polaris_chasync_log_t, polaris_chasync_log_t)
logging_log_filetrans(polaris_chasync_log_t, polaris_chasync_log_t, dir, "chasync")

# chasfs_boottime script
polaris_process_domain_template(chasfs_boottime)
unconfined_domain(polaris_chasfs_boottime_t)

# chasfs_boottime.sh starts cman_fp or cmand with -C option; allow its
# transition to fman_fp_t type
optional_policy('
  polaris_cm_rp_domtrans(polaris_chasfs_boottime_t)
  )
optional_policy('
  polaris_cm_fp_domtrans(polaris_chasfs_boottime_t)
  )
optional_policy('
  polaris_cm_cc_domtrans(polaris_chasfs_boottime_t)
  )

ifdef(`ngwc_family',`

  # Allow iox_polaris.conf read
  polaris_caf_files_read(polaris_chasync_t)

  # Allow losetup in helper script
  fstools_domtrans(polaris_chasync_t)

  # Manage alternate hdd files
  polaris_iox_alt_hdd_manage(polaris_chasync_t)

  # Allow console logging
  term_open_unallocated_ttys(polaris_chasync_t)

  # Allow logger which is used for syslog message
  allow polaris_chasync_t self:unix_dgram_socket { connect create };
  logging_send_syslog_msg(polaris_chasync_t)

  # logger needs to run pidof
  dev_read_sysfs(polaris_chasync_t)
  domain_read_all_domains_state(polaris_chasync_t)

  )

type polaris_chasync_files_t;
files_type(polaris_chasync_files_t)
polaris_pfile_type(polaris_chasync_files_t)

optional_policy('
  gen_require(''
    type polaris_disk_harddisk_t;
    type polaris_disk_bootflash_t;
  ')
filetrans_pattern(polaris_chasync_t, {polaris_disk_bootflash_t polaris_disk_harddisk_t}, polaris_chasync_files_t, dir, "sys_report")
filetrans_pattern(polaris_chasync_t, {polaris_disk_bootflash_t polaris_disk_harddisk_t}, polaris_chasync_files_t, dir, "fp_cc_crash")
filetrans_pattern(polaris_chasync_t, polaris_disk_bootflash_t, polaris_chasync_files_t, file, "user_input_custom.xml")

# chasync can manage files inside of its own polaris_disk_chasync_t directories
manage_dirs_pattern(polaris_chasync_t, polaris_chasync_files_t, polaris_chasync_files_t)
manage_files_pattern(polaris_chasync_t, polaris_chasync_files_t, polaris_chasync_files_t)
allow polaris_chasync_t polaris_chasync_files_t:dir watch;
polaris_install_disk_read(polaris_chasync_t)
')

optional_policy(' # chasync invoked sys_report does ls /tmp/ufs/crashinfo polaris_ncl_tmp_read(polaris_chasync_t)
')

# chasync moves inv files from /tftp/inv to chasfs directory
allow polaris_chasync_t self:capability { chown fowner fsetid };
gen_require(' type brctl_t;
')
# pd_iox.sh invokes brctl which needs access to chasfs
polaris_chasfs_read(brctl_t)

#allow chasync to unmount flash partition
mount_domtrans(polaris_chasync_t)
sysnet_domtrans_ifconfig(polaris_chasync_t)

# chasync.sh needs read access to /bootflash/.installer/install_issu_state
polaris_disk_install_read(polaris_chasync_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarischasfs.te
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#
# March 2017, Victor Kamensky
#
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#
policy_module(polariscpp, 1.0):

####################################################################################################
# Polaris cpp (ultra)
####################################################################################################
type polaris_cpp_device_t;
  dev_node(polaris_cpp_device_t)

  # deals with /dev/shm files semaphors, etc
  type polaris_cpp_tmpfs_t;
  files_tmpfs_file(polaris_cpp_tmpfs_t)
  attribute polaris_cpp_domain;
  fs_tmpfs_filetrans(polaris_cpp_domain, polaris_cpp_tmpfs_t, file)
  manage_files_pattern(polaris_cpp_domain, tmpfs_t, polaris_cpp_tmpfs_t)
  allow polaris_cpp_domain polaris_cpp_tmpfs_t:file map;
  polaris_cpp_tmpfs_manage(polaris_cpp_domain)
  polaris_cerr_shm_manage(polaris_cpp_domain)

  # on TSN ucode_dram lives in hugetlbfs
  fs_hugetlbfs_filetrans(polaris_cpp_domain, polaris_cpp_tmpfs_t, file)
  gen_require('
    type hugetlbfs_t;
  ')
  manage_files_pattern(polaris_cpp_domain, hugetlbfs_t, polaris_cpp_tmpfs_t)

  # deals with cpp /tmp files
  type polaris_cpp_tmp_t;
  files_tmp_file(polaris_cpp_tmp_t)
  files_tmp_filetrans(polaris_cpp_domain, polaris_cpp_tmp_t, file, "cpp_anon_db")
  files_tmp_filetrans(polaris_cpp_domain, polaris_cpp_tmp_t, file, "qm_rt_dbg")
  files_tmp_filetrans(polaris_cpp_domain, polaris_cpp_tmp_t, fifo_file, "cpp_ifdev_rep")
  files_tmp_filetrans(polaris_cpp_domain, polaris_cpp_tmp_t, fifo_file, "cpp_ifdev_req")
  manage_files_pattern(polaris_cpp_domain, tmp_t, polaris_cpp_tmp_t)
  manage_fifo_files_pattern(polaris_cpp_domain, tmp_t, polaris_cpp_tmp_t)
  allow polaris_cpp_domain polaris_cpp_tmp_t:file map;
  fs_getattr_tmpfs(polaris_cpp_domain)

  # overlord/neptune access /sys/bus/pci/devices/0000:01:00.0/resource0
  # when initializing the CPP DMAP library
  optional_policy('polaris_cpp_cavium_dma_map(polaris_cpp_domain)
  ')

  type polaris_i95_device_t;
  dev_node(polaris_i95_device_t)

  Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscpp.te
  No license file was found, but licenses were detected in source scan.

  #
  # March 2017, Victor Kamensky
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#

# some platforms have /usr/binos/bin/fman_fp as hardlink to
# /usr/binos/bin/fman_fp_image
/usr/binos/bin/fman_fp -- gen_context(system_u:object_r:polaris_fman_fp_exec_t,s0)
/usr/binos/bin/fman_fp_ledp -- gen_context(system_u:object_r:polaris_fman_fp_exec_t,s0)
/usr/binos/bin/fman_fp_vwlc_ledp -- gen_context(system_u:object_r:polaris_fman_fp_exec_t,s0)
/usr/binos/bin/fman_fp_us_ledp -- gen_context(system_u:object_r:polaris_fman_fp_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisfmanfp.fc
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#
# July 2017, Victor Kamensky
#
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#

### <summary>Polaris ngiolite Policy Rules.</summary>

# Execute mcp_smartctl_cmds.sh in the polaris_smartctl domain.
#</summary>
#<param name="domain">
# Domain allowed to transition.
#</param>
#
interface(`polaris_smartctl_domtrans',`
gen_require(`
type polaris_smartctl_t, polaris_smartctl_exec_t;
')
corecmd_search_bin($1)
domtrans_pattern($1, polaris_smartctl_exec_t, polaris_smartctl_t)
')

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisngiolite.if
No license file was found, but licenses were detected in source scan.

# February 2018, Manohar Hungund
#
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#
/dev/act2           -c gen_context(system_u:object_r:polaris_act2_device_t,s0)
/tmp/hw_entropy     -- gen_context(system_u:object_r:polaris_hw_entropy_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisact2.fc

No license file was found, but licenses were detected in source scan.

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#
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#
policy_module(polariscmcc, 1.0);

  gen_require('
    type polaris_cm_cc_t;
  ')

  polaris_btrace_data_manage(polaris_cm_cc_t)
polaris_crft_data_manage(polaris_cm_cc_t)
polaris_chasfs_manage(polaris_cm_cc_t)
polaris_tdlresolve_read(polaris_cm_cc_t)
polaris_tdlldb_list_dirs(polaris_cm_cc_t)
polaris_cpld_read(polaris_cm_cc_t)
polaris_lua_read(polaris_cm_cc_t)
polaris_flashlib_read(polaris_cm_cc_t)
polaris_cpld_dev_use(polaris_cm_cc_t)
polaris_proc_rmonbifo_read(polaris_cm_cc_t)

  polaris_ripc_sman_ui_serv_connect(polaris_cm_cc_t)

optional_policy(''
  # access to /dev/iocp0
  polaris_spa_dev_use(polaris_cm_cc_t)
')
optional_policy(''

# access to /dev/htdb[0-9]*
   polaris_htdp_dev_use(polaris_cm_cc_t)
')
# read /proc/cmdline
kernel_read_system_state(polaris_cm_cc_t)
# work with /dev/i2c devices
polaris_i2c_use(polaris_cm_cc_t)

polaris_obfl_data_read(polaris_cm_cc_t)
# cmcc module as part of init calls cmem_obfl_write_voltage_log(),
# which writes to obfl device.
polaris_obfl_data_manage(polaris_cm_cc_t)
# on vxe platform /obfl is symlink to /varied
ifdef('vxe_family',
   polaris_disk_varied_list(polaris_cm_cc_t)
')

# on lng works with /dev/cpld-virtual-cc
polaris_cpp_dev_use(polaris_cm_cc_t)
polaris_i2c_use(polaris_cm_cc_t)
dev_rw_sysfs(polaris_cm_cc_t)

ifdef('crankshaft_family',
# read,getattr, map access to /firmware/ files for Switzer-CC
polaris_firmware_read(polaris_cm_cc_t)
polaris_firmware_getattr(polaris_cm_cc_t)
polaris_firmware_map(polaris_cm_cc_t)
')

# allow objstore access
polaris_disk_objstore_read(polaris_cm_cc_t)

# get interface address cmlib_if_config_addr at cman/lib/cmlib_msgs/src/cmlib_eobc.c
allow polaris_cm_cc_t self:udp_socket { create ioctl }

# on utah need to get model info
optional_policy('
   polaris_dash_dev_use(polaris_cm_cc_t)
')

# access to /dev/dash_fpga device on fugazi platform
ifdef('fugazi_platform',
   polaris_dash_dev_mcp_use(polaris_cm_cc_t)
')

# access to /dev/nutella_fpga device on nutella platform
optional_policy('
polaris_nutella_fpga_dev_use(polaris_cm_cc_t)
')

# handle /tmp/pci files on utah
type polaris_pci_tmp_t;
files_tmp_file(polaris_pci_tmp_t)
# /tmp/pci/bus, /tmp/pci/vendor, /tmp/pic/device created by systemd unit
gen_require(''
    type initrc_t;
    type unconfined_service_t;
    type tmp_t;
')
files_tmp_filetrans({ unconfined_service_t initrc_t }, polaris_pci_tmp_t, dir, "pci")
manage_dirs_pattern(initrc_t, tmp_t, polaris_pci_tmp_t)
manage_files_pattern(initrc_t, polaris_pci_tmp_t, polaris_pci_tmp_t)
manage_files_pattern(polaris_cm_cc_t, polaris_pci_tmp_t, polaris_pci_tmp_t)

logging_send_syslog_msg(polaris_cm_cc_t)

# cmcc module creates the PCI rescan shm mutex.
# /dev/shm/rescan_shm file.
type polaris_cm_cc_tmpfs_t;
files_tmpfs_file(polaris_cm_cc_tmpfs_t)
fs_tmpfs_filetrans(polaris_cm_cc_t, polaris_cm_cc_tmpfs_t, file)
manage_files_pattern(polaris_cm_cc_t, tmpfs_t, polaris_cm_cc_tmpfs_t)
mmap_files_pattern(polaris_cm_cc_t, tmpfs_t, polaris_cm_cc_tmpfs_t)
dev_read_sysfs(polaris_cm_cc_t)
dev_getattr_sysfs_fs(polaris_cm_cc_t)
fs_getattr_tmpfs(polaris_cm_cc_t)

# /tmp/udev-cc should it not be polaris_udev_tmp_t
type polaris_cm_cc_tmpfs_t;
files_tmpfs_file(polaris_cm_cc_tmpfs_t)
files_tmpfs_filetrans(polaris_cm_cc_t, polaris_cm_cc_tmpfs_t, dir, "udev-cc")
manage_files_pattern(polaris_cm_cc_t, polaris_cm_cc_tmpfs_t, polaris_cm_cc_tmpfs_t)
gen_require(''
    type tmp_t;
')
manage_dirs_pattern(polaris_cm_cc_t, { tmp_t polaris_cm_cc_tmpfs_t }, polaris_cm_cc_tmpfs_t)

# on tsn need access to /dev/moka_fpga
optional_policy(''
polaris_mokafpga_dev_use(polaris_cm_cc_t)
')

optional_policy(''
# betelgeuse need access to /dev/sirius_fpga
polaris_sirius_fpga_dev_use(polaris_cm_cc_t)
# on macallan need access to /dev/quack
optional_policy('polaris_quack_dev_use(polaris_cm_cc_t)
')

polaris_cpld_write(polaris_cm_cc_t)

optional_policy(' # on starfleet access gettysburg_fpga
polaris_gettysburg_fpga_dev_use(polaris_cm_cc_t)
')

# /dev/epactrlN on qwlc
optional_policy('polaris_epa_dev_use(polaris_cm_cc_t)
')

# /dev/luna_fpga on qwlc
optional_policy('polaris_luna_mbfpga_dev_use(polaris_cm_cc_t)
')

# /dev/astro on qwlc
optional_policy('polaris_astro_dev_use(polaris_cm_cc_t)
')

# /dev/huron_fpga on Sumatra
optional_policy('polaris_huron_dev_use(polaris_cm_cc_t)
')

type polaris_nim_xxd_tmp_t;
files_tmp_file(polaris_nim_xxd_tmp_t)
files_tmp_filetrans(polaris_cm_cc_t, polaris_nim_xxd_tmp_t, file, "nim_xxd_present")
manage_files_pattern(polaris_cm_cc_t, polaris_nim_xxd_tmp_t, polaris_nim_xxd_tmp_t)
ifdef('starfleet_platform',
    # In cman.cc
    # cmcc_starfleet_act2_authentication_udi in cman/cc/src/cmcc_starfleet.c
    # cmcc_starfleet_cpuboard_act2_authentication_udi cman/cc/src/cmcc_starfleet.c
    # tam_lib_device_open infra/act2/tam_act2/tam_lib/src/tam_lib_device.c:
    polaris_act2_dev_use(polaris_cm_cc_t)
')

ifdef('crankshaft_family',
')
# modprobe sm_nim_adpt.ko for Switzer-CC
modutils_domtrans_insmod(polaris_cm_cc_t)
# /dev/sm_nim_adpt device files for Switzer-CC
polaris_sm_nim_adpt_dev_use(polaris_cm_cc_t)
)

# Mapping permission for /dev/shm/<name>
ifdef(`crankshaft_family',`
  gen_require(`
    type systemd_tmpfiles_t;
  )
  mmap_files_pattern(systemd_tmpfiles_t, polaris_cm_cc_tmpfs_t, polaris_cm_cc_tmpfs_t)
  )

# on ngwc cmcc needs to access /dev/chdrvmmap for asic memory mapping
optional_policy(`
polaris_chdrvmmap_dev_use(polaris_cm_cc_t)
  )

ifdef(`vxe_family',`
  # bind to BMC_AGENT_CLIENT_PORT port from cman_tlv_init
  corenet_tcp_bind_polaris_bmc_agent_client_port(polaris_cm_cc_t)
  )

# allow /usr/binos/bin/cmcc to access /tmp/hd_sz
gen_require(`
  type udev_tmp_t;
)  
read_files_pattern(polaris_cm_cc_t, udev_tmp_t, udev_tmp_t)

# allow /usr/sbin/smartctl to be operated on fsadm_exec_t
fstools_exec(polaris_cm_cc_t)

# using existing interface "polaris_cm_rp_tmp_manage" for polaris_cm_cc_t
# to acces /tmp/cmlib_eeprom_sim_smartctl.out
polaris_cm_rp_tmpmanage(polaris_cm_cc_t)
files_tmp_filetrans(polaris_cm_cc_t, polaris_cm_rp_tmp_t, file, "cmlib_eeprom_sim_smartctl.out")

# allow access to /dev/nvme*
dev_nvme_chr_files_manage(polaris_cm_cc_t)
dev_nvme_blk_files_manage(polaris_cm_cc_t)

# access to /dev/ttyS0
term_use_unallocated_ttys(polaris_cm_cc_t)

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscmcc.te
No license file was found, but licenses were detected in source scan.

# June 2017, Victor Kamensky
#
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#

## <summary>Polaris tservice Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristservice.if
No license file was found, but licenses were detected in source scan.

# March 2017, Victor Kamensky
#
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## <summary>Polaris polarissortfiles Policy Rules.</summary>

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarissortfiles.if
No license file was found, but licenses were detected in source scan.

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#
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#

## <summary>Polaris Storage Policy Rules.</summary>

# Persistent storage policy

# Make the specified type usable as default type for files
# in a Polaris persistent (bootflash, hardisk, etc) filesystem.
#
## <param name="type"></param>
## <summary>
## <summary>
## Type to be used for files.
## </summary>
## </param>
#
interface('polaris_disk_type',
    files_type($1)
gen_require(
    attribute polaris_disk;
')
typeattribute $1 polaris_disk;
')

## Make the specified type usable for files
## in a Polaris persistent (bootflash, hardisk, etc) filesystem.
## </summary>
## <param name="type">
## Type to be used for files.
## </param>
#
interface('polaris_pfile_type',
    files_type($1)
gen_require(
    attribute polaris_disk;
')
typeattribute $1 polaris_disk;
')

## Read any regular file/directory from persistent storage.
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_persistent_read',
gen_require(
    attribute polaris_disk;
')
read_files_pattern($1, polaris_disk, polaris_disk)
read_lnk_files_pattern($1, polaris_disk, polaris_disk)
list_dirs_pattern($1, polaris_disk, polaris_disk)

#######################################
## <summary>
## Getattr of any regular file/directory from persistent storage.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_persistent_getattr',
  gen_require(
    attribute polaris_disk;
  
  list_dirs_pattern($1, polaris_disk, polaris_disk)
  getattr_files_pattern($1, polaris_disk, polaris_disk)
  getattr_lnk_files_pattern($1, polaris_disk, polaris_disk)
)

#######################################
## <summary>
## Listdir of any regular directory from persistent storage.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_persistent_list_dirs',
  gen_require(
    attribute polaris_disk;
  
  list_dirs_pattern($1, polaris_disk, polaris_disk)
)

#######################################
## <summary>
## Write/read any regular file/directory from persistent storage.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
interface('polaris_persistent_manange',`
    gen_require(`
        attribute polaris_disk;
    `)
    manage_files_pattern($1, polaris_disk, polaris_disk)
    manage_dirs_pattern($1, polaris_disk, polaris_disk)
    manage_lnk_files_pattern($1, polaris_disk, polaris_disk)
    `)

# debug.conf

# Read debug.conf from persistent storage.

interface('polaris_read_debug_conf',`
    gen_require(`
        type polaris_debug_conf_t;
        type polaris_disk_bootflash_t;
        type polaris_disk_harddisk_t;
        type tmp_t;
read_files_pattern($1, polaris_disk_bootflash_t, polaris_debug_conf_t)
read_files_pattern($1, polaris_disk_harddisk_t, polaris_debug_conf_t)
read_files_pattern($1, tmp_t, polaris_debug_conf_t)
read_lnk_files_pattern($1, tmp_t, polaris_debug_conf_t)
polaris_disk_bootflash_read_lnk($1)
)

# packages.conf

## <summary>
##	Read packages.conf from persistent storage.
## </summary>

# interface('polaris_read_packages_conf',
    gen_require(
        type polaris_packages_conf_t;
        type polaris_disk_bootflash_t;
        type polaris_disk_harddisk_t;
    )
read_files_pattern($1, polaris_disk_bootflash_t, polaris_packages_conf_t)
read_files_pattern($1, polaris_disk_harddisk_t, polaris_packages_conf_t)
)

## <summary>
##Manage packages.conf in persistent storage.
## </summary>

# interface('polaris_manage_packages_conf',
    gen_require(
        type polaris_packages_conf_t;
        type polaris_disk_bootflash_t;
        type polaris_disk_harddisk_t;
    )
)
manage_files_pattern($1, polaris_disk_bootflash_t, polaris_packages_conf_t)
manage_files_pattern($1, polaris_disk_harddisk_t, polaris_packages_conf_t)
')

*****************************************************************************
## <summary>
## Write/read any regular file/directory from /varied
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_disk_varied_manage',`
    gen_require(`
        type polaris_disk_varied_t;
    `)
    manage_files_pattern($1, polaris_disk_varied_t, polaris_disk_varied_t)
')

*****************************************************************************
## <summary>
## read any regular file/directory from /varied
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_disk_varied_read',`
    gen_require(`
        type polaris_disk_varied_t;
    `)
    read_files_pattern($1, polaris_disk_varied_t, polaris_disk_varied_t)
    list_dirs_pattern($1, polaris_disk_varied_t, polaris_disk_varied_t)
')

*****************************************************************************
## <summary>
## Search /varied directory
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
interface('polaris_disk_varied_search',
    gen_require(
        type polaris_disk_varied_t;
        )
        search_dirs_pattern($1, polaris_disk_varied_t, polaris_disk_varied_t)
    )

interface('polaris_disk_varied_list',
    gen_require(
        type polaris_disk_varied_t;
        )
        list_dirs_pattern($1, polaris_disk_varied_t, polaris_disk_varied_t)
    )

interface('polaris_core_file_manage',
    gen_require(
        type polaris_core_file_t;
        )
        allow $1 polaris_core_file_t:dir rmdir;
        manage_files_pattern($1, polaris_core_file_t, polaris_core_file_t)
        allow $1 polaris_core_file_t:dir watch;
    )
### Search polaris_core_file_t dir

#### <summary>
Search polaris_core_file_t dir
#### </summary>

#### <param name="domain">
Domain allowed access.
#### </param>

```c
interface('polaris_core_file_search',
    gen_require(
        type polaris_core_file_t;
    )
    search_dirs_pattern($1, polaris_core_file_t, polaris_core_file_t)
')
```

### Read/Open/Search polaris_core_file_t dir

#### <summary>
Read/Open/Search polaris_core_file_t dir
#### </summary>

#### <param name="domain">
Domain allowed access.
#### </summary>

```c
interface('polaris_core_file_read',
    gen_require(
        type polaris_core_file_t;
    )
    allow $1 polaris_core_file_t:dir read;
    getattr_files_pattern($1, polaris_core_file_t, polaris_core_file_t)
')
```

### Get attrib of bootflash fifo file.

#### <summary>
Get attrib of bootflash fifo file.
#### </summary>

```c
interface('polaris_disk_bootflash_fifo_file_getattr',
    gen_require(
        type polaris_disk_bootflash_t;
    )
)
getattr_fifo_files_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)

#######################################
## <summary>
## Get attrib of bootflash sock file.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_disk_bootflash_sock_file_getattr`,
  gen_require(`
    type polaris_disk_bootflash_t;
  `)
  getattr_sock_files_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
)

#######################################
## <summary>
## Read links of polaris_disk_bootflash_t
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_disk_bootflash_read_lnk`,
  gen_require(`
    type polaris_disk_bootflash_t;
  `)
  read_lnk_files_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
)

#######################################
## <summary>
## Search polaris_disk_bootflash_t dir
## </summary>
## <param name="domain">
## Domain allowed access.
## </summary>
interface("polaris_disk_bootflash_search");
gen_require('type polaris_disk_bootflash_t;
')
search_dirs_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)

interface("polaris_disk_csl_p_t; type polaris_disk_csl_s_t;")
manage_files_pattern($1, polaris_disk_csl_p_t, polaris_disk_csl_p_t)
manage_files_pattern($1, polaris_disk_csl_s_t, polaris_disk_csl_s_t)
read_lnk_files_pattern($1, polaris_disk_csl_p_t, polaris_disk_csl_p_t)
read_lnk_files_pattern($1, polaris_disk_csl_s_t, polaris_disk_csl_s_t)

interface("polaris_disk_csl_p_t; type polaris_disk_csl_s_t;")
manage_files_pattern($1, polaris_disk_csl_p_t, polaris_disk_csl_p_t)
manage_files_pattern($1, polaris_disk_csl_s_t, polaris_disk_csl_s_t)
read_lnk_files_pattern($1, polaris_disk_csl_p_t, polaris_disk_csl_p_t)
read_lnk_files_pattern($1, polaris_disk_csl_s_t, polaris_disk_csl_s_t)
read_files_pattern($1, polaris_disk_csl_p_t, polaris_disk_csl_p_t)
read_files_pattern($1, polaris_disk_csl_s_t, polaris_disk_csl_s_t)
read_lnk_files_pattern($1, polaris_disk_csl_p_t, polaris_disk_csl_p_t)
read_lnk_files_pattern($1, polaris_disk_csl_s_t, polaris_disk_csl_s_t)

#######################################
## <summary>
## Write/read any regular file/directory under /objstore,
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_disk_objstore_manage',`
    gen_require(`
        type polaris_disk_objstore_t;
    `)
    manage_files_pattern($1, polaris_disk_objstore_t, polaris_disk_objstore_t)
    read_lnk_files_pattern($1, polaris_disk_objstore_t, polaris_disk_objstore_t)
`)

interface(`polaris_disk_objstore_read',`
    gen_require(`
        type polaris_disk_objstore_t;
    `)
    read_files_pattern($1, polaris_disk_objstore_t, polaris_disk_objstore_t)
    list_dirs_pattern($1, polaris_disk_objstore_t, polaris_disk_objstore_t)
`)

#######################################
## <summary>
## Read links of polaris_disk_harddisk_t
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface(`polaris_disk_harddisk_read_lnk',`
    gen_require(`
        type polaris_disk_harddisk_t;
    `)
    read_lnk_files_pattern($1, polaris_disk_harddisk_t, polaris_disk_harddisk_t)
`)

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### <summary>
## Read harddisk files
### </summary>
### <param name="domain">
## Domain allowed access.
### </param>
#
# interface('polaris_harddisk_read',
    gen_require(
        type polaris_disk_harddisk_t;
    )
    read_files_pattern($1, polaris_disk_harddisk_t, polaris_disk_harddisk_t)
    list_dirs_pattern($1, polaris_disk_harddisk_t, polaris_disk_harddisk_t)
    )

### <summary>
## Read bootflash files
### </summary>
### <param name="domain">
## Domain allowed access.
### </param>
#
# interface('polaris_bootflash_read',
    gen_require(
        type polaris_disk_bootflash_t;
    )
    read_files_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
    read_lnk_files_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
    list_dirs_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
    )

### <summary>
## Manage bootflash files
### </summary>
### <param name="domain">
## Domain allowed access.
### </param>
# interface `polaris_bootflash_manage',
  gen_require(
    type polaris_disk_bootflash_t;
  )
manage_files_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
manage_link_files_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
manage_dirs_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
')

###########################################################
## <summary>
## Create an object in the polaris_disk_bootflash_t directories,
## with a private type using a type transition.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <param name="private type">
## The type of the object to be created.
## </param>
## <param name="object">
## The object class of the object being created.
## </param>
## <param name="name" optional="true">
## The name of the object being created.
## </param>
#
interface `polaris_bootflash_filetrans',
  gen_require(
    type polaris_disk_bootflash_t;
  )
filetrans_pattern($1, polaris_disk_bootflash_t, $2, $3, $4)
')

###########################################################
## <summary>
## Manage bootflash files
## </summary>
#<param name="domain">
##<summary>
Domain allowed access.
##</summary>
#</param>

#
interface('polaris_harddisk_manage',
    gen_require(
        type polaris_disk_harddisk_t;
    ')
)manage_files_pattern($1, polaris_disk_harddisk_t, polaris_disk_harddisk_t)manage_link_files_pattern($1, polaris_disk_harddisk_t, polaris_disk_harddisk_t)manage_dirs_pattern($1, polaris_disk_harddisk_t, polaris_disk_harddisk_t)
')

#*******************************************************************************
##<summary>
##Create an object in the polaris_disk_harddisk_t directories,
##with a private type using a type transition.
##</summary>
##<param name="domain">
##<summary>
##Domain allowed access.
##</summary>
##</param>
##<param name="private type">
##<summary>
The type of the object to be created.
##</summary>
##</param>
##<param name="object">
##<summary>
The object class of the object being created.
##</summary>
##</param>
##<param name="name" optional="true">
##<summary>
The name of the object being created.
##</summary>
##</param>
#
interface('polaris_harddisk_filetrans',
    gen_require(
        type polaris_disk_harddisk_t;
    ')
)filetrans_pattern($1, polaris_disk_harddisk_t, $2, $3, $4)
## <summary>
##
## Getattr of polaris_disk_crashinfo_t (typically /crashinfo symbolic link and real disk it points to)
##
## </summary>
##
## <param name="domain">
##      <summary>
##      Domain allowed access.  
##      </summary>
##      
## </param>
#
# interface('polaris_disk_crashinfo_getattr',
#     gen_require(''
#         type polaris_disk_crashinfo_t;
# )
# read_lnk_files_pattern($1, polaris_disk_crashinfo_t, polaris_disk_crashinfo_t)
# getattr_lnk_files_pattern($1, polaris_disk_crashinfo_t, polaris_disk_crashinfo_t)
# getattr_files_pattern($1, polaris_disk_crashinfo_t, polaris_disk_crashinfo_t)
# getattr_dirs_pattern($1, polaris_disk_crashinfo_t, polaris_disk_crashinfo_t)
#)

## <summary>
##
## Manage polaris_disk_crashinfo_t (typically /crashinfo symbolic link and real disk it points to)
##
## </summary>
##
## <param name="domain">
##      <summary>
##      Domain allowed access.  
##      </summary>
##      
## </param>
#
# interface('polaris_disk_crashinfo_manage',
#     gen_require(''
#         type polaris_disk_crashinfo_t;
# )
# manage_files_pattern($1, polaris_disk_crashinfo_t, polaris_disk_crashinfo_t)
# manage_lnk_files_pattern($1, polaris_disk_crashinfo_t, polaris_disk_crashinfo_t)
# manage_dirs_pattern($1, polaris_disk_crashinfo_t, polaris_disk_crashinfo_t)
#)

## <summary>
##
## Read links of polaris_disk_crashinfo_t
##
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface(`polaris_disk_crashinfo_read_lnk',`
gen_require(`
    type polaris_disk_crashinfo_t;
')
read_link_files_pattern($1, polaris_disk_crashinfo_t, polaris_disk_crashinfo_t)
')

#######################################
## <summary>
##	Write/read polaris_disk_license_t files/directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface(`polaris_disk_license_manage',`
gen_require(`
    type polaris_disk_license_t;
')
manage_files_pattern($1, polaris_disk_license_t, polaris_disk_license_t)
manage_link_files_pattern($1, polaris_disk_license_t, polaris_disk_license_t)
allow $1 polaris_disk_license_t:file map;
')

#######################################
## <summary>
##	Fedead polaris_disk_license_t files/directories
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
# interface(`polaris_disk_license_read',`
gen_require(`
    type polaris_disk_license_t;
')
read_files_pattern($1, polaris_disk_license_t, polaris_disk_license_t)
read_link_files_pattern($1, polaris_disk_license_t, polaris_disk_license_t)
')

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
## <summary>
## Get the attributes of an removable filesystem.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_getattr_removable',
gen_require('type removable_t;
')
allow $1 removable_t:filesystem getattr;
allow $1 removable_t:dir  getattr;
')

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
## <summary>
## Create, read, write, and delete all removable files.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
interface('polaris_removable_manage',
gen_require('type removable_t;
')
manage_files_pattern($1, removable_t, removable_t)
manage_dirs_pattern($1, removable_t, removable_t)
')

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
## <summary>
## read all removable files.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
interface('polaris_removable_read',
    gen_require(
        type removable_t;
    )
    read_files_pattern($1, removable_t, removable_t)
    list_dirs_pattern($1, removable_t, removable_t)
    read_link_files_pattern($1, removable_t, removable_t)
)

.interface('polaris_getattr_filesystem_disk_ucode',
    gen_require(
        type polaris_disk_ucode_t;
    )
    allow $1 polaris_disk_ucode_t:filesystem getattr;
)

.interface('polaris_getattr_bootflash',
    gen_require(
        type polaris_disk_bootflash_t;
    )
    allow $1 polaris_disk_bootflash_t:filesystem getattr;
')

###################################################
## <summary>
## Get the attributes of an harddisk filesystem.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
# interface('polaris_getattr_harddisk',
# gen_require('  
# type polaris_disk_harddisk_t;
#
allow $1 polaris_disk_harddisk_t:filesystem getattr;
#
###################################################
## <summary>
## Get the attributes of an harddisk file.
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
#
# interface('polaris_getattr_file_harddisk',
# gen_require('  
# type polaris_disk_harddisk_t;
#')
#  getattr_files_pattern($1, polaris_disk_harddisk_t, polaris_disk_harddisk_t)
#
###################################################
## <summary>
## Watch persistent file or directories
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>
## <summary>
## <param>
## <rolebase/>
#
# interface('polaris_persistent_watch',
# gen_require(
# attribute polaris_disk;
# )
#   allow $1 polaris_disk: {dir file } watch;
# )
#
########################################################
## <summary>
## Create an object in the polaris_disk_crashinfo_t directories,
## with a private type using a type transition.
## </summary>
## <param name="domain">
## <summary>
## Domain allowed access.
## </summary>
## </param>
## <param name="private type">
## <summary>
## The type of the object to be created.
## </summary>
## </param>
## <param name="object">
## <summary>
## The object class of the object being created.
## </summary>
## </param>
## <param name="name" optional="true">
## <summary>
## The name of the object being created.
## </summary>
## </param>
#
# interface('polaris_crashinfo_filetrans',
# gen_require(
# type polaris_disk_crashinfo_t;
# )
#   filetrans_pattern($1, polaris_disk_crashinfo_t, $2, $3, $4)
# )
#
########################################################
## <summary>
## Get the attributes of an polaris_disk_config_t
## file or directory.
## </summary>
## <param name="domain">
##      <summary>
##      Domain allowed access.
##      </summary>
## </param>
#
interface('polaris_getattr_disk_config',
gen_require(
type polaris_disk_config_t;
')
    getattr_files_pattern($1, polaris_disk_config_t, polaris_disk_config_t)
    getattr_dirs_pattern($1, polaris_disk_config_t, polaris_disk_config_t)
')

########################################################################
## <summary>
##Create an object in the polaris_disk_config_t directories,
## with a private type using a type transition.
## </summary>
## <param name="domain">
##<summary>
##Domain allowed access.
##</summary>
## </param>
## <param name="private type">
##<summary>
##The type of the object to be created.
##</summary>
## </param>
## <param name="object">
##<summary>
##The object class of the object being created.
##</summary>
## </param>
## <param name="name" optional="true">
##<summary>
##The name of the object being created.
##</summary>
## </param>
#
interface('polaris_disk_config_filetrans',
gen_require(
type polaris_disk_config_t;
')
    filetrans_pattern($1, polaris_disk_config_t, $2, $3, $4)
')
## <summary>
## Manage bootflash files mmap
## </summary>
## <param name="domain">
## Domain allowed access.
## </param>

```
interface('polaris_bootflash_files_mmap',
    gen_require(
        type polaris_disk_bootflash_t;
    ),
    mmap_files_pattern($1, polaris_disk_bootflash_t, polaris_disk_bootflash_t)
)
```

```
# March 2020, Victor Kamensky
#
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#

policy_module(polarisjvm, 1.0);

gen_require(
    type polaris_jvm_t;
)

# access /etc/passwd
auth_use_nsswitch(polaris_jvm_t)

# java through posix_sysconf accesses /sys/devices/system/cpu
# to get number of CPUs
dev_read_sysfs(polaris_jvm_t)

# checks whether IPV6 is configured accessing /proc/pid/net/if_inet6
kernel_read_network_state(polaris_jvm_t)

# handling ~/.oracle_jre_usage
type polaris_jvm_home_t;
files_type(polaris_jvm_home_t)
gen_require('
type user_home_dir_t;

filetrans_pattern(polaris_jvm_t, user_home_dir_t, polaris_jvm_home_t, dir, ".oracle_jre_usage")
manage_dirs_pattern(polaris_jvm_t, user_home_dir_t, polaris_jvm_home_t)
manage_files_pattern(polaris_jvm_t, polaris_jvm_home_t, polaris_jvm_home_t)

# handling /tmp/hsperfdata_root

type polaris_jvm_tmp_t;
files_type(polaris_jvm_tmp_t)
gen_require(' 
    type tmp_t;
')

files_tmp_filetrans(polaris_jvm_t, polaris_jvm_tmp_t, dir, "hsperfdata_root")
manage_dirs_pattern(polaris_jvm_t, tmp_t, polaris_jvm_tmp_t)
manage_files_pattern(polaris_jvm_t, polaris_jvm_tmp_t, polaris_jvm_tmp_t)
mmap_files_pattern(polaris_jvm_t, polaris_jvm_tmp_t, polaris_jvm_tmp_t)

# listen on 9093 websocket tcp port

corenets_tcp_bind_polaris_poljvm_websocket_port(polaris_jvm_t)
corenets_tcp_bind_generic_node(polaris_jvm_t)
allow polaris_jvm_t self:tcp_socket create_stream_socket_perms;

# java uses jit and needs executable anonymous mapping
allow polaris_jvm_t self:process execmem;

# Allow JDK access to read cpu and memory utilization data on start up

gen_require(' 
    type proc_t;
')

allow polaris_jvm_t proc_t:file { getattr open read }; 
fs_read_cgroup_files(polaris_jvm_t)
fs_search_cgroup_dirs(polaris_jvm_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisjvm.te 
No license file was found, but licenses were detected in source scan.

# 
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# 
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#

## <summary>Polaris plogd Policy Rules.</summary>

Found in path(s):
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#
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#

### <summary>Polaris hm Policy Rules.</summary>

# Write into fifo file created by hman, typical case when hman starts script under popen.
### <summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>

interface(`polaris_hman_use_fifo',
   gen_require(`
      type polaris_hm_t;
   `)
   write_fifo_files_pattern($1, polaris_hm_t, polaris_hm_t)
)

# Read tmp files created by hman. I.e /tmp/myhostname.
### <summary>
### <param name="domain">
### <summary>
### Domain allowed access.
### </summary>
### </param>

interface(`polaris_hm_tmp_read',
   gen_require(`
      type polaris_hm_tmp_t;
   `)
read_files_pattern($1, polaris_hm_tmp_t, polaris_hm_tmp_t)
')

#########################################################################
## <summary>
##   Execute pkg_summary.sh in its own domain
## </summary>
## <param name="domain">
##   <summary>
##      Domain allowed access.
##   </summary>
## </param>
## <rolecap/>
#
interface('polaris_pkg_summary_domtrans',
   gen_require(
      type polaris_pkg_summary_t;
      type polaris_pkg_summary_exec_t;
   )
)

corecmd_search_bin($1)
   domtrans_pattern($1, polaris_pkg_summary_exec_t, polaris_pkg_summary_t)
')

#########################################################################
## <summary>
##   Execute pkg_to_tree.sh in its own domain
## </summary>
## <param name="domain">
##   <summary>
##      Domain allowed access.
##   </summary>
## </param>
## <rolecap/>
#
interface('polaris_pkg_to_tree_domtrans',
   gen_require(
      type polaris_pkg_to_tree_t;
      type polaris_pkg_to_tree_exec_t;
   )
)

corecmd_search_bin($1)
   domtrans_pattern($1, polaris_pkg_to_tree_exec_t, polaris_pkg_to_tree_t)
')

#########################################################################
## Execute hman in the polaris_cli_fs_cmds domain.
### <summary>
### Domain allowed to transition.
### </summary>
### </param>
#
interface('polaris_cli_fs_cmds_domtrans',
gen_require('  
type polaris_cli_fs_cmds_t, polaris_cli_fs_cmds_exec_t;
')

corecmd_search_bin($1)
domtrans_pattern($1, polaris_cli_fs_cmds_exec_t, polaris_cli_fs_cmds_t)
')

########################################################################
### <summary>
### Read file /tmp/pkg_summary.txt file
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
interface('polaris_pkg_summary_tmp_read',
gen_require('  
type polaris_pkg_summary_tmp_t;
')
  read_files_pattern($1, polaris_pkg_summary_tmp_t, polaris_pkg_summary_tmp_t)
')

########################################################################
### <summary>
### read the contents of /tmp/show_provision_temp
### </summary>
### <param name="domain">
### Domain allowed access.
### </param>
#
interface('polaris_show_provision_temp_read',
gen_require('  
type polaris_show_provision_tmp_t;
')
  read_files_pattern($1, polaris_show_provision_tmp_t, polaris_show_provision_tmp_t)
manage_files_pattern($1, polaris_show_provision_tmp_t, polaris_show_provision_tmp_t)
manage_link_files_pattern($1, polaris_show_provision_tmp_t, polaris_show_provision_tmp_t)
manage_dirs_pattern($1, polaris_show_provision_tmp_t, polaris_show_provision_tmp_t)
files_tmp_filetrans($1, polaris_show_provision_tmp_t, { file dir })

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarishm.if
No license file was found, but licenses were detected in source scan.

policy_module(polarispsvp, 1.0);

polaris_process_domain_template(psvp)

# transition to pman domain, once pman is invoked by psvp
polaris_pman_domtrans(polaris_psvp_t)
# transition to pvp domain, once pvp is invoked by psvp
polaris_pvp_domtrans(polaris_psvp_t)

corecmd_exec_bin(polaris_psvp_t)
corecmd_exec_shell(polaris_psvp_t)

# can execute process in polaris domain
polaris_exec(polaris_psvp_t)
# LOOK AT ME start-stop-daemon from busy box iterates all
# /proc/<pid> directories and reads /proc/<pid>/cmdline
# /proc/<pid>/exe. It need quite a bit of priviledges
domain_read_all_domains_state(polaris_psvp_t)

# another issue of running busybox start-stop-daemon under
# psvp_t label
# type=AVC msg=audit(1480527500.482:46): avc: denied { sys_ptrace } for pid=14853 comm="start-stop-daem"
capability=19 scontext=system_u:system_r:polaris_psvp_t:s0 tcontext=system_u:system_r:polaris_psvp_t:s0
tclass=capability
allow polaris_psvp_t self:capability sys_ptrace;

# allow to read /proc/meminfo
kernel_read_system_state(polaris_psvp_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_psvp_t)

# run ldd, which in turns execve "ld.so --verify"
libs_exec_ld_so(polaris_psvp_t)

# work with /tmp files
type polaris_psvp_tmp_t;
files_tmp_file(polaris_psvp_tmp_t)
manage_dirs_pattern(polaris_psvp_t, tmp_t, polaris_psvp_tmp_t)
manage_files_pattern(polaris_psvp_t, polaris_psvp_tmp_t, polaris_psvp_tmp_t)
manage_fifo_files_pattern(polaris_psvp_t, polaris_psvp_tmp_t, polaris_psvp_tmp_t)
files_tmp_filetrans(polaris_psvp_t, polaris_psvp_tmp_t, { file dir })
filetrans_pattern(domain, tmp_t, polaris_psvp_tmp_t, dir, "psvp")

ifdef(`ngwc_family',`
# also need to be able to ls /tmp/ufs/ on ngwc
optional_policy(`
polaris_ncd_tmp_read(polaris_psvp_t)
')
')

# note split entry another psvp capability listed above
allow polaris_psvp_t self:capability sys_resource;

polaris_pvp_getattrs_tmp_dirs(polaris_psvp_t)

dmidecode_domtrans(polaris_psvp_t)
polaris_btrace_data_manage(polaris_psvp_t)
polaris_chasfs_manage(polaris_psvp_t)
polaris_cpld_read(polaris_psvp_t)
allow polaris_psvp_t self:capability dac_override;

# watch /tmp/sai/psvp
allow polaris_psvp_t polaris_psvp_tmp_t:dir watch;

# creates /tmp/sai/pvp/rp/run_stg2
polaris_pvp_manage_tmp_files(polaris_psvp_t)

# Allow /tmp/ufs/bootflash & /tmp/ufs/harddisk read access
ifdef(`vwlc_platform',`
optional_policy(`
polaris_ncd_tmp_read(polaris_psvp_t)
')
')

# permissions during shutdown
polaris_pvp_manage_tmp_files(polaris_psvp_t);

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarispsvp.te
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#
# October 2019, Patrick O'Halloran
#
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#

policy_module(polariscrft, 1.0);

###############################################################
# CRFT policy
###############################################################
gen_require(`
    attribute domain;
    attribute polaris_extended_domain;
')

# persistent CRFT files stored under crft_data
type polaris_crft_data_t;
files_type(polaris_crft_data_t)

# allow crft data file reside on persistent storage
polaris_pfile_type(polaris_crft_data_t)

attribute polaris_crft_data_domain;

type attribute polaris_crft_data_domain; polaris_crft_data_domain;

# Start of mcp_crft_request context elements
polaris_utility_domain_template(crf_request)

# smand calls the mcp_crft_request.sh in bexec context
polaris_bexecute_domain(polaris_crft_request_t)
polaris_bexecute_domain(polaris_crft_request_t, polaris_crft_request_exec_t)

# read the cpld information
polaris_cpld_read(polaris_crft_request_t)

# dev/pty access as part of bexec operations
telnet_use_ptys(polaris_crft_request_t)

# filesystem attributes for df /
fs_getattr_xattr_fs(polaris_crft_request_t)

# btrace used in script uses these
polaris_btrace_tmppub_manage(polaris_crft_request_t)
polaris_use_btrace_fifo(polaris_crft_request_t)

# read /proc/rmbonbifo files such as env_var.sh
polaris_rmonbifo_tmp_read(polaris_crft_request_t)

# read /tmp/sw/boot/base_pkg
polaris_boot_tmp_manage(polaris_crft_request_t)

# ufs information captured by the chasfs utils
ifdef(`ngwc_family',`
optimal_policy(`

 optional_policy(`
polaris_ncd_tmp_manage(polaris_crft_request_t)
`)
`)`)

# scripts read /proc/cmdline
kernel_read_system_state(polaris_crft_request_t)

# ping the vrf
netutils_domtrans_ping(polaris_crft_request_t)
sysnet_domtrans_ifconfig(polaris_crft_request_t)
# rsync operations for members and standby rps

gen_require(
    type rsync_exec_t;
    type rsync_port_t;
)
allow polaris_crft_request_t rsync_exec_t:file { execute execute_no_trans getattr map open read };
allow polaris_crft_request_t rsync_port_t:tcp_socket name_connect;

# access to /etc/hosts for rp/members information

gen_require(
    type net_conf_t;
)
files_etc_filetrans(polaris_crft_request_t, net_conf_t, file, "hosts")
auth_use_nsswitch(polaris_crft_request_t)

# execute the bash script

corecmd_exec_bin(polaris_crft_request_t)

# net namespace filesystem

fs_read_nsfs_files(polaris_crft_request_t)
polaris_chasfs_manage(polaris_crft_request_t)

# script also accesses the persistent files from crft
polaris_persistent_manage(polaris_crft_request_t)
polaris_crft_data_manage_all(polaris_crft_request_t)

# ping operations via ip nets

gen_require(
    type ifconfig_t;
)
netutils_domtrans_ping(ifconfig_t)

# Curl accesses from IoT boxes like petra/sparrow

gen_require(
    type polaris_curl_t;
    type polaris_iosd_t;
)
allow polaris_curl_t polaris_crft_request_t:process sigchld;

# handle mktemp creation and cleanup

files_manage_generic_tmp_dirs(polaris_crft_request_t)
allow polaris_crft_request_t self:capability sys_resource;

Found in path(s):
  * /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscrft.te
No license file was found, but licenses were detected in source scan.
policy_module(polaristamdrp, 1.0);

gen_require('  
    type polaris_tamd_rp_t;
')

polaris_btrace_data_manage(polaris_tamd_rp_t)
polaris_crft_data_manage(polaris_tamd_rp_t)
polaris_chasfs_manage(polaris_tamd_rp_t)
polaris_tdlresolve_read(polaris_tamd_rp_t)
polaris_tdldb_list_dirs(polaris_tamd_rp_t)
polaris_flashlib_read(polaris_tamd_rp_t)
logging_send_syslog_msg(polaris_tamd_rp_t)

# allow read of /etc/passwd
auth_use_nsswitch(polaris_tamd_rp_t)

dash_cpld_read(polaris_tamd_rp_t)
dash_cpld_write(polaris_tamd_rp_t)

dash_quack_dev_use(polaris_tamd_rp_t)

# tmp file for udi authentication
type polaris_tamd_rp_tmp_t;
files_tmp_file(polaris_tamd_rp_tmp_t);
files_tmp_filetrans(polaris_tamd_rp_t, polaris_tamd_rp_tmp_t, file, "tam_uid_validation")
manage_files_pattern(polaris_tamd_rp_t, polaris_tamd_rp_tmp_t, polaris_tamd_rp_tmp_t)
polaris_cm_rp_tmpmanage(polaris_tamd_rp_t)

# hybrid tam needs access to /objstore/swtam
gen_require('  
    type polaris_disk_objstore_t;
    type root_t;
')
filetrans_pattern(polaris_tamd_rp_t, root_t, polaris_disk_objstore_t, dir, "objstore")
manage_dirs_pattern(polaris_tamd_rp_t, polaris_disk_objstore_t, polaris_disk_objstore_t)
polaris_disk_objstoremanage(polaris_tamd_rp_t)

# need access to dash fpga to read/write TAM
optional_policy('  
    polaris_dash_dev_use(polaris_tamd_rp_t)
#access to /dev/dash_fpga device on fugazi platform
ifdef(`fugazi_platform',`
    polaris_dash_dev_mcp_use(polaris_tamd_rp_t)
')

allow polaris_tamd_rp_t self:capability net_admin;

# LOOK AT ME tamd_rp needs shell access to do something like this
# sh -c "echo 0x04 > /sys/devices/platform/cpld/reg_rp_reset_control"
# need to rework into simple open,write,close
corecmd_exec_shell(polaris_tamd_rp_t)

# LOOK AT ME access should be restricted after /flash/dummy_check is removed,
# which is tracked under CSCvh68866. Allow access to bootflash till then.
polaris_bootflash_read(polaris_tamd_rp_t)

optional_policy(`
    # Allow /dev/dmammap access
    polaris_dmammap_dev_use(polaris_tamd_rp_t)
')

# LOOK AT ME: /dev/mem access restriction
polaris_dev_mem_use(polaris_tamd_rp_t)

optional_policy(`
    polaris_ngwc_shm_manage(polaris_tamd_rp_t)
')

optional_policy(`
    polaris_remap_mem_dev_use(polaris_tamd_rp_t)
')

polaris_cpld_dev_use(polaris_tamd_rp_t)

optional_policy(`
    # allow access to /sys/devices/virtual/misc/ggpio/gpio_out_assert
    polaris_ggpio_dev_read_write(polaris_tamd_rp_t)
')

optional_policy(`
    polaris_quake_i2c_manage(polaris_tamd_rp_t)
')

#/dev/aikido access
polaris_aikido_dev_use(polaris_tamd_rp_t)
# tamlib debug file access
polaris_tamlib_dbg_file_manage(polaris_tamd_rp_t)

# tam gpio sysfs access
optional_policy(
  dev_rw_sysfs(polaris_tamd_rp_t)
)

ifdef('petra_platform',
  #allow access to /dev/i2c-0 for hash value
  polaris_i2c_use(polaris_tamd_rp_t)
)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polaristamdrp.te
No license file was found, but licenses were detected in source scan.

#
# March 2017, Victor Kamensky
#
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#
/usr/binos/conf/sort_files_by_inode.sh -- gen_context(system_u:object_r:polaris_sort_files_exec_t,s0)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polarisortfiles.fc
No license file was found, but licenses were detected in source scan.

#
# February 2020, Victor Kamensky
#
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#

policy_module(polariscedgestart, 1.0);

gen_require(
  type polaris_cedge_start_t;
)

polaris_chasfs_manage(polaris_cedge_start_t)
polaris_boot_tmp_read(polaris_cedge_start_t)
polaris_bootflash_manage(polaris_cedge_start_t)
polaris_cpld_read(polaris_cedge_start_t)
polaris_flashlib_read(polaris_cedge_start_t)
polaris_rmonbifo_tmp_read(polaris_cedge_start_t)
polaris_btrace_tmppub_read(polaris_cedge_start_t)

# needed by install_util.sh
polaris_read_packages_conf(polaris_cedge_start_t)

corecmd_exec_bin(polaris_cedge_start_t)
corecmd_exec_shell(polaris_cedge_start_t)
auth_use_nsswitch(polaris_cedge_start_t)

polaris_dmi_ports_fetch_domtrans(polaris_cedge_start_t)

# runs ps -C cfgmgr -o pid=
# ps needs access to proc_t
kernel_read_system_state(polaris_cedge_start_t)
# ps needs access to state of all domains
domain_read_all_domains_state(polaris_cedge_start_t)
# "ps" needs read access to /sys/devices/system/cpu/online
# "ps" needs read access to /proc/uptime
dev_read_sysfs(polaris_cedge_start_t)

# runs vip-confd-startup.sh needs transition into polaris_confd_t domain
polaris_confd_domtrans(polaris_cedge_start_t)

# runs systemctl start logrotate.service
systemd_exec_systemctl(polaris_cedge_start_t)

# manage /etc/viptela
polaris_cedge_etc_manage(polaris_cedge_start_t)

# runs install_assist.sh
polaris_install_engine_domtrans(polaris_cedge_start_t)

# write /bootflash/.installer/images/pkg_boot_17.3.01/version
polaris_disk_install_manage(polaris_cedge_start_t)

gen_require(‘
    type polaris_disk_install_t;
’)
# du -s /bootflash/.installer/images/pkg_boot_17.3.01/confd0/cdb
allow polaris_cedge_start_t polaris_disk_install_t:filesystem getattr;

# chown -R binos /bootflash/sdwan
fs_getattr_xattr_fs(polaris_cedge_start_t)

allow polaris_cedge_start_t self:capability { chown fowner net_admin }; 

# PLEASE LOOK AT ME cedge_start.sh modifies set of directories that
# are supposed to be read only, like usr_t, etc_t, root_t

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files_rw_usr_dirs(polaris_cedge_start_t)
  gen_require(
    'type usr_t;
  ')
manage_lnk_files_pattern(polaris_cedge_start_t, usr_t, usr_t)
libs_manage_lib_dirs(polaris_cedge_start_t)
  gen_require(
    'type lib_t;
  ')
manage_lnk_files_pattern(polaris_cedge_start_t, lib_t, lib_t)
files_manage_etc_symlinks(polaris_cedge_start_t)
files_manage_var_symlinks(polaris_cedge_start_t)
  # creates /home directory in root
  gen_require(
    'type root_t;
  ')
manage_dirs_pattern(polaris_cedge_start_t, root_t, root_t)
manage_lnk_files_pattern(polaris_cedge_start_t, root_t, root_t)
  # creates /var/log/sdwan
  gen_require(
    'type var_log_t;
  ')
manage_dirs_pattern(polaris_cedge_start_t, var_log_t, var_log_t)
manage_lnk_files_pattern(polaris_cedge_start_t, var_log_t, var_log_t)
corecmd_manage_bin_files(polaris_cedge_start_t)
  # PLEASE LOOK AT ME copy unit files into /lib/systemd/system
  # cp /tmp/sw/rp/0/0/rp_daemons/mount/lib/systemd/system/logrotate.service /lib/systemd/system
  gen_require(
    'type systemd_unit_file_t;
  ')
read_lnk_files_pattern(polaris_cedge_start_t, systemd_unit_file_t, systemd_unit_file_t)
  # PLEASE LOOK AT ME need to have separate label for logrotate.service
  # allow only to start if, do it once copy of logrotate.service is fixed
  systemd_config_generic_services(polaris_cedge_start_t)
init_start(polaris_cedge_start_t)
  # creates /var/log/confd
polaris_confd_var_log_manage(polaris_cedge_start_t)
  # executes touch /etc/resolv.conf for case when it is missing
  # check create_etc_resolv_conf make sure that it becomes net_conf_t
  gen_require(
    'type net_conf_t;
  ')
files_etc_filetrans(polaris_cedge_start_t, net_conf_t, file, "resolv.conf")
sytnet_create_config(polaris_cedge_start_t)
sysnet_write_config(polaris_cedge_start_t)

# creates /var/confd0 when box boots with startup config disabled
polaris_confdir_var_filetrans(polaris_cedge_start_t, dir, "confd0")

polaris_confdir_var_dir_manage(polaris_cedge_start_t)

# During controller-mode enablement/bringup,
# viptela scripts are not loaded as part of the base packages.
# viptela-start.sh script takes care of creating these references.
# It creates softlink copies them as below to desired location depending on the packaging (mono vs subpackage).
# "cp $PKG_PATH/lib/systemd/system/logrotate.service /lib/systemd/system"
# Below policy statement allow copy access needed for viptela-logrotate.sh
# for updating /lib/systemd/system and /usr/binos/conf path
write_files_pattern(polaris_cedge_start_t, systemd_unit_file_t, systemd_unit_file_t)

# While creating soflink as below
# "ln -sf $PKG_PATH/usr/binos/conf/viptela-logrotate.sh /usr/binos/conf/viptela-logrotate.sh"
# As the ln command tries to create the new link, it removes the already existing link.
# In deletes the file associated with the path name if this path name is the last link to the file.
# If In can't get rid of the conflicting path name, it does not attempt to establish the new link.
# If In successfully removes the conflicting path name, it then establishes the link.
# delete file permissions are hence needed for ln command to perform unlinking previous link
files_delete_etc_files(polaris_cedge_start_t)

# During cEdge upgrade, viptela-start.sh needs permissions to maintain the
# state of roll back timer in /bootflash/.rollback_timer/*
polaris_rbtimer_bootflash_manage(polaris_cedge_start_t)

#Nutella-XE - Vedge image install
#/bin/bash /tmp/sw/rp/0/0/rp_security/mount/usr/binos/conf/viptela-start.sh
mount_domtrans(polaris_cedge_start_t)

Found in path(s):
* /opt/cola/permits/1103963160_1615183271.1/0/selinux-tar/selinux/polariscedgestart.te

1.514 snappy 1.1.8 3.el8

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1.515 jackson 2.12.3

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It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has
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It is currently developed by a community of developers.

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*
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Thanks to the following people for their input:
Mike Belshe (mbelshe@netscape.com)
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generated code

package cloud

import (  
"bytes"  
"io/ioutil"  
"os"  
"path/filepath"  
"strings"  
"testing"  
)

var sentinels = []string{  
"Copyright",  
"Google",  
'Licensed under the Apache License, Version 2.0 (the "License");',
}

func TestLicense(t *testing.T) {  
t.Parallel()
  err := filepath.Walk(".", func(path string, fi os.FileInfo, err error) error {  
    if err != nil {  
      return err
    }  
    if ext := filepath.Ext(path); ext != ".go" && ext != ".proto" {  
      return nil
    }  
    if strings.HasSuffix(path, ".pb.go") {  
      // .pb.go files are generated from the proto files.
// .proto files must have license headers.
return nil
}
if path == "bigtable/cmd/cbt/cbtdoc.go" {
// Automatically generated.
return nil
}
if path == "cmd/go-cloud-debug-agent/internal/debug/elf/elf.go" {
// BSD license, which is compatible, is embedded in the file.
return nil
}
src, err := ioutil.ReadFile(path)
if err != nil {
    return nil
}
src = src[:300] // Ensure all of the sentinel values are at the top of the file.

// Find license
for _, sentinel := range sentinels {
    if !bytes.Contains(src, []byte(sentinel)) {
        t.Errorf("%v: license header not present. want %q", path, sentinel)
        return nil
    }
}

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1.534 idna 2.10
1.534.1 Available under license :
No license file was found, but licenses were detected in source scan.

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------

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A library to support the Internationalised Domain Names in Applications (IDNA) protocol as specified in RFC 5890 et.al. This new methodology, known as IDNA 2008, can generate materially different results to the previous standard. The library can act as a drop-in replacement for the "encodings.idna" module.

```python
import io, sys
from setuptools import setup

def main():
    python_version = sys.version_info[:2]
    if python_version < (2,7):
        raise SystemExit("Sorry, Python 2.7 or newer required")

    package_data = {}
    exec(open('idna/package_data.py').read(), package_data)
```

No license file was found, but licenses were detected in source scan.

Found in path(s):
* /opt/cola/permits/1110905341_1606871385.15/0/kjd-idna-v2-10-0-ge5c11db-1-tar-gz/kjd-idna-b8defb9/LICENSE.rst

---

A library to support the Internationalised Domain Names in Applications (IDNA) protocol as specified in RFC 5890 et.al. This new methodology, known as IDNA 2008, can generate materially different results to the previous standard. The library can act as a drop-in replacement for the "encodings.idna" module.

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    package_data = {}
    exec(open('idna/package_data.py').read(), package_data)
```
arguments = {
    'name': 'idna',
    'packages': ['idna'],
    'version': package_data['__version__'],
    'description': 'Internationalized Domain Names in Applications (IDNA)',
    'long_description': io.open("README.rst", encoding="UTF-8").read(),
    'author': 'Kim Davies',
    'author_email': 'kim@cynosure.com.au',
    'license': 'BSD-like',
    'url': 'https://github.com/kjd/idna',
    'classifiers': [
        'Development Status :: 5 - Production/Stable',
        'Intended Audience :: Developers',
        'Intended Audience :: System Administrators',
        'License :: OSI Approved :: BSD License',
        'Operating System :: OS Independent',
        'Programming Language :: Python',
        'Programming Language :: Python :: 2',
        'Programming Language :: Python :: 2.7',
        'Programming Language :: Python :: 3',
        'Programming Language :: Python :: 3.4',
        'Programming Language :: Python :: 3.5',
        'Programming Language :: Python :: 3.6',
        'Programming Language :: Python :: 3.7',
        'Programming Language :: Python :: 3.8',
        'Programming Language :: Python :: Implementation :: CPython',
        'Programming Language :: Python :: Implementation :: PyPy',
        'Topic :: Internet :: Name Service (DNS)',
        'Topic :: Software Development :: Libraries :: Python Modules',
        'Topic :: Utilities',
    ],
    'python_requires': '>=2.7, !=3.0.*, !=3.1.*, !=3.2.*, !=3.3.*',
}

setup(**arguments)

if __name__ == '__main__':
    main()

Found in path(s):
* /opt/cola/permits/1110905341_1606871385.15/0/kjd-idna-v2-10-0-ge5c11db-1-tar-gz/kjd-idna-b8defb9/setup.py

1.535 perl-dbi 1.641-
3.module_el8.3.0+2054+fbe55708
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goproperties - properties file decoder for Go

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procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc.

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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1.544 image-size 1.1.0
1.544.1 Available under license :

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imagesize
============

.. image:: https://travis-ci.org/shibukawa/imagesize_py.svg?branch=master
   :target: https://travis-ci.org/shibukawa/imagesize_py

This module analyzes JPEG/JPEG 2000/PNG/GIF/TIFF image headers and returns image size.

.. code:: python

   import imagesize

   width, height = imagesize.get("test.png")
   print(width, height)

This module is a pure Python module.

API
----

* `imagesize.get(filepath)`

Returns image size (width, height).

Benchmark
----------

It only parses headers, and ignores pixel data. So it is much faster than Pillow.
I tested on MacBookPro (2014/Core i7) with 125kB PNG files.

Restriction
-------------

* TIFF

It can returns only first picture's size because of restriction of API design.

It supports only small TIFF file. BigTIFF support is not implemented.

Development
-------------

Run test with the following command:

```
python -m unittest
```

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--------

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Thanks
--------

I referred to the following code:

* http://markasread.net/post/17551554979/get-image-size-info-using-pure-python-code

I use sample image from here:

* https://www.nightprogrammer.org/development/multipage-tiff-example-download-test-image-file/
Thank you for feedback:

* tk0miya (https://github.com/tk0miya)
* shimizukawa (https://github.com/shimizukawa)
* xantares (https://github.com/xantares)
* Ivan Zakharyaschev (https://github.com/imz)
* Jon Dufresne (https://github.com/jdufresne)
* Geoff Lankow (https://github.com/darktrojan)
* Hugo (https://github.com/hugovk)

Found in path(s):
* /opt/cola/permits/1111648332_1606948805.44/0/imagesize-1-1-0-tar-gz/imagesize-1.1.0/README.rst
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* /opt/cola/permits/1111648332_1606948805.44/0/imagesize-1-1-0-tar-gz/imagesize-1.1.0/setup.py
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Metadata-Version: 1.2
Name: imagesize
Version: 1.1.0
Summary: Getting image size from png/jpeg/jpeg2000/gif file
Home-page: https://github.com/shibukawa/imagesize_py
Author: Yoshiki Shibukawa
Author-email: yoshiki@shibu.jp
License: MIT
Description:

It parses image files' header and return image size.

* PNG
* JPEG
* JPEG2000
* GIF
* TIFF (experimental)

This is a pure Python library.

Platform: UNKNOWN
Classifier: Development Status :: 5 - Production/Stable
Classifier: Intended Audience :: Developers
Classifier: License :: OSI Approved :: MIT License
Classifier: Programming Language :: Python
Classifier: Operating System :: OS Independent
Classifier: Programming Language :: Python :: 2
Classifier: Programming Language :: Python :: 2.7
Classifier: Programming Language :: Python :: 3
Classifier: Programming Language :: Python :: 3.4
Classifier: Programming Language :: Python :: 3.5
Classifier: Programming Language :: Python :: 3.6
Classifier: Programming Language :: Python :: 3.7
Classifier: Programming Language :: Python :: Implementation :: CPython
Classifier: Programming Language :: Python :: Implementation :: PyPy
Classifier: Topic :: Multimedia :: Graphics
Requires-Python: >=2.7, !=3.0.*, !=3.1.*, !=3.2.*, !=3.3.*

Found in path(s):
* /opt/cola/permits/1111648332_1606948805.44/0/imagesize-1-1-0-tar-gz/imagesize-1.1.0/imagesize.egg-info/PKG-INFO
* /opt/cola/permits/1111648332_1606948805.44/0/imagesize-1-1-0-tar-gz/imagesize-1.1.0/PKG-INFO

1.545 selinux 2.9-1.el8
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### Commands to generate dependency files

```shell
GEN_DEPS.c=$(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc=$(CXX) -E -MM $(DEFS) $(CPPFLAGS)
```

### Flags for position independent code

```
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
```
```bash
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE=-Wl,-rpath,

## Compiler switch to embed a library name
LD SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bs symbolic

## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation rules
%.$(STATIC_O): $(srcdir)/%.c
$(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
$(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
$(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
$(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<

## Dependency rules
%.d: $(srcdir)/%.c
@echo "generating dependency information for $<"
@$(SHELL) -ec "$(_GEN_DEPS.c) $<
| sed "s/\([^*\n]\)/$1.o $@ : /g" > $@;\n[ -s $@ ] || rm -f $@

%.d: $(srcdir)/%.cpp
@echo "generating dependency information for $<"
@$(SHELL) -ec "$(_GEN_DEPS.cc) $<
| sed "s/\([^*\n]\)/$1.o $@ : /g" > $@;\n[ -s $@ ] || rm -f $@

## Versioned libraries rules
```
## Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS = -Wl,-Bs symbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS =

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup

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A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python’s principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

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(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

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https://github.com/dominictarr/JSONStream

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1.550 flask-restful 0.3.6

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1.551 apk-tools 2.12.1-r0

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author:
- 'Artur Bergman, Jerry D. Hedden <jdhedden AT cpan DOT org>'
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  ExtUtils::MakeMaker: '0'
configure_requires:
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generated_by: 'ExtUtils::MakeMaker version 7.24, CPAN::Meta::Converter version 2.150010'
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  Config: '0'
  ExtUtils::testlib: '0'
  Hash::Util: '0'
  IO::File: '0'
  Test::More: '0'
  XSLoader: '0'
overload: '0'
strict: '0'
warnings: '0'
version: '2.21'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'

Found in path(s):
No license file was found, but licenses were detected in source scan.

License: GPL+ or Artistic

Found in path(s):
No license file was found, but licenses were detected in source scan.

/*

ppport.h -- Perl/Pollution/Portability Version 3.32

Automatically created by Devel::PPPort running under perl 5.022001.

Do NOT edit this file directly! -- Edit PPPort.pm.PL and the includes in parts/inc/ instead.

Use 'perldoc ppport.h' to view the documentation below.

SKIP

=pod

=head1 NAME

ppport.h - Perl/Pollution/Portability version 3.32

=head1 SYNOPSIS

perl ppport.h [options] [source files]

Searches current directory for files if no [source files] are given

--help show short help
--version  
   show version

--patch=file  
   write one patch file with changes
--copy=suffix  
   write changed copies with suffix
--diff=program  
   use diff program and options

--compat-version=version  
   provide compatibility with Perl version
--cplusplus  
   accept C++ comments
--quiet  
   don't output anything except fatal errors
--nodiag  
   don't show diagnostics
--nohints  
   don't show hints
--nochanges  
   don't suggest changes
--nofilter  
   don't filter input files
--strip  
   strip all script and doc functionality from pport.h

--list-provided  
   list provided API
--list-unsupported  
   list unsupported API
--api-info=name  
   show Perl API portability information

=head1 COMPATIBILITY

This version of F<pport.h> is designed to support operation with Perl installations back to 5.003, and has been tested up to 5.20.

=head1 OPTIONS

=head2 --help

Display a brief usage summary.

=head2 --version

Display the version of F<pport.h>.

=head2 --patch=I<file>

If this option is given, a single patch file will be created if any changes are suggested. This requires a working diff program to be installed on your system.

=head2 --copy=I<suffix>

If this option is given, a copy of each file will be saved with the given suffix that contains the suggested changes. This does not require any external programs. Note that this does not
automagically add a dot between the original filename and the suffix. If you want the dot, you have to include it in the option argument.

If neither C<--patch> or C<--copy> are given, the default is to simply print the diffs for each file. This requires either C<Text::Diff> or a C<diff> program to be installed.

=head2 --diff=I<program>

Manually set the diff program and options to use. The default is to use C<Text::Diff>, when installed, and output unified context diffs.

=head2 --compat-version=I<version>

Tell F<ppport.h> to check for compatibility with the given Perl version. The default is to check for compatibility with Perl version 5.003. You can use this option to reduce the output of F<ppport.h> if you intend to be backward compatible only down to a certain Perl version.

=head2 --cplusplus

Usually, F<ppport.h> will detect C++ style comments and replace them with C style comments for portability reasons. Using this option instructs F<ppport.h> to leave C++ comments untouched.

=head2 --quiet

Be quiet. Don't print anything except fatal errors.

=head2 --nodiag

Don't output any diagnostic messages. Only portability alerts will be printed.

=head2 --nohints

Don't output any hints. Hints often contain useful portability notes. Warnings will still be displayed.

=head2 --nochanges

Don't suggest any changes. Only give diagnostic output and hints unless these are also deactivated.
=head2 --nofilter

Don't filter the list of input files. By default, files not looking like source code (i.e. not *.xs, *.c, *.cc, *.cpp or *.h) are skipped.

=head2 --strip

Strip all script and documentation functionality from F<ppport.h>. This reduces the size of F<ppport.h> dramatically and may be useful if you want to include F<ppport.h> in smaller modules without increasing their distribution size too much.

The stripped F<ppport.h> will have a C<--unstrip> option that allows you to undo the stripping, but only if an appropriate C<Devel::PPPort> module is installed.

=head2 --list-provided

Lists the API elements for which compatibility is provided by F<ppport.h>. Also lists if it must be explicitly requested, if it has dependencies, and if there are hints or warnings for it.

=head2 --list-unsupported

Lists the API elements that are known not to be supported by F<ppport.h> and below which version of Perl they probably won't be available or work.

=head2 --api-info=I<name>

Show portability information for API elements matching I<name>. If I<name> is surrounded by slashes, it is interpreted as a regular expression.

=head1 DESCRIPTION

In order for a Perl extension (XS) module to be as portable as possible across differing versions of Perl itself, certain steps need to be taken.

=over 4

=item *

Including this header is the first major one. This alone will give you access to a large part of the Perl API that hasn't been available in earlier Perl releases. Use

    perl ppport.h --list-provided


to see which API elements are provided by ppport.h.

=item *

You should avoid using deprecated parts of the API. For example, using global Perl variables without the C<PL_> prefix is deprecated. Also, some API functions used to have a C<perl_> prefix. Using this form is also deprecated. You can safely use the supported API, as F<ppport.h> will provide wrappers for older Perl versions.

=item *

If you use one of a few functions or variables that were not present in earlier versions of Perl, and that can't be provided using a macro, you have to explicitly request support for these functions by adding one or more C<#define>s in your source code before the inclusion of F<ppport.h>.

These functions or variables will be marked C<explicit> in the list shown by C<--list-provided>.

Depending on whether you module has a single or multiple files that use such functions or variables, you want either C<static> or global variants.

For a C<static> function or variable (used only in a single source file), use:

#define NEED_function
#define NEED_variable

For a global function or variable (used in multiple source files), use:

#define NEED_function_GLOBAL
#define NEED_variable_GLOBAL

Note that you mustn't have more than one global request for the same function or variable in your project.

<table>
<thead>
<tr>
<th>Function / Variable</th>
<th>Static Request</th>
<th>Global Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL_parser</td>
<td>NEED_PL_parser</td>
<td>NEED_PL_parser_GLOBAL</td>
</tr>
<tr>
<td>PL_signals</td>
<td>NEED_PL_signals</td>
<td>NEED_PL_signals_GLOBAL</td>
</tr>
<tr>
<td>caller_cx()</td>
<td>NEED_caller_cx</td>
<td>NEED_caller_cx_GLOBAL</td>
</tr>
<tr>
<td>eval_pv()</td>
<td>NEED_eval_pv</td>
<td>NEED_eval_pv_GLOBAL</td>
</tr>
<tr>
<td>grok_bin()</td>
<td>NEED_grok_bin</td>
<td>NEED_grok_binGLOBAL</td>
</tr>
<tr>
<td>grok_hex()</td>
<td>NEED_grok_hex</td>
<td>NEED_grok_hex_GLOBAL</td>
</tr>
</tbody>
</table>
To avoid namespace conflicts, you can change the namespace of the explicitly exported functions/variables using the C<DPPP_NAMESPACE> macro. Just C<#define> the macro before including C<ppport.h>:

```c
#define DPPP_NAMESPACE MyOwnNamespace_
#include "ppport.h"
```

The default namespace is C<DPPP_>.

=back

The good thing is that most of the above can be checked by running F<ppport.h> on your source code. See the next section for details.

=head1 EXAMPLES

To verify whether F<ppport.h> is needed for your module, whether you should make any changes to your code, and whether any special defines
should be used, F<ppport.h> can be run as a Perl script to check your source code. Simply say:

    perl ppport.h

The result will usually be a list of patches suggesting changes that should at least be acceptable, if not necessarily the most efficient solution, or a fix for all possible problems.

If you know that your XS module uses features only available in newer Perl releases, if you're aware that it uses C++ comments, and if you want all suggestions as a single patch file, you could use something like this:

    perl ppport.h --compat-version=5.6.0 --cplusplus --patch=test.diff

If you only want your code to be scanned without any suggestions for changes, use:

    perl ppport.h --nochanges

You can specify a different C<diff> program or options, using the C<--diff> option:

    perl ppport.h --diff='diff -C 10'

This would output context diffs with 10 lines of context.

If you want to create patched copies of your files instead, use:

    perl ppport.h --copy=.new

To display portability information for the C<newSVpvn> function, use:

    perl ppport.h --api-info=newSVpvn

Since the argument to C<--api-info> can be a regular expression, you can use

    perl ppport.h --api-info=_nomg$/

to display portability information for all C<_nomg> functions or

    perl ppport.h --api-info=/./

to display information for all known API elements.
BUGS

If this version of F<ppport.h> is causing failure during the compilation of this module, please check if newer versions of either this module or C<Devel::PPPort> are available on CPAN before sending a bug report.

If F<ppport.h> was generated using the latest version of C<Devel::PPPort> and is causing failure of this module, please file a bug report here: L<https://github.com/mhx/Devel-PPPort/issues/>

Please include the following information:

item 1.
The complete output from running "perl -V"

item 2.
This file.

item 3.
The name and version of the module you were trying to build.

item 4.
A full log of the build that failed.

item 5.
Any other information that you think could be relevant.

For the latest version of this code, please get the C<Devel::PPPort> module from CPAN.

COPYRIGHT

Version 3.x, Copyright (c) 2004-2013, Marcus Holland-Moritz.

Version 2.x, Copyright (C) 2001, Paul Marquess.

Version 1.x, Copyright (C) 1999, Kenneth Albanowski.
This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

=head1 SEE ALSO

See L<Devel::PPPort>.

=cut

use strict;

# Disable broken TRIE-optimization
BEGIN { eval '{^RE_TRIE_MAXBUF} = -1' if $] >= 5.009004 && $] <= 5.009005 }

my $VERSION = 3.32;

my %opt = (
    quiet => 0,
    diag  => 1,
    hints => 1,
    changes => 1,
    cplusplus => 0,
    filter => 1,
    strip  => 0,
    version => 0,
);

my($ppport) = $0 =~ /\[(\w.\.+)$/;
my $LF = '(?:\x0d\x0a|\\x0d\x0a)'; # line feed
my $HS = '[ 	]';             # horizontal whitespace

# Never use C comments in this file!
my $ccs = '/'.'*';
my $cce = '*'.'/';
my $rccs = quotemeta $ccs;
my $rcce = quotemeta $cce;

eval {
    require Getopt::Long;
    Getopt::Long::GetOptions(%opt, qw(
        help quiet diag! filter! hints! changes! cplusplus strip version
        patch=s copy=s diff=s compat-version=s
        list-provided list-unsupported api-info=s
    )) or usage();
};

if ($@ and grep /^-/, @ARGV) {
    usage() if "$ARGV" =~ /^-?h(?:elp)?$/;
}
die "Getopt::Long not found. Please don't use any options.
"
};

if ($opt{version}) {
    print "This is $0 $VERSION.\n";
    exit 0;
}

usage() if $opt{help};
strip() if $opt{strip};

if (exists $opt{'compat-version'}) {
    my($r,$v,$s) = eval { parse_version($opt{'compat-version'}) };
    if ($@) {
        die "Invalid version number format: '$opt{'compat-version'}'\n"
    }
    die "Only Perl 5 is supported\n" if $r != 5;
    die "Invalid version number: $opt{'compat-version'}\n" if $v >= 1000 || $s >= 1000;
    $opt{'compat-version'} = sprintf "%d.%03d%03d", $r, $v, $s;
} else {
    $opt{'compat-version'} = 5;
}

my %API = map { /^(\w+)\|([^|]*)\|([^|]*)\|([^\s]*)$/
    ? ( $1 => {
        ($2 ? ( base => $2 ) : ()),
        ($3 ? ( todo => $3 ) : ()),
        (index($4, 'v') >= 0 ? ( varargs => 1 ) : ()),
        (index($4, 'p') >= 0 ? ( provided => 1 ) : ()),
        (index($4, 'n') >= 0 ? ( nothxarg => 1 ) : ())
    }
    : die "invalid spec: $_" } qw(
ASCII_TO_NEED||5.007001|n
AvFILLp|5.004050||p
AvFILL||
BhkDISABLE||5.021008|
BhkENABLE||5.021008|
BhkENTRY_set||5.021008|
BhkENTRY||
BhkFLAGS||
CALL_BLOCK_HOOKS||
CLASS||n
CPERLscope|5.005000||p
CX_CURPAD_SAVE||
CX_CURPAD_SV||
CopFILEAV|5.006000||p
CopFILEGV_set|5.006000||p

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PerlIO_save_errno
PerlIO_seek[5.007003]
PerlIO_set_cnum[5.007003]
PerlIO_set_ptrnum[5.007003]
PerlIO_setlinebuf[5.007003]
PerlIO_stderr[5.007003]
PerlIO_stdio[5.007003]
PerlIO_stdout[5.007003]
PerlIO_tell[5.007003]
PerlIO_unread[5.007003]
PerlIO_write[5.007003]
Perl_signbit[5.009005]
PoisonFree[5.009004]
PoisonNew[5.009004]
PoisonWith[5.009004]
Poison[5.008000]
READ XDIGIT[5.017006]
RETV AL|||n
Renewc||
Renew||
SAVECLEARSV||
SAVECOMPPAD||
SAVEPADSV||
SAVETMPS||
SAVE_DEF SV[5.004050]
SPAGAIN||
SP||
START_EXTERN_C[5.005000]
START_MY_CXT[5.007003]
STM_T_END||p
STM_T_START||p
STR WITH LEN[5.009003]
ST||
SV CONST RETURN[5.009003]
SV_COW DROP PV[5.008001]
SV_COW SHARED_HASH KEYS[5.009005]
SV_GMAGIC[5.007002]
SV_HAS TRAILING_NUL[5.009004]
SV_IMMEDIATE UNREF[5.007001]
SV_MUTABLE RETURN[5.009003]
SV_NOSTEAL[5.009002]
SV_SMAGIC[5.009003]
SV_UTF8 NO_ENCODING[5.008001]
SVfARG[5.009005]
SVf UTF8[5.006000]
SVf[5.006000]
SVt_INVLIST[5.019002]
SVt IV|||
SVt_NULL
SVt_NV
SVt_PVAV
SVt_PVCV
SVt_PVFV
SVt_PVGV
SVt_PVHV
SVt_PVIO
SVt_PVIV
SVt_PVLV
SVt_PVMG
SVt_PVNV
SVt_PV
SVt_REGEXP
Safefree
Slab_Alloc
Slab_Free
Slab_to_ro
Slab_to_rw
StructCopy
SvCUR_set
SvCUR
SvEND
SvGAMAGIC
SvGETMAGIC
SvGROW
SvIOK_UV
SvIOK_notUV
SvIOK_off
SvIOK_only_UV
SvIOK_only
SvIOK_on
SvIOKp
SvIOK
SvIVX
SvIV_nomg
SvIV_set
SvIVx
SvIV
SvlsCOW_shared_hash
SvlsCOW
SvLEN_set
SvLEN
SvLOCK
SvMAGIC_set
SvNIOK_off
SvNIOKp
SvNIOK
SvNOK_off||
SvNOK_only||
SvNOK_on||
SvNOKp||
SvNOK||
SvNVX||
SvNV_nomg|$5.013002|
SvNV_set||
SvNVx||
SvNV||
SvOK||
SvOOK_offset|$5.011000|
SvOOK||
SvPOK_off||
SvPOK_only_UTF8|$5.006000|
SvPOK_only||
SvPOK_on||
SvPOKp||
SvPOK||
SvPVX_const|$5.009003||p
SvPVX_mutable|$5.009003||p
SvPVX||
SvPV_const|$5.009003||p
SvPV_flags_const_nolen|$5.009003||p
SvPV_flags_const|$5.009003||p
SvPV_flags_mutable|$5.009003||p
SvPV_flags|$5.007002||p
SvPV_force_flags_mutable|$5.009003||p
SvPV_force_flags_nolen|$5.009003||p
SvPV_force_flags|$5.009003||p
SvPV_force|$5.009003||p
SvPV_mutable|$5.009003||p
SvPV_nolen_const|$5.009003||p
SvPV_nolen|$5.006000||p
SvPV_nomg_const_nolen|$5.009003||p
SvPV_nomg_const|$5.009003||p
SvPV_nomg_nolen|$5.013007||p
SvPV_nomg|$5.007002||p
SvPV_renew|$5.009003||p
SvPV_set||
SvPVbyte_force|$5.009002|
SvPVbyte_nolen|$5.006000|
SvPVbyte_nforce|$5.006000|
SvPVbyte|$5.006000|
SvUTF8||5.006000|
SvUVXx[5.004000]p
SvUVX[5.004000]p
SvUVVNomg[5.009001]p
SvUVVset[5.009003]p
SvUVXj[5.004000]p
SvUVV[5.004000]p
SvVOK[5.008001]
SvVSTRING_mg[5.009004]p
THIS]n
UNDERBAR[5.009002]p
UTF8_MAXBYTES[5.009002]p
UVSIZE[5.006000]p
UVTYPE[5.006000]p
UVX[5.007001]p
UVof[5.006000]p
UVuf[5.006000]p
UVxf[5.006000]p
WARN_ALL[5.006000]p
WARN_AMBIGUOUS[5.006000]p
WARN_ASSERTIONS[5.021008]p
WARN_BAREWORD[5.006000]p
WARN_CLOSED[5.006000]p
WARN_CLOSURE[5.006000]p
WARN_DEBUGGING[5.006000]p
WARN_DEPRECATED[5.006000]p
WARN_DIGIT[5.006000]p
WARN_EXEC[5.006000]p
WARN_EXITING[5.006000]p
WARN_GLOB[5.006000]p
WARN_INPLACE[5.006000]p
WARN_INTERNAL[5.006000]p
WARN_IO[5.006000]p
WARN_LAYER[5.008000]p
WARN_MALLOC[5.006000]p
WARN_MISC[5.006000]p
WARN_NEWLINE[5.006000]p
WARN_NUMERIC[5.006000]p
WARN_ONCE[5.006000]p
WARN_OVERFLOW[5.006000]p
WARN_PACK[5.006000]p
WARN_PARENTHESIS[5.006000]p
WARN_PIPE[5.006000]p
WARN_PORTABLE[5.006000]p
WARN_PRECEDENCE[5.006000]p
WARN_PRINTF[5.006000]p
WARN_PROTOTYPE[5.006000]p
WARN_QW[5.006000]p
XS_VERSION_BOOTCHECK||5.021008|
XS_VERSION|||
XSprePUSH||5.006000||p
XS|||
XopDISABLE||5.021008|
XopENABLE||5.021008|
XopENTRYCUSTOM||5.021008|
XopENTRY_set||5.021008|
XopENTRY||5.021008|
XopFLAGS||5.013007|
ZeroD||5.009002||p
Zero|||
_aMY_CXT||5.007003||p
_add_range_to_invlist|||
_append_range_to_invlist|||
_core_swash_init|||
_get_encoding|||
_get_regclass_nonbitmap_data|||
_get_swash_invlist|||
_invlist_array_init||n
_invlist_contains_cp||n
_invlist_contents|||
_invlist_dump|||
_invlist_intersection_maybe_complement_2nd|||
_invlist_intersection|||
_invlist_invert|||
_invlist_len||n
_invlist_populate_swatch||n
_invlist_search||n
_invlist_subtract|||
_invlist_union_maybe_complement_2nd|||
_invlist_union|||
_is_cur_LC_category_utf8|||
_is_in_locale_category||5.021001|
_is_uni_FOO||5.017008|
_is_uni_perl_idcont||5.017008|
_is_uni_perl_idstart||5.017007|
_is_utf8_FOO||5.017008|
_is_utf8_char_slow||5.021001||n
_is_utf8_idcont||5.021001|
_is_utf8_idstart||5.021001|
_is_utf8_mark||5.017008|
_is_utf8_perl_idcont||5.017008|
_is_utf8_perl_idstart||5.017007|
_is_utf8_xidcont||5.021001|
_is_utf8_xidstart||5.021001|
_load_PL_utf8_foldclosures|||
_make_exactf_invlist|||

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do_chomp||
do_close||
do_delete_local||
do_dump_pad||
do_eof||
do_exec3||
do_execfree||
do_exec||
do_gv_dump||
do_gvgv_dump||
do_hv_dump||
do_ipcct||
do_ipcget||
do_join||
do_magic_dump||
do_msgrcv||
do_msgsnd||
doncmp||
do_oddball||
do_op_dump||
do_open6||
do_open9||
do_open_raw||
do_openc||
do_open||
do_pmop_dump||
do_print||
do_readline||
do_seek||
do_semop||
do_shmio||
do_smartmatch||
do_spawn_nowait||
do_spawn||
do_sprintf||
do_sv_dump||
do_sysseek||
do.tell||
do_trans_complex_utf8||
do_trans_complex||
do_trans_count_utf8||
do_trans_count||
do_trans_simple_utf8||
do_trans_simple||
do_trans||
do_vecget||
do_vecset||
do_vop||
is_uni_alnumc_lc[5.017007]
is_uni_alnum[5.017007]
is_uni_num[5.006000]
is_uni_alpha[5.006000]
is_uni_alpha_lc[5.006000]
is_uni_ascii[5.006000]
is_uni_ascii_lc[5.006000]
is_uni_blank[5.017002]
is_uni_blank_lc[5.017002]
is_uni_cntrl[5.006000]
is_uni_cntrl_lc[5.006000]
is_uni_digit[5.006000]
is_uni_digit_lc[5.006000]
is_uni_graph[5.006000]
is_uni_graph_lc[5.006000]
is_uni_idfirst[5.006000]
is_uni_idfirst_lc[5.006000]
is_uni_lower[5.006000]
is_uni_lower_lc[5.006000]
is_uni_print[5.006000]
is_uni_print_lc[5.006000]
is_uni_punct[5.006000]
is_uni_punct_lc[5.006000]
is_uni_space[5.006000]
is_uni_space_lc[5.006000]
is_uni_upper[5.006000]
is_uni_upper_lc[5.006000]
is_uni_xdigit[5.006000]
is_uni_xdigit_lc[5.006000]
is_utf8_alnumc[5.017007]
is_utf8_alnum[5.006000]
is_utf8_alpha[5.006000]
is_utf8_ascii[5.006000]
is_utf8_blank[5.017002]
is_utf8_char_buf[5.015008]
is_utf8_char[5.006000]
is_utf8_cntrl[5.006000]
is_utf8_common

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newLOOPOP
newMETHOP_internal
newMETHOP_named[5.021005]
newMETHOP[5.021005]
newMYSUB[5.017004]
newNULLLIST
newOP
newPADNAMELIST[5.021007]
newPADNAMEouter[5.021007]
newPADNAMEpvn[5.021007]
newPADOP
newPMOP
newPROG
newPVOP
newRANGE
newRV[5.004000]
newRV_noinc[5.004000]
newRV
newSLICEOP
newSTATEOP
newSTUB
newSUB
newSVOP
newSVREF
newSV_type[5.009005]
newSVavdefelem
newSVhek[5.009003]
newSViv
newSVpadname[5.017004]
newSVpv_share[5.013006]
newSVpvf_nocontext[5.017004]
newSVpvf[5.004000]
newSVpvn_flags[5.010001]
newSVpvn_share[5.007001]
newSVpvn_ut8[5.010001]
newSVpvn[5.004050]
newSVpvs_flags[5.010001]
newSVpvs_share[5.009003]
newSVpvs[5.009003]
newSVpv
newSVr
newSVsv
newSVuv[5.006000]
newSV
newUNOP_AUX[5.021007]
newUNOP
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if (exists $opt{'list-unsupported'}) {
    my $f;
    for $f (sort { lc $a cmp lc $b } keys %API) {
        next unless $API{$f}{todo};
        print "$f ", '.'x(40-length($f)), " ", format_version($API{$f}{todo}), "un";
    }
    exit 0;
}
}
# Scan for possible replacement candidates
my(%replace, %need, %hints, %warnings, %depends);
my $replace = 0;
my($hint, $define, $function);
sub find_api
{
my $code = shift;
$code =~ s{
/ (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
| "[^"\\]*(?:\\.[^"\\]*)*"
| '[^'\\]*(?:\\.[^'\\]*)*' }{}egsx;
grep { exists $API{$_} } $code =~ /(\w+)/mg;
}
while (<DATA>) {
if ($hint) {
my $h = $hint->[0] eq 'Hint' ? \%hints : \%warnings;
if (m{^\s*\*\s(.*?)\s*$}) {
for (@{$hint->[1]}) {
$h->{$_} ||= ''; # suppress warning with older perls
$h->{$_} .= "$1\n";
}
}
else { undef $hint }
}
$hint = [$1, [split /,?\s+/, $2]]
if m{^\s*$rccs\s+(Hint|Warning):\s+(\w+(?:,?\s+\w+)*)\s*$};
if ($define) {
if ($define->[1] =~ /\\$/) {
$define->[1] .= $_;
}
else {
if (exists $API{$define->[0]} && $define->[1] !~ /^DPPP_\(/) {
my @n = find_api($define->[1]);
push @{$depends{$define->[0]}}, @n if @n
}
undef $define;
}
}
$define = [$1, $2] if m{^\s*#\s*define\s+(\w+)(?:\([^)]*\))?\s+(.*)};

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if ($function) {
  if ('^' //$function)) {
    if (exists $API{$function->[0]}) {
      my @n = find_api($function->[1]);
      push @{$depends{$function->[0]}}, @n if @n
    }
    undef $function;
  } else {
    $function->[1] .= $_;
  }
}

$function = ['^DPPP_', (my $w)] if m{^\S+$DPPP_\(my_\(w\))};

for (values %depends) {
  my %s;
  $_. = [sort grep !$s{$_}++, @$_] if (exists $opt{'api-info'})) {
    my $f;
    my $count = 0;
    my $match = $opt{'api-info'} =~ m!^/(.*)/$! ? $1 : "^\Q$opt{'api-info'}\E\$!;
    for $f (sort { lc $a cmp lc $b } keys %API) {
      next unless $f =~ /$match/;
      print "=== $f ===

      my $info = 0;
      if ($API{$f}{base} || $API{$f}{todo}) {
        my $base = format_version($API{$f}{base} || $API{$f}{todo});
        print "Supported at least starting from perl-$base Cảnh",
      }
      $info++;
    }
  }
}
my $port = $ppport provided back to perl-$todo.
print "$need{$f}" if exists $need{$f};
print "$depends{$f}" if exists $depends{$f};
print "$hints{$f}" if exists $hints{$f};
print "$warnings{$f}" if exists $warnings{$f};
$info++;
print "No portability information available." unless $info;
$count++;
$count or print "Found no API matching '$opt{'api-info'}'.";
print "$opt{'list-provided'}" if exists $opt{'list-provided'};
my %$API;
for $f (sort { lc $a cmp lc $b } keys %$API) {
    next unless $API{provided};
    my @flags;
    push @flags, 'explicit' if exists $need{$f};
    push @flags, 'depend'   if exists $depends{$f};
    push @flags, 'hint'     if exists $hints{$f};
    push @flags, 'warning'  if exists $warnings{$f};
    my $flags = @flags ? '  [' . join(', ', @flags) . '] ' : "
    print "$flags
    exit 0;
}

my @files);
my @srcext = qw( .xs .c .h .cc .cpp .c.inc -xs.inc );
my $srcext = join '|', map { quotemeta $_ } @srcext;
if (@ARGV) {
    my %seen;
    for (@ARGV) {
        if (-e) {
            if (-f) {
                push @files, $_ unless $seen{$_}++;
            } else { warn "$_ is not a file." }
        } else {
            my @new = grep { -f } glob $_
        }
    }
    my @src = sort { lc $a cmp lc $b } keys @srcext;
    my @flags = map { quotemeta $_ } @srcext;
    my %flags;
    for (@src) {
        my $src = $srcext[0];
        my @flags = map { quotemeta $_ } @srcext;
        my $file = open("$src", "w") or warn "$_ is not a file."
        print $file "$flags
        close $file;
        if ($flag) {
            push @files, $flag unless $seen{$_}++;
        }
    }
    close $src;
    print "$src
    my @src = sort { lc $a cmp lc $b } keys @srcext;
    my @flags = map { quotemeta $_ } @srcext;
    my %flags;
    for (@src) {
        my $src = $srcext[0];
        my @flags = map { quotemeta $_ } @srcext;
        my $file = open("$src", "w") or warn "$_ is not a file."
        print $file "$flags
        close $file;
        if ($flag) {
            push @files, $flag unless $seen{$_}++;
        }
    }
    close $src;
    print "$src
    my @src = sort { lc $a cmp lc $b } keys @srcext;
    my @flags = map { quotemeta $_ } @srcext;
    my %flags;
    for (@src) {
        my $src = $srcext[0];
        my @flags = map { quotemeta $_ } @srcext;
        my $file = open("$src", "w") or warn "$_ is not a file."
        print $file "$flags
        close $file;
        if ($flag) {
            push @files, $flag unless $seen{$_}++;
        }
    }
    close $src;
    print "$src
    my @src = sort { lc $a cmp lc $b } keys @srcext;
    my @flags = map { quotemeta $_ } @srcext;
    my %flags;
    for (@src) {
        my $src = $srcext[0];
        my @flags = map { quotemeta $_ } @srcext;
        my $file = open("$src", "w") or warn "$_ is not a file."
        print $file "$flags
        close $file;
        if ($flag) {
            push @files, $flag unless $seen{$_}++;
        }
    }
    close $src;
    print "$src
    my @src = sort { lc $a cmp lc $b } keys @srcext;
    my @flags = map { quotemeta $_ } @srcext;
    my %flags;
    for (@src) {
        my $src = $srcext[0];
        my @flags = map { quotemeta $_ } @srcext;
        my $file = open("$src", "w") or warn "$_ is not a file."
        print $file "$flags
        close $file;
        if ($flag) {
            push @files, $flag unless $seen{$_}++;
        }
    }
    close $src;
    print "$src
    my @src = sort { lc $a cmp lc $b } keys @srcext;
    my @flags = map { quotemeta $_ } @srcext;
    my %flags;
    for (@src) {
        my $src = $srcext[0];
        my @flags = map { quotemeta $_ } @srcext;
        my $file = open("$src", "w") or warn "$_ is not a file."
        print $file "$flags
        close $file;
        if ($flag) {
            push @files, $flag unless $seen{$_}++;
        }
    }
    close $src;
or warn "'$_' does not exist.\n";
push @files, grep { !$seen{$_}++ } @new;
}
}
}
else {
eval {
require File::Find;
File::Find::find(sub {
$File::Find::name =~ /($srcext)$/i
and push @files, $File::Find::name;
}, '.');
};
if ($@) {
@files = map { glob "*$_" } @srcext;
}
}
if (!@ARGV || $opt{filter}) {
my(@in, @out);
my %xsc = map { /(.*)\.xs$/ ? ("$1.c" => 1, "$1.cc" => 1) : () } @files;
for (@files) {
my $out = exists $xsc{$_} || /\b\Q$ppport\E$/i || !/($srcext)$/i;
push @{ $out ? \@out : \@in }, $_;
}
if (@ARGV && @out) {
warning("Skipping the following files (use --nofilter to avoid this):\n| ", join "\n| ", @out);
}
@files = @in;
}
die "No input files given!\n" unless @files;
my(%files, %global, %revreplace);
%revreplace = reverse %replace;
my $filename;
my $patch_opened = 0;
for $filename (@files) {
unless (open IN, "<$filename") {
warn "Unable to read from $filename: $!\n";
next;
}
info("Scanning $filename ...");
my $c = do { local $/; <IN> };
close IN;

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my %file = (orig => $c, changes => 0);
# Temporarily remove C/XS comments and strings from the code
my @ccom;
$c =~ s{
( ^$HS*\#$HS*include\b[^\r\n]+\b(?:\Q$ppport\E|XSUB\.h)\b[^\r\n]*
| ^$HS*\#$HS*(?:define|elif|if(?:def)?)\b[^\r\n]* )
| ( ^$HS*\#[^\r\n]*
| "[^"\\]*(?:\\.[^"\\]*)*"
| '[^'\\]*(?:\\.[^'\\]*)*'
| / (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]* ) )
}{ defined $2 and push @ccom, $2;
defined $1 ? $1 : "$ccs$#ccom$cce" }mgsex;
$file{ccom} = \@ccom;
$file{code} = $c;
$file{has_inc_ppport} = $c =~ /^$HS*#$HS*include[^\r\n]+\b\Q$ppport\E\b/m;
my $func;
for $func (keys %API) {
my $match = $func;
$match .= "|$revreplace{$func}" if exists $revreplace{$func};
if ($c =~ /\b(?:Perl_)?($match)\b/) {
$file{uses_replace}{$1}++ if exists $revreplace{$func} && $1 eq $revreplace{$func};
$file{uses_Perl}{$func}++ if $c =~ /\bPerl_$func\b/;
if (exists $API{$func}{provided}) {
$file{uses_provided}{$func}++;
if (!exists $API{$func}{base} || $API{$func}{base} > $opt{'compat-version'}) {
$file{uses}{$func}++;
my @deps = rec_depend($func);
if (@deps) {
$file{uses_deps}{$func} = \@deps;
for (@deps) {
$file{uses}{$_} = 0 unless exists $file{uses}{$_};
}
}
for ($func, @deps) {
$file{needs}{$_} = 'static' if exists $need{$_};
}
}
}
if (exists $API{$func}{todo} && $API{$func}{todo} > $opt{'compat-version'}) {
if ($c =~ /\b$func\b/) {
$file{uses_todo}{$func}++;
}

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}
}
}
while ($c =~ /^$HS*#$HS*define$HS+(NEED_(\w+?)(_GLOBAL)?)\b/mg) {
if (exists $need{$2}) {
$file{defined $3 ? 'needed_global' : 'needed_static'}{$2}++;
}
else { warning("Possibly wrong #define $1 in $filename") }
}
for (qw(uses needs uses_todo needed_global needed_static)) {
for $func (keys %{$file{$_}}) {
push @{$global{$_}{$func}}, $filename;
}
}
$files{$filename} = \%file;
}
# Globally resolve NEED_'s
my $need;
for $need (keys %{$global{needs}}) {
if (@{$global{needs}{$need}} > 1) {
my @targets = @{$global{needs}{$need}};
my @t = grep $files{$_}{needed_global}{$need}, @targets;
@targets = @t if @t;
@t = grep /\.xs$/i, @targets;
@targets = @t if @t;
my $target = shift @targets;
$files{$target}{needs}{$need} = 'global';
for (@{$global{needs}{$need}}) {
$files{$_}{needs}{$need} = 'extern' if $_ ne $target;
}
}
}
for $filename (@files) {
exists $files{$filename} or next;
info("=== Analyzing $filename ===");
my %file = %{$files{$filename}};
my $func;
my $c = $file{code};
my $warnings = 0;
for $func (sort keys %{$file{uses_Perl}}) {

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if ($API{$func}{varargs}) {
    unless ($API{$func}{nothxarg}) {
        my $changes = ($c =~ s{(Perl_$func\s*\(\s*?!aTHX_\?)\(\^[^s]*\)\}\(\^[^s]*\)}{$1 . ($2 eq ')' ? 'aTHX' : 'aTHX_ ') . $2 }ge);
        if ($changes) {
            warning("Doesn't pass interpreter argument aTHX to Perl_$func");
            $file{changes} += $changes;
        }
    }
    else {
        warning("Uses Perl_$func instead of $func");
        $file{changes} += ($c =~ s{\bPerl_$func\(\s*?!aTHX_?\)\(\^[^s]*\)}{$func$1(}g);
    }
}

for $func (sort keys %{$file{uses_replace}}) {
    warning("Uses $func instead of $replace{$func}");
    $file{changes} += ($c =~ s{\b$func\(\s*?!aTHX_?\)\(\^[^s]*\)}{$func$1(}g);
}

for $func (sort keys %{$file{uses_provided}}) {
    if ($file{uses}{$func}) {
        if (exists $file{uses_deps}{$func}) {
            diag("Uses $func, which depends on ", join(', ', @{$file{uses_deps}{$func}}));
        } else {
            diag("Uses $func");
        }
    } else {
        $warnings += hint($func);
    }
}

unless ($opt{quiet}) {
    for $func (sort keys %{$file{uses_todo}}) {
        print "*** WARNING: Uses $func, which may not be portable below perl ",
        format_version($API{$func}{todo}), ", even with 'ppport'='n';
        $warnings++;
    }
}

for $func (sort keys %{$file{needed_static}}) {
    my $message = "";
    if (not exists $file{uses}{$func}) {
        $message = "No need to define NEED_$func if $func is never used";
    } elsif (exists $file{needs}{$func} && $file{needs}{$func} ne 'static') {
        $message = "No need to define NEED_$func if $func is never used";
    } else {
        $message = "Static $func is not used, remove NEED_$func from file";
    }
    print $message;
}
$message = "No need to define NEED_$func when already needed globally";
}
if ($message) {
    diag($message);
    $file{changes} += ($c =~ s/^\$\*\$\*define\$\*NEED_$func\b.*\$\*\$\*/mg);
}

for $func (sort keys %{$file{needed_global}}) {
    my $message = ";"
    if (not exists $global{uses}{$func}) {
        $message = "No need to define NEED_$func_GLOBAL if $func is never used";
    }
    elsif (exists $file{needs}{$func}) {
        if ($file{needs}{$func} eq 'extern') {
            $message = "No need to define NEED_$func_GLOBAL when already needed globally";
        }
        elsif ($file{needs}{$func} eq 'static') {
            $message = "No need to define NEED_$func_GLOBAL when only used in this file";
        }
    }
    if ($message) {
        diag($message);
        $file{changes} += ($c =~ s/^\$\*\$\*define\$\*NEED_$func\b.*\$\*\$\*/mg);
    }
}

$file{needs_inc_ppport} = keys %{$file{uses}};

if ($file{needs_inc_ppport}) {
    my $pp = ";"

    for $func (sort keys %{$file{needs}}) {
        my $type = $file{needs}{$func};
        next if $type eq 'extern';
        my $suffix = $type eq 'global' ? '_GLOBAL' : "";
        unless (exists $file{"needed_$type"}{$func}) {
            if ($type eq 'global') {
                diag("Files [@{$global{needs}{$func}} need $func, adding global request"];
            }
            else {
                diag("File needs $func, adding static request");
            }
            $pp .= \\#define NEED_$func$suffix\n;"
        }
    }

    if ($pp && ($c =~ s/^(?=\$\*\$\*define\$\*NEED_\w+)$/\$\*/mg)) {
$pp = ";
$file{changes}++; 

unless ($file{has_inc_ppport}) { 
  diag("Needs to include \"$ppport\"\n);
  $pp .= qq(#include "$ppport\n")
}

if ($pp) { 
  $file{changes} += ($c =~ s/^(\$HS*#$HS*define$HS+NEED_\w+.*?)/$1$pp/m) 
  || ($c =~ s/^(?=$HS*#$HS*include.*\$Q$ppport\E)/$pp/m) 
  || ($c =~ s/^(\$HS*#$HS*include.*XSUB.*\$s*)\)/$1$pp/m) 
  || ($c =~ s/\$/\$pp/);
} 
else { 
  if ($file{has_inc_ppport}) { 
    diag("No need to include \"$ppport\"\n");
    $file{changes} += ($c =~ s/(^\$HS*?#$HS*include.*\$Q$ppport\E.*?\$LF//m);
  }
} 

# put back in our C comments
my $ix;
my $cppc = 0;
my @ccom = @{$file{ccom}};
for $ix (0 .. $#ccom) { 
  if (!$opt{cplusplus} && $ccom[$ix] =~ s!^//!!) {
    $cppc++;
    $file{changes} += $c =~ s/$rccs$ix$rcce/$ccs$ccom[$ix] $cce/;
  } 
  else {
    $c =~ s/$rccs$ix$rcce/$ccom[$ix]/;
  }
}

if ($cppc) { 
  my $s = $cppc != 1 ? 's' : ";
  warning("Uses $cppc C++ style comment$s, which is not portable\n");
}

my $s = $warnings != 1 ? 's' : " 
my $warn = $warnings ? "$ (\$warnings warning\$s)" : ";
info("Analysis completed\$warn\n"); 

if ($file{changes}) { 
  if (exists $opt{copy}) {
my $newfile = "$filename$opt{copy}";
if (-e $newfile) {
    error("$newfile’ already exists, refusing to write copy of $filename”");
} else {
    local *F;
    if (open F, ">$newfile") {
        info("Writing copy of $filename' with changes to $newfile”");
        print F $c;
        close F;
    } else {
        error("Cannot open $newfile' for writing: $!");
    }
}

elsif (exists $opt{patch} || $opt{changes}) {
    if (exists $opt{patch}) {
        unless ($patch_opened) {
            if (open PATCH, ">$opt{patch}") {
                $patch_opened = 1;
            } else {
                error("Cannot open $opt{patch'} for writing: $!");
                delete $opt{patch};
                $opt{changes} = 1;
                goto fallback;
            }
        }
        mydiff(\*PATCH, $filename, $c);
    } else {
        fallback:
        info("Suggested changes:”);
        mydiff(\*STDOUT, $filename, $c);
    }
} else {
    my $s = $file{changes} == 1 ? '' : 's';
    info("$file{changes} potentially required change$s detected”);
} } else {
    info("Looks good");
} }

close PATCH if $patch_opened;
exit 0;

sub try_use { eval "use @_; return @{$eq}" }

sub mydiff
{
    local *F = shift;
    my($file, $str) = @_;
    my $diff;

    if (exists $opt{diff}) {
        $diff = run_diff($opt{diff}, $file, $str);
    }

    if (!defined $diff and try_use('Text::Diff')) {
        $diff = Text::Diff::diff($file, $str, { STYLE => 'Unified' });
        $diff = <<HEADER . $diff;
        --- $file
        +++ $file.patched
        HEADER
    }

    if (!defined $diff) {
        $diff = run_diff('diff -u', $file, $str);
    }

    if (!defined $diff) {
        $diff = run_diff('diff', $file, $str);
    }

    if (!defined $diff) {
        error("Cannot generate a diff. Please install Text::Diff or use --copy.");
        return;
    }

    print F $diff;
}

sub run_diff
{
    my($prog, $file, $str) = @_;
    my $tmp = 'dppptemp';
    my $suf = 'aaa';
    my $diff = '';
while (-e "$tmp.$suf") { $suf++ }
$tmp = "$tmp.$suf";

if (open F, ">$tmp") {
    print F $str;
    close F;

    if (open F, "$prog $file $tmp |") {
        while (<F>) {
            s/Q$tmp/E/$file.patched/;
            $diff .= $_.
        }
        close F;
        unlink $tmp;
        return $diff;
    }

    unlink $tmp;
}
else {
    error("Cannot open '$tmp' for writing: $!");
}

return undef;
}

sub rec_depend
{
    my($func, $seen) = @_; 
    return () unless exists $depends{$func};
    $seen = {%{$seen||{}}};
    return () if $seen->{$func}++;
    my %s;
    grep !$s{$_}++, map { ($_, rec_depend($_, $seen)) } @{$depends{$func}}; 
    } @{$depends{$func}};
}

sub parse_version
{
    my $ver = shift;

    if ($ver =~ /^\d+\.\d+\.\d+$/) {
        return ($1, $2, $3);
    }
    elsif ($ver !~ /^\d+\.[\d_.]+$/) {
        die "cannot parse version '$ver' un";
    }
    $ver =~ s/_//g;

$ver =~ s/$/000000/;

my($r,$v,$s) = $ver =~ /\d+/.((\d{3}))((\d{3})/;

$v = int $v;
$s = int $s;

if ($r < 5 || ($r == 5 && $v < 6)) {
    if ($s % 10) {
        die "cannot parse version '$ver\n";
    }
}

return ($r, $v, $s);

sub format_version {
    my $ver = shift;

    $ver =~ s/$/000000/;
    my($r,$v,$s) = $ver =~ /\d+/.((\d{3}))((\d{3})/;

    $v = int $v;
    $s = int $s;

    if ($r < 5 || ($r == 5 && $v < 6)) {
        if ($s % 10) {
            die "invalid version '$ver\n";
        }
        $s /= 10;
    }

    $ver = sprintf "%d.%03d", $r, $v;
    $s > 0 and $ver .= sprintf "_.%02d", $s;

    return $ver;
}

return sprintf "%d.%d.%d", $r, $v, $s;

sub info {
    $opt{quiet} and return;
    print @_, "\n";
}

sub diag
{
$opt{quiet} and return;
$opt{diag} and print @_, "\n";
}
sub warning
{
$opt{quiet} and return;
print "*** ", @_, "\n";
}
sub error
{
print "*** ERROR: ", @_, "\n";
}
my %given_hints;
my %given_warnings;
sub hint
{
$opt{quiet} and return;
my $func = shift;
my $rv = 0;
if (exists $warnings{$func} && !$given_warnings{$func}++) {
my $warn = $warnings{$func};
$warn =~ s!^!*** !mg;
print "*** WARNING: $func\n", $warn;
$rv++;
}
if ($opt{hints} && exists $hints{$func} && !$given_hints{$func}++) {
my $hint = $hints{$func};
$hint =~ s/^/ /mg;
print " --- hint for $func ---\n", $hint;
}
$rv;
}
sub usage
{
my($usage) = do { local(@ARGV,$/)=($0); <> } =~ /^=head\d$HS+SYNOPSIS\s*^(.*?)\s*^=/ms;
my %M = ( 'I' => '*' );
$usage =~ s/^\s*perl\s+\S+/$^X $0/;
$usage =~ s/([A-Z])<([^>]+)>/$M{$1}$2$M{$1}/g;
print <<ENDUSAGE;
Usage: $usage

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See perldoc $0 for details.
ENDUSAGE
exit 2;
}
sub strip
{
my $self = do { local(@ARGV,$/)=($0); <> };
my($copy) = $self =~ /^=head\d\s+COPYRIGHT\s*^(.*?)^=\w+/ms;
$copy =~ s/^(?=\S+)/ /gms;
$self =~ s/^$HS+Do NOT edit.*?(?=^-)/$copy/ms;
$self =~ s/^SKIP.*(?=^__DATA__)/SKIP
if (\@ARGV && \$ARGV[0] eq '--unstrip') {
eval { require Devel::PPPort };
\$@ and die "Cannot require Devel::PPPort, please install.\\n";
if (eval \$Devel::PPPort::VERSION < $VERSION) {
die "$0 was originally generated with Devel::PPPort $VERSION.\\n"
. "Your Devel::PPPort is only version \$Devel::PPPort::VERSION.\\n"
. "Please install a newer version, or --unstrip will not work.\\n";
}
Devel::PPPort::WriteFile(\$0);
exit 0;
}
print <<END;
Sorry, but this is a stripped version of \$0.
To be able to use its original script and doc functionality,
please try to regenerate this file using:
\$^X \$0 --unstrip
END
/ms;
my($pl, $c) = $self =~ /(.*^__DATA__)(.*)/ms;
$c =~ s{
/ (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
| ( "[^"\\]*(?:\\.[^"\\]*)*"
| '[^'\\]*(?:\\.[^'\\]*)*' )
| ($HS+) }{ defined $2 ? ' ' : ($1 || '') }gsex;
$c =~ s!\s+$!!mg;
$c =~ s!^$LF!!mg;
$c =~ s!^\s*#\s*!#!mg;
$c =~ s!^\s+!!mg;
open OUT, ">$0" or die "cannot strip $0: $!\n";

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print OUT "$pl$e\n";

exit 0;
}

__DATA__
*/

Found in path(s):
No license file was found, but licenses were detected in source scan.

=head1 NAME

threads - Perl interpreter-based threads

=head1 VERSION

This document describes threads version 2.21

=head1 WARNING

The "interpreter-based threads" provided by Perl are not the fast, lightweight system for multitasking that one might expect or hope for. Threads are implemented in a way that make them easy to misuse. Few people know how to use them correctly or will be able to provide help.

The use of interpreter-based threads in perl is officially L<discouraged|perlpolicy/discouraged>.

=head1 SYNOPSIS

use threads ('yield',
    'stack_size' => 64*4096,
    'exit' => 'threads_only',
    'stringify');

sub start_thread {
    my @args = @_;
    print('Thread started: ', join(' ', @args), "\n");
}

my $thr = threads->create('start_thread', 'argument');
$thr->join();

threads->create(sub { print("I am a thread\n"); })->join();

my $thr2 = async { foreach (@files) { ... } };
$thr2->join();
if (my $err = $thr2->error()) {
    warn("Thread error: $err\n");
}

# Invoke thread in list context (implicit) so it can return a list
my ($thr) = threads->create(sub { return (qw/a b c/); });
# or specify list context explicitly
my $thr = threads->create({'context' => 'list'},
    sub { return (qw/a b c/); });
my @results = $thr->join();

$thr->detach();

# Get a thread's object
$thr = threads->self();
$thr = threads->object($tid);

# Get a thread's ID
$tid = threads->tid();
$tid = $thr->tid();
$tid = "$thr";

# Give other threads a chance to run
threads->yield();
yield();

# Lists of non-detached threads
my @threads = threads->list();
my $thread_count = threads->list();

my @running = threads->list(threads::running);
my @joinable = threads->list(threads::joinable);

# Test thread objects
if ($thr1 == $thr2) {
    ...
}

# Manage thread stack size
$stack_size = threads->get_stack_size();
$old_size = threads->set_stack_size(32*4096);

# Create a thread with a specific context and stack size
my $thr = threads->create(
    'context' => 'list',
    'stack_size' => 32*4096,
    'exit' => 'thread_only',
    &foo);
# Get thread's context
my $wantarray = $thr->wantarray();

# Check thread's state
if ($thr->is_running()) {
    sleep(1);
}
if ($thr->is_joinable()) {
    $thr->join();
}

# Send a signal to a thread
$thr->kill('SIGUSR1');

# Exit a thread
threads->exit();

=head1 DESCRIPTION

Since Perl 5.8, thread programming has been available using a model called
I<interpreter threads> which provides a new Perl interpreter for each
thread, and, by default, results in no data or state information being shared
between threads.

(Prior to Perl 5.8, I<5005threads> was available through the C<Thread.pm> API.
This threading model has been deprecated, and was removed as of Perl 5.10.0.)

As just mentioned, all variables are, by default, thread local. To use shared
variables, you need to also load L<threads::shared>:

    use threads;
    use threads::shared;

When loading L<threads::shared>, you must C<use threads> before you
C<use threads::shared>. (C<threads> will emit a warning if you do it the
other way around.)

It is strongly recommended that you enable threads via C<use threads> as early
as possible in your script.

If needed, scripts can be written so as to run on both threaded and
non-threaded Perls:

    my $can_use_threads = eval 'use threads; 1';
    if ($can_use_threads) {
        # Do processing using threads
        ...
    }
} else {  
  # Do it without using threads  
  ...
}

=item $thr = threads-&gt;create(FUNCTION, ARGS)

This will create a new thread that will begin execution with the specified entry point function, and give it the ARG list as parameters. It will return the corresponding threads object, or undef if thread creation failed.

FUNCTION may either be the name of a function, an anonymous subroutine, or a code ref.

my $thr = threads-&gt;create('func_name', ...);
   # or
my $thr = threads-&gt;create(sub { ... }, ...);
   # or
my $thr = threads-&gt;create('&amp;func, ...);

The new() method is an alias for create().

=item $thr-&gt;join()

This will wait for the corresponding thread to complete its execution. When the thread finishes, join() will return the return value(s) of the entry point function.

The context (void, scalar or list) for the return value(s) for join() is determined at the time of thread creation.

# Create thread in list context (implicit)
my ($thr1) = threads-&gt;create(sub {
   my @results = qw(a b c);
   return (@results);
});
   # or (explicit)
my $thr1 = threads-&gt;create({'context' =&gt; 'list'},
   sub {
   my @results = qw(a b c);
   return (@results);
  });
# Retrieve list results from thread
my @res1 = $thr1-&gt;join();

# Create thread in scalar context (implicit)
my $thr2 = threads->create(sub {
    my $result = 42;
    return ($result);
});
# Retrieve scalar result from thread
my $res2 = $thr2->join();

# Create a thread in void context (explicit)
my $thr3 = threads->create({'void' => 1},
    sub { print("Hello, world\n"); });
# Join the thread in void context (i.e., no return value)
$thr3->join();

See L</"THREAD CONTEXT"> for more details.

If the program exits without all threads having either been joined or detached, then a warning will be issued.

Calling C<-gt>join()> or C<-gt>detach()> on an already joined thread will cause an error to be thrown.

=item $thr->detach()

Makes the thread unjoinable, and causes any eventual return value to be discarded. When the program exits, any detached threads that are still running are silently terminated.

If the program exits without all threads having either been joined or detached, then a warning will be issued.

Calling C<-gt>join()> or C<-gt>detach()> on an already detached thread will cause an error to be thrown.

=item threads->detach()

Class method that allows a thread to detach itself.

=item threads->self()

Class method that allows a thread to obtain its own I<threads> object.

=item $thr->tid()

Returns the ID of the thread. Thread IDs are unique integers with the main thread in a program being 0, and incrementing by 1 for every thread created.

=item threads->tid()
Class method that allows a thread to obtain its own ID.

=item "$thr"

If you add the C<stringify> import option to your C<use threads> declaration, then using a threads object in a string or a string context (e.g., as a hash key) will cause its ID to be used as the value:

use threads qw(stringify);

my $thr = threads->create(...);
print("Thread $thr started\n"); # Prints: Thread 1 started

=item threads->object($tid)

This will return the I<threads> object for the I<active> thread associated with the specified thread ID. If C<$tid> is the value for the current thread, then this call works the same as C<-E<gt>self().> Otherwise, returns C<undef> if there is no thread associated with the TID, if the thread is joined or detached, if no TID is specified or if the specified TID is undef.

=item threads->yield()

This is a suggestion to the OS to let this thread yield CPU time to other threads. What actually happens is highly dependent upon the underlying thread implementation.

You may do C<use threads qw(yield)>, and then just use C<yield()> in your code.

=item threads->list()

=item threads->list(threads::all)

=item threads->list(threads::running)

=item threads->list(threads::joinable)

With no arguments (or using C<threads::all>) and in a list context, returns a list of all non-joined, non-detached I<threads> objects. In a scalar context, returns a count of the same.

With a I<true> argument (using C<threads::running>), returns a list of all non-joined, non-detached I<threads> objects that are still running.

With a I<false> argument (using C<threads::joinable>), returns a list of all non-joined, non-detached I<threads> objects that have finished running (i.e., for which C<-E<gt>join()> will not I<block>>).
Tests if two threads objects are the same thread or not. This is overloaded to the more natural forms:

```perl
if ($thr1 == $thr2) {
    print("Threads are the same\n");
} # or
if ($thr1 != $thr2) {
    print("Threads differ\n");
}
```

(Thread comparison is based on thread IDs.)

C<async> creates a thread to execute the block immediately following it. This block is treated as an anonymous subroutine, and so must have a semicolon after the closing brace. Like C<threads-E<gt>create()>, C<async> returns a I<threads> object.

```
=item $thr->error()

Threads are executed in an C<eval> context. This method will return C<undef> if the thread terminates I<normally>. Otherwise, it returns the value of C<$@> associated with the thread's execution status in its C<eval> context.
```

```
=item $thr->_handle()

This I<private> method returns a pointer (i.e., the memory location expressed as an unsigned integer) to the internal thread structure associated with a threads object. For Win32, this is a pointer to the C<HANDLE> value returned by C<CreateThread> (i.e., C<HANDLE *>); for other platforms, it is a pointer to the C<pthread_t> structure used in the C<pthread_create> call (i.e., C<pthread_t *>).

This method is of no use for general Perl threads programming. Its intent is to provide other (XS-based) thread modules with the capability to access, and possibly manipulate, the underlying thread structure associated with a Perl thread.
```

```
=item threads->_handle()

Class method that allows a thread to obtain its own I<handle>.
```

=back
EXITING A THREAD

The usual method for terminating a thread is to `return(EXPR)` from the entry point function with the appropriate return value(s).

```
=item threads->exit()
```

If needed, a thread can be exited at any time by calling `threads->exit()`. This will cause the thread to return `undef` in a scalar context, or the empty list in a list context.

When called from the `main` thread, this behaves the same as `exit(0)`.

```
=item threads->exit(status)
```

When called from a thread, this behaves like `threads->exit()` (i.e., the exit status code is ignored).

When called from the `main` thread, this behaves the same as `exit(status)`.

```
=item die()
```

Calling `die()` in a thread indicates an abnormal exit for the thread. Any `__DIE__` handler in the thread will be called first, and then the thread will exit with a warning message that will contain any arguments passed in the `die()` call.

```
=item exit(status)
```

Calling `exit(EXPR)` inside a thread causes the whole application to terminate. Because of this, the use of `exit()` inside threaded code, or in modules that might be used in threaded applications, is strongly discouraged.

If `exit()` really is needed, then consider using the following:

```
threads->exit() if threads->can('exit');  # Thread friendly
exit(status);
```

```
=item use threads 'exit' => 'threads_only'
```

This globally overrides the default behavior of calling `exit()` inside a thread, and effectively causes such calls to behave the same as `threads->exit()`. In other words, with this setting, calling `exit()`...
causes only the thread to terminate.

Because of its global effect, this setting should not be used inside modules or the like.

The I<main> thread is unaffected by this setting.

=item threads->create(
  { 'exit' => 'thread_only' }, ...)

This overrides the default behavior of C<exit()> inside the newly created thread only.

=item $thr->set_thread_exit_only(boolean)

This can be used to change the I<exit thread only> behavior for a thread after it has been created. With a I<true> argument, C<exit()> will cause only the thread to exit. With a I<false> argument, C<exit()> will terminate the application.

The I<main> thread is unaffected by this call.

=item threads->set_thread_exit_only(boolean)

Class method for use inside a thread to change its own behavior for C<exit()>.

The I<main> thread is unaffected by this call.

=back

=head1 THREAD STATE

The following boolean methods are useful in determining the I<state> of a thread.

=over

=item $thr->is_running()

Returns true if a thread is still running (i.e., if its entry point function has not yet finished or exited).

=item $thr->is_joinable()

Returns true if the thread has finished running, is not detached and has not yet been joined. In other words, the thread is ready to be joined, and a call to C<$thr->join()> will not I<brace>.  

=item $thr->is_detached()
Returns true if the thread has been detached.
=item threads->is_detached()
Class method that allows a thread to determine whether or not it is detached.
=back
=head1 THREAD CONTEXT
As with subroutines, the type of value returned from a thread's entry point
function may be determined by the thread's I<context>: list, scalar or void.
The thread's context is determined at thread creation. This is necessary so
that the context is available to the entry point function via
L<wantarray()|perlfunc/"wantarray">. The thread may then specify a value of
the appropriate type to be returned from C<-E<gt>join()>.
=head2 Explicit context
Because thread creation and thread joining may occur in different contexts, it
may be desirable to state the context explicitly to the thread's entry point
function. This may be done by calling C<-E<gt>create()> with a hash reference
as the first argument:
my $thr = threads->create({'context' => 'list'}, \&foo);
...
my @results = $thr->join();
In the above, the threads object is returned to the parent thread in scalar
context, and the thread's entry point function C<foo> will be called in list
(array) context such that the parent thread can receive a list (array) from
the C<-E<gt>join()> call. (C<'array'> is synonymous with C<'list'>.)
Similarly, if you need the threads object, but your thread will not be
returning a value (i.e., I<void> context), you would do the following:
my $thr = threads->create({'context' => 'void'}, \&foo);
...
$thr->join();
The context type may also be used as the I<key> in the hash reference followed
by a I<true> value:
threads->create({'scalar' => 1}, \&foo);
...
my ($thr) = threads->list();
my $result = $thr->join();

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If not explicitly stated, the thread's context is implied from the context of the \texttt{C\textasciitilde create()} call:

\begin{verbatim}
# Create thread in list context
my ($thr) = threads->create(...);

# Create thread in scalar context
my $thr = threads->create(...);

# Create thread in void context
threads->create(...);
\end{verbatim}

This returns the thread's context in the same manner as \texttt{L<wantarray()>perlfunc/'wantarray'>}.

\begin{verbatim}
Class method to return the current thread's context. This returns the same value as running \texttt{L<wantarray()>perlfunc/'wantarray'>} inside the current thread's entry point function.
\end{verbatim}

The default per-thread stack size for different platforms varies significantly, and is almost always far more than is needed for most applications. On Win32, Perl's makefile explicitly sets the default stack to 16 MB; on most other platforms, the system default is used, which again may be much larger than is needed.

By tuning the stack size to more accurately reflect your application's needs, you may significantly reduce your application's memory usage, and increase the number of simultaneously running threads.

Note that on Windows, address space allocation granularity is 64 KB, therefore, setting the stack smaller than that on Win32 Perl will not save any more memory.

Returns the current default per-thread stack size. The default is zero, which means the system default stack size is currently in use.
=item $size = $thr->get_stack_size();

Returns the stack size for a particular thread. A return value of zero indicates the system default stack size was used for the thread.

=item $old_size = threads->set_stack_size($new_size);

Sets a new default per-thread stack size, and returns the previous setting.

Some platforms have a minimum thread stack size. Trying to set the stack size below this value will result in a warning, and the minimum stack size will be used.

Some Linux platforms have a maximum stack size. Setting too large of a stack size will cause thread creation to fail.

If needed, $new_size will be rounded up to the next multiple of the memory page size (usually 4096 or 8192).

Threads created after the stack size is set will then either call C<pthread_attr_setstacksize()> I<(for pthreads platforms)>, or supply the stack size to C<CreateThread()> I<(for Win32 Perl)>.

(Obviously, this call does not affect any currently extant threads.)

=item use threads ('stack_size' => VALUE);

This sets the default per-thread stack size at the start of the application.

=item $ENV{'PERL5_ITHREADS_STACK_SIZE'}

The default per-thread stack size may be set at the start of the application through the use of the environment variable C<PERL5_ITHREADS_STACK_SIZE>:

```
PERL5_ITHREADS_STACK_SIZE=1048576
export PERL5_ITHREADS_STACK_SIZE
perl -e'use threads; print(threads->get_stack_size(), "\n")'
```

This value overrides any stack_size parameter given to use threads>. Its primary purpose is to permit setting the per-thread stack size for legacy threaded applications.

=item threads->create({'stack_size' => VALUE}, FUNCTION, ARGS)

To specify a particular stack size for any individual thread, call C<-E<gt>create()> with a hash reference as the first argument:
my $thr = threads->create( {'stack_size' => 32*4096}, 
&foo, @args);

=item $thr2 = $thr1->create(FUNCTION, ARGs)

This creates a new thread (C<$thr2>) that inherits the stack size from an existing thread (C<$thr1>). This is shorthand for the following:

my $stack_size = $thr1->get_stack_size();
my $thr2 = threads->create( {'stack_size' => $stack_size},
    FUNCTION, ARGs);

=back

=head1 THREAD SIGNALLING

When safe signals is in effect (the default behavior - see L</"Unsafe signals">
for more details), then signals may be sent and acted upon by individual threads.

=over 4

=item $thr->kill('SIG...');

Sends the specified signal to the thread. Signal names and (positive) signal numbers are the same as those supported by L<kill()|perlfunc/> for example, 'SIGTERM', 'TERM' and (depending on the OS) 15 are all valid arguments to C<threads->kill()>.

Returns the thread object to allow for method chaining:

$thr->kill('SIG...')->join();

=back

Signal handlers need to be set up in the threads for the signals they are expected to act upon. Here's an example for I<cancelling> a thread:

use threads;

sub thr_func
{
    # Thread 'cancellation' signal handler
    $SIG{'KILL'} = sub { threads->exit(); };

    ...
}


# Create a thread
my $thr = threads->create('thr_func');

...

# Signal the thread to terminate, and then detach
# it so that it will get cleaned up automatically
$thr->kill('KILL')->detach();

Here’s another simplistic example that illustrates the use of thread signalling in conjunction with a semaphore to provide rudimentary I<suspend> and I<resume> capabilities:

use threads;
use Thread::Semaphore;

sub thr_func
{
    my $sema = shift;

    # Thread 'suspend/resume' signal handler
    $SIG{'STOP'} = sub {
        $sema->down();      # Thread suspended
        $sema->up();        # Thread resumes
    };

    ...
}

# Create a semaphore and pass it to a thread
my $sema = Thread::Semaphore->new();
my $thr = threads->create('thr_func', $sema);

# Suspend the thread
$sema->down();
$thr->kill('STOP');

...

# Allow the thread to continue
$sema->up();

CAVEAT: The thread signalling capability provided by this module does not actually send signals via the OS. It I<emulates> signals at the Perl-level such that signal handlers are called in the appropriate thread. For example, sending C<$thr-E<gt>kill('STOP')> does not actually suspend a thread (or the whole process), but does cause a C<$SIG{'STOP'}> handler to be called in that thread (as illustrated above).
As such, signals that would normally not be appropriate to use in the `kill()` command (e.g., `kill('KILL', $$)`) are okay to use with the `kill()` method (again, as illustrated above).

Correspondingly, sending a signal to a thread does not disrupt the operation the thread is currently working on: The signal will be acted upon after the current operation has completed. For instance, if the thread is stuck on an I/O call, sending it a signal will not cause the I/O call to be interrupted such that the signal is acted up immediately.

Sending a signal to a terminated/finished thread is ignored.

=head1 WARNINGS

=over 4

=item Perl exited with active threads:

If the program exits without all threads having either been joined or detached, then this warning will be issued.

NOTE: If the `main` thread exits, then this warning cannot be suppressed using `no warnings 'threads';` as suggested below.

=item Thread creation failed: `pthread_create` returned #

See the appropriate `man` page for `pthread_create` to determine the actual cause for the failure.

=item Thread # terminated abnormally: ...

A thread terminated in some manner other than just returning from its entry point function, or by using `threads->exit()`. For example, the thread may have terminated because of an error, or by using `die`.

=item Using minimum thread stack size of #

Some platforms have a minimum thread stack size. Trying to set the stack size below this value will result in the above warning, and the stack size will be set to the minimum.

=item Thread creation failed: `pthread_attr_getstacksize` returned 22

The specified `SIZE` exceeds the system's maximum stack size. Use a smaller value for the stack size.
If needed, thread warnings can be suppressed by using:

```perl
no warnings 'threads';
```

in the appropriate scope.

=head1 ERRORS

=over 4

=item This Perl not built to support threads

The particular copy of Perl that you're trying to use was not built using the C<useithreads> configuration option.

Having threads support requires all of Perl and all of the XS modules in the Perl installation to be rebuilt; it is not just a question of adding the L<threads> module (i.e., threaded and non-threaded Perls are binary incompatible).

=item Cannot change stack size of an existing thread

The stack size of currently extant threads cannot be changed, therefore, the following results in the above error:

```perl
$thr->set_stack_size($size);
```

=item Cannot signal threads without safe signals

Safe signals must be in effect to use the C<-E<gt>kill()> signalling method. See L</"Unsafe signals"> for more details.

=item Unrecognized signal name: ...

The particular copy of Perl that you're trying to use does not support the specified signal being used in a C<-E<gt>kill()> call.

=back

=head1 BUGS AND LIMITATIONS

Before you consider posting a bug report, please consult, and possibly post a message to the discussion forum to see if what you've encountered is a known problem.

=over
=item Thread-safe modules

See L<perlmod/"Making your module threadsafe"> when creating modules that may be used in threaded applications, especially if those modules use non-Perl data, or XS code.

=item Using non-thread-safe modules

Unfortunately, you may encounter Perl modules that are not I<thread-safe>. For example, they may crash the Perl interpreter during execution, or may dump core on termination. Depending on the module and the requirements of your application, it may be possible to work around such difficulties.

If the module will only be used inside a thread, you can try loading the module from inside the thread entry point function using C<require> (and C<import> if needed):

```perl
sub thr_func
{
    require Unsafe::Module
    # Unsafe::Module->import(...);

    ....
}
```

If the module is needed inside the I<main> thread, try modifying your application so that the module is loaded (again using C<require> and C<E<gt>import()> after any threads are started, and in such a way that no other threads are started afterwards.

If the above does not work, or is not adequate for your application, then file a bug report on L<http://rt.cpan.org/Public/> against the problematic module.

=item Memory consumption

On most systems, frequent and continual creation and destruction of threads can lead to ever-increasing growth in the memory footprint of the Perl interpreter. While it is simple to just launch threads and then C<E<gt>join()> or C<E<gt>detach()> them, for long-lived applications, it is better to maintain a pool of threads, and to reuse them for the work needed, using L<queues/Thread::Queue> to notify threads of pending work. The CPAN distribution of this module contains a simple example (F<examples/pool_reuse.pl>) illustrating the creation, use and monitoring of a pool of I<reusable> threads.

=item Current working directory

On all platforms except MSWin32, the setting for the current working directory
is shared among all threads such that changing it in one thread (e.g., using `C<chdir()>`) will affect all the threads in the application.

On MSWin32, each thread maintains its own the current working directory setting.

=item Environment variables

Currently, on all platforms except MSWin32, all `I<system>` calls (e.g., using `C<system()>` or back-ticks) made from threads use the environment variable settings from the `I<main>` thread. In other words, changes made to `C<%ENV>` in a thread will not be visible in `I<system>` calls made by that thread.

To work around this, set environment variables as part of the `I<system>` call. For example:

```perl
my $msg = 'hello';
system("FOO=$msg; echo \$FOO");  # Outputs 'hello' to STDOUT
```

On MSWin32, each thread maintains its own set of environment variables.

=item Catching signals

Signals are `I<caught>` by the main thread (thread ID = 0) of a script. Therefore, setting up signal handlers in threads for purposes other than `L</"THREAD SIGNALLING">` as documented above will not accomplish what is intended.

This is especially true if trying to catch `C<SIGALRM>` in a thread. To handle alarms in threads, set up a signal handler in the main thread, and then use `L</"THREAD SIGNALLING">` to relay the signal to the thread:

```perl
# Create thread with a task that may time out
my $thr = threads->create(sub {
   threads->yield();
   eval {
      SSIG(ALRM) = sub { die("Timeout\n"); };
      alarm(10);
      ...  # Do work here
      alarm(0);
   };
   if ($@ =~ /Timeout/) {
      warn("Task in thread timed out\n");
   }
});

# Set signal handler to relay SIGALRM to thread
SSIG(ALRM) = sub { $thr->kill('ALRM') };
```
... # Main thread continues working

=item Parent-child threads

On some platforms, it might not be possible to destroy I<parent> threads while there are still existing I<child> threads.

=item Unsafe signals

Since Perl 5.8.0, signals have been made safer in Perl by postponing their handling until the interpreter is in a I<safe> state. See L<perl58delta/"Safe Signals"> and L<perlipc/"Deferred Signals (Safe Signals)"> for more details.

Safe signals is the default behavior, and the old, immediate, unsafe signalling behavior is only in effect in the following situations:

=over 4

=item * Perl has been built with C<PERL_OLD_SIGNALS> (see C<perl -V>).

=item * The environment variable C<PERL_SIGNALS> is set to C<unsafe> (see L<perlrun/"PERL_SIGNALS">).

=item * The module L<Perl::Unsafe::Signals> is used.

=back

If unsafe signals is in effect, then signal handling is not thread-safe, and the C<-E<gt>kill()> signalling method cannot be used.

=item Identity of objects returned from threads

When a value is returned from a thread through a C<join> operation, the value and everything that it references is copied across to the joining thread, in much the same way that values are copied upon thread creation. This works fine for most kinds of value, including arrays, hashes, and subroutines. The copying recurses through array elements, reference scalars, variables closed over by subroutines, and other kinds of reference.

However, everything referenced by the returned value is a fresh copy in the joining thread, even if a returned object had in the child thread been a copy of something that previously existed in the parent thread. After joining, the parent will therefore have a duplicate of each such object. This sometimes matters, especially if the object gets mutated; this can especially matter for private data to which a returned subroutine
returns access.

=item Returning blessed objects from threads

Returning blessed objects from threads does not work. Depending on the classes involved, you may be able to work around this by returning a serialized version of the object (e.g., using L<Data::Dumper> or L<Storable>), and then reconstituting it in the joining thread. If you're using Perl 5.10.0 or later, and if the class supports L<shared objects|threads::shared/OBJECTS>, you can pass them via L<shared queues|Thread::Queue>.

=item END blocks in threads

It is possible to add L<END blocks|perlmod/BEGIN, UNITCHECK, CHECK, INIT and END> to threads by using L<require|perlfunc/reQUIRE VERSION> or L<eval|perlfunc/eval EXPR> with the appropriate code. These C<END> blocks will then be executed when the thread's interpreter is destroyed (i.e., either during a C<-E<gt>join()> call, or at program termination).

However, calling any L<threads> methods in such an C<END> block will most likely I<fail> (e.g., the application may hang, or generate an error) due to mutexes that are needed to control functionality within the L<threads> module.

For this reason, the use of C<END> blocks in threads is B<strongly> discouraged.

=item Open directory handles

In perl 5.14 and higher, on systems other than Windows that do not support the C<fchdir> C function, directory handles (see L<opendir|perlfunc/opendir DIRHANDLE,EXPR>) will not be copied to new threads. You can use the C<d_fchdir> variable in L<Config.pm|Config> to determine whether your system supports it.

In prior perl versions, spawning threads with open directory handles would crash the interpreter.

L<perl #75154|http://rt.perl.org/rt3/Public/Bug/Display.html?id=75154>

=item Detached threads and global destruction

If the main thread exits while there are detached threads which are still running, then Perl's global destruction phase is not executed because otherwise certain global structures that control the operation of threads and that are allocated in the main thread's memory may get destroyed before the detached thread is destroyed.

If you are using any code that requires the execution of the global destruction phase for clean up (e.g., removing temp files), then do not use
detached threads, but rather join all threads before exiting the program.

=item Perl Bugs and the CPAN Version of L<threads>

Support for threads extends beyond the code in this module (i.e., F<threads.pm> and F<threads.xs>), and into the Perl interpreter itself. Older versions of Perl contain bugs that may manifest themselves despite using the latest version of L<threads> from CPAN. There is no workaround for this other than upgrading to the latest version of Perl.

Even with the latest version of Perl, it is known that certain constructs with threads may result in warning messages concerning leaked scalars or unreferenced scalars. However, such warnings are harmless, and may safely be ignored.

You can search for L<threads> related bug reports at L<http://rt.cpan.org/Public/>. If needed submit any new bugs, problems, patches, etc. to: L<http://rt.cpan.org/Public/Dist/Display.html?Name=threads>

=back

=head1 REQUIREMENTS

Perl 5.8.0 or later

=head1 SEE ALSO

threads on MetaCPAN: L<https://metacpan.org/release/threads>


L<threads::shared>, L<perlthrtut>


Perl threads mailing list: L<http://lists.perl.org/list/ithreads.html>

Stack size discussion: L<http://www.perlmonks.org/?node_id=532956>

Sample code in the I<examples> directory of this distribution on CPAN.

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Helping me out tons, trying to find reasons for races and other weird bugs!

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Helping with debugging

Dean Arnold <darnold AT presicient DOT com>
Stack size API

=cut

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Markus Kuhn -- 2007-05-26 (Unicode 5.0)

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1.567 jline-reader 3.12.1

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1.568 pciutils 3.7.0-1.el8

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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/collect/FilteredMultimap.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/collect/FilteredEntrySetMultimap.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/collect/UnmodifiableSortedMultiset.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/collect/SortedMultisetBridge.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/collect/AbstractMultiset.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/base/FinalizableSoftReference.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/base/Functions.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5.jar/com/google/common/io/CountingInputStream.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5.jar/com/google/common/io/LittleEndianDataInputStream.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/collect/SortedLists.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
  jar/com/google/common/base/Preconditions.java
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  jar/com/google/common/base/VerifyException.java
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  jar/com/google/common/collection/FilteredMultimapValues.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/util/concurrent/AbstractIdleService.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/net/UrlEscapers.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/base/Utf8.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/xml/XmlEscapers.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/base/UTF8.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
  jar/com/google/common/hash/ChecksumHashFunction.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
  jar/com/google/common/collection/CartesianList.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
  jar/com/google/common/collection/ImmutableRangeMap.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
  jar/com/google/common/collection/ImmutableRangeSet.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
  jar/com/google/common/hash/SipHashFunction.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
  jar/com/google/common/collection/FilteredKeyMultimap.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
  jar/com/google/common/io/BaseEncoding.java
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  jar/com/google/common/util/concurrent/FuturesGetChecked.java
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/*
jar/com/google/common/math/MathPreconditions.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
jar/com/google/common/cache/Weigher.java

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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
jar/com/google/common/util/concurrent/TimeLimiter.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
jar/com/google/common/io/PatternFilenameFilter.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
jar/com/google/common/escape/CharEscaperBuilder.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
jar/com/google/common/io/AppendableWriter.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
jar/com/google/common/base/CaseFormat.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
jar/com/google/common/reflect/TypeToken.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
jar/com/google/common/util/concurrent/UncheckedTimeoutException.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-
jar/com/google/common/util/concurrent/GwtFuturesCatchingSpecialization.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/collection/MultimapBuilder.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/collection/ImmutableMapEntry.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/util/concurrent/WrappingScheduledExecutorService.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/thirdparty/publicsuffix/PublicSuffixType.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/io/CharSequenceReader.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/cache/Striped64.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/cache/LongAdder.java

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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/util/concurrent/InterruptibleTask.java
* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/util/concurrent/Platform.java
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* /opt/cola/permits/1150909099_1617718347.03/0/guava-19-0-sources-5-jar/com/google/common/hash/package-info.java

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Written by: Philip Hazel
Email local part: ph10
Email domain: cam.ac.uk

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---------------------------------------------------------------------------

[zlib]

/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.3, July 18th, 2005

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The data format used by the zlib library is described by RFCs (Request for
Comments) 1950 to 1952 in the files http://www.ietf.org/rfc/rfc1950.txt
(zlib format), rfc1951.txt (deflate format) and rfc1952.txt (gzip format).
*/

---------------------------------------------------------------------------

dialyzer]

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[leex]

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1.578 open-ldap 2.4.46-18.el8

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1.579 netmiko 3.4.0
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1.582 prometheus-client 0.2.0

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EndSplineSet
Validated: 1
EndChar
StartChar: copyright
Encoding: 169 169 102
GlifName: copyright
Width: 869
Flags: HMW
LayerCount: 2
Back
SplineSet
548 524 m 2
564 517 l 1
537 439 l 1
518 446 l 1
495 454 473 458 449 458 c 0
371 458 351 408 351 353 c 0
351 294 372 238 455 238 c 0
475 238 495 242 515 249 c 2
533 255 l 1
561 179 l 1
543 172 l 2
509 159 474 152 437 152 c 0
355 152 255 195 255 343 c 0
255 496 355 547 442 547 c 0
479 547 515 539 548 524 c 2
430 602 m 0
284 602 171 484 171 347 c 0
171 210 284 93 430 93 c 0
576 93 688 210 688 347 c 0
688 484 576 602 430 602 c 0
792 347 m 3
792 155 634 -10 430 -10 c 3
226 -10 67 154 67 347 c 3
67 536 223 706 430 706 c 3
634 706 792 539 792 347 c 3
EndSplineSet
Fore
SplineSet
784 334 m 259
784 129 638 -10 432 -10 c 3
229 -10 85 130 85 334 c 259
85 537 228 678 432 678 c 3
638 678 784 540 784 334 c 259
719 334 m 259
719 498 600 614 436 614 c 3
270 614 151 499 151 334 c 259
1.584 perl-file-path 2.15-2.el8

1.584.1 Available under license:

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---
abstract: 'Create or remove directory trees'
author:
- unknown
buildRequires:
  Carp: '0'
  Config: '0'
  Errno: '0'
  ExtUtils::MakeMaker: '0'
  Fcntl: '0'
  File::Spec::Functions: '0'
  SelectSaver: '0'
  Test::Simple: '0.44'
configureRequires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.24, CPAN::Meta::Converter version 2.150010'
license: unknown
metaSpec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
name: File-Path
no_index:
directory:
- t
- inc
requires:
  Cwd: '0'
  Exporter: '0'
  File::Basename: '0'
  File::Spec: '0'
resources:
  repository: https://github.com/jkeenan/File-Path.git
  version: '2.15'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'

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NAME
File::Path - Create or remove directory trees

INSTALLATION
perl Makefile.PL
make
make test
make install

PREREQUISITES
All prerequisites are found in the Perl 5 core distribution.

To configure:
  ExtUtils::MakeMaker

To build:
  Cwd               File::Basename
  Exporter          File::Spec

To test:
  Carp               File::Spec::Functions
  Config             SelectSaver
  Cwd                Test::More
  Errno              Win32   # Windows only
  Fcntl

BUGS
The File-Path bug tracker is located at:

  <http://rt.cpan.org/NoAuth/Bugs.html?Dist=File-Path>

File reports by sending email to:
Include test programs or patches as email attachments.

AUTHORS
Prior authors and maintainers: Tim Bunce, Charles Bailey, and David Landgren (david at landgren dot net).

Current maintainers are Richard Elberger (riche at cpan dot org) and James E Keenan (jkeenan at cpan dot org).

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=head1 NAME
File::Path - Create or remove directory trees

=head1 VERSION

=head1 SYNOPSIS
use File::Path qw(make_path remove_tree);

@created = make_path('foo/bar/baz', '/zug/zwang');
@created = make_path('foo/bar/baz', '/zug/zwang', { verbose => 1,
           mode => 0711,
       });
make_path('foo/bar/baz', '/zug/zwang', { chmod => 0777,
                  });

$removed_count = remove_tree('foo/bar/baz', '/zug/zwang', { verbose => 1,
This module provides a convenient way to create directories of arbitrary depth and to delete an entire directory subtree from the filesystem.

The following functions are provided:

=item make_path( $dir1, $dir2, .... )

=item make_path( $dir1, $dir2, ...., \%opts )

The C<make_path> function creates the given directories if they don't exist before, much like the Unix command C<mkdir -p>.

The function accepts a list of directories to be created. Its behaviour may be tuned by an optional hashref appearing as the last parameter on the call.

The function returns the list of directories actually created during the call; in scalar context the number of directories created.

The following keys are recognised in the option hash:

=item mode => $num

The numeric permissions mode to apply to each created directory (defaults to C<0777>), to be modified by the current C<umask>. If the directory already exists (and thus does not need to be created).
the permissions will not be modified.

C<mask> is recognised as an alias for this parameter.

=item chmod => $num

Takes a numeric mode to apply to each created directory (not modified by the current C<umask>). If the directory already exists (and thus does not need to be created), the permissions will not be modified.

=item verbose => $bool

If present, will cause C<make_path> to print the name of each directory as it is created. By default nothing is printed.

=item error => \$err

If present, it should be a reference to a scalar. This scalar will be made to reference an array, which will be used to store any errors that are encountered. See the L</"ERROR HANDLING"> section for more information.

If this parameter is not used, certain error conditions may raise a fatal error that will cause the program to halt, unless trapped in an C<eval> block.

=item owner => $owner

=item user => $owner

=item uid => $owner

If present, will cause any created directory to be owned by C<$owner>. If the value is numeric, it will be interpreted as a uid; otherwise a username is assumed. An error will be issued if the username cannot be mapped to a uid, the uid does not exist or the process lacks the privileges to change ownership.

Ownership of directories that already exist will not be changed.

C<user> and C<uid> are aliases of C<owner>.

=item group => $group

If present, will cause any created directory to be owned by the group C<$group>. If the value is numeric, it will be interpreted as a gid; otherwise a group name is assumed. An error will be issued if the
group name cannot be mapped to a gid, the gid does not exist or the process lacks the privileges to change group ownership.

Group ownership of directories that already exist will not be changed.

    make_path '/var/tmp/webcache', {owner=>'nobody', group=>'nogroup'};

=back

=item mkpath( $dir )

=item mkpath( $dir, $verbose, $mode )

=item mkpath( [$dir1, $dir2,...], $verbose, $mode )

=item mkpath( $dir1, $dir2,..., %opt )

The C<mkpath()> function provide the legacy interface of C<make_path()> with a different interpretation of the arguments passed. The behaviour and return value of the function is otherwise identical to C<make_path()>.

=item remove_tree( $dir1, $dir2, .... )

=item remove_tree( $dir1, $dir2, ...., %opts )

The C<remove_tree> function deletes the given directories and any files and subdirectories they might contain, much like the Unix command C<rm -rf> or the Windows commands C<rmdir /s> and C<rd /s>.

The function accepts a list of directories to be removed. (In point of fact, it will also accept filesystem entries which are not directories, such as regular files and symlinks. But, as its name suggests, its intent is to remove trees rather than individual files.)

C<remove_tree()>'s behaviour may be tuned by an optional hashref appearing as the last parameter on the call. If an empty string is passed to C<remove_tree>, an error will occur.

B<NOTE:> For security reasons, we strongly advise use of the hashref-as-final-argument syntax -- specifically, with a setting of the C<safe> element to a true value.

    remove_tree( $dir1, $dir2, .....,
       {
          safe => 1,
          ...    # other key-value pairs
       },


The function returns the number of files successfully deleted.

The following keys are recognised in the option hash:

=item over

If present, will cause C<remove_tree> to print the name of each file as it is unlinked. By default nothing is printed.

=item verbose => $bool

When set to a true value, will cause C<remove_tree> to skip the files for which the process lacks the required privileges needed to delete files, such as delete privileges on VMS. In other words, the code will make no attempt to alter file permissions. Thus, if the process is interrupted, no filesystem object will be left in a more permissive mode.

=item keep_root => $bool

When set to a true value, will cause all files and subdirectories to be removed, except the initially specified directories. This comes in handy when cleaning out an application's scratch directory.

    remove_tree( '/tmp', {keep_root => 1} );

=item result => \$res

If present, it should be a reference to a scalar. This scalar will be made to reference an array, which will be used to store all files and directories unlinked during the call. If nothing is unlinked, the array will be empty.

    remove_tree( '/tmp', {result => \my $list} );
    print "unlinked $\n" for @$list;

This is a useful alternative to the C<verbose> key.

=item error => \$err

If present, it should be a reference to a scalar. This scalar will be made to reference an array, which will be used to store any errors that are encountered. See the L</"ERROR HANDLING"> section for more information.
Removing things is a much more dangerous proposition than creating things. As such, there are certain conditions that `remove_tree` may encounter that are so dangerous that the only sane action left is to kill the program.

Use `error` to trap all that is reasonable (problems with permissions and the like), and let it die if things get out of hand. This is the safest course of action.

```perl
=item rmtree( $dir )
=item rmtree( $dir, $verbose, $safe )
=item rmtree( [$dir1, $dir2,...], $verbose, $safe )
=item rmtree( $dir1, $dir2,..., %opt )
```

The `rmtree()` function provides the legacy interface of `remove_tree()` with a different interpretation of the arguments passed. The behaviour and return value of the function is otherwise identical to `remove_tree()`.

**NOTE:** For security reasons, we strongly advise use of the hashref-as-final-argument syntax, specifically with a setting of the C<safe> element to a true value.

```perl
rmtree( $dir1, $dir2, .....,
   {
      safe => 1,
      ... # other key-value pairs
   },
);
```

**ERROR HANDLING**

**NOTE:**

The following error handling mechanism is consistent throughout all code paths EXCEPT in cases where the ROOT node is nonexistent. In version 2.11 the maintainers attempted to rectify this inconsistency but too many downstream modules encountered problems. In such case,
if you require root node evaluation or error checking prior to calling
C<make_path> or C<remove_tree>, you should take additional precautions.

If C<make_path> or C<remove_tree> encounters an error, a diagnostic
message will be printed to C<STDERR> via C<carp> (for non-fatal
errors) or via C<croak> (for fatal errors).

If this behaviour is not desirable, the C<error> attribute may be
used to hold a reference to a variable, which will be used to store
the diagnostics. The variable is made a reference to an array of hash
references. Each hash contain a single key/value pair where the key
is the name of the file, and the value is the error message (including
the contents of C<$!> when appropriate). If a general error is
encountered the diagnostic key will be empty.

An example usage looks like:

remove_tree( 'foo/bar', 'bar/rat', {error => \my $err} );
if ($err && @$err) {
    for my $diag (@$err) {
        my ($file, $message) = %$diag;
        if ($file eq '') {
            print "general error: $message\n";
        } else {
            print "problem unlinking $file: $message\n";
        }
    }
} else {
    print "No error encountered\n";
}

Note that if no errors are encountered, C<$err> will reference an
empty array. This means that C<$err> will always end up TRUE; so you
need to test C<@$err> to determine if errors occurred.

=head2 NOTES

C<File::Path> blindly exports C<mkpath> and C<rmtree> into the
current namespace. These days, this is considered bad style, but
to change it now would break too much code. Nonetheless, you are
invited to specify what it is you are expecting to use:

use File::Path 'rmtree';
The routines `make_path` and `remove_tree` are not exported by default. You must specify which ones you want to use.

```perl
use File::Path 'remove_tree';
```

Note that a side-effect of the above is that `mkpath` and `rmtree` are no longer exported at all. This is due to the way the `Exporter` module works. If you are migrating a codebase to use the new interface, you will have to list everything explicitly. But that's just good practice anyway.

```perl
use File::Path qw(remove_tree rmtree);
```

=head3 API CHANGES

The API was changed in the 2.0 branch. For a time, `mkpath` and `rmtree` tried, unsuccessfully, to deal with the two different calling mechanisms. This approach was considered a failure.

The new semantics are now only available with `make_path` and `remove_tree`. The old semantics are only available through `mkpath` and `rmtree`. Users are strongly encouraged to upgrade to at least 2.08 in order to avoid surprises.

=head3 SECURITY CONSIDERATIONS

There were race conditions in the 1.x implementations of `Path::`'s `rmtree` function (although sometimes patched depending on the OS distribution or platform). The 2.0 version contains code to avoid the problem mentioned in CVE-2002-0435.

See the following pages for more information:

- http://bugs.debian.org/cgi-bin/bugreport.cgi?bug=286905
- http://www.nntp.perl.org/group/perl.perl5.porters/2005/01/msg97623.html

Additionally, unless the `safe` parameter is set (or the third parameter in the traditional interface is TRUE), should a `remove_tree` be interrupted, files that were originally in read-only mode may now have their permissions set to a read-write (or "delete OK") mode.

The following CVE reports were previously filed against `Path::` and are believed to have been addressed:

=over 4
In February 2017 the cPanel Security Team reported an additional vulnerability in File-Path. The `chmod()` logic to make directories traversable can be abused to set the mode on an attacker-chosen file to an attacker-chosen value. This is due to the time-of-check-to-time-of-use (TOCTTOU) race condition between the `stat()` that decides the inode is a directory and the `chmod()` that tries to make it user-rwx. CPAN versions 2.13 and later incorporate a patch provided by John Lightsey to address this problem. This vulnerability has been reported as CVE-2017-6512.

=head1 DIAGNOSTICS

FATAL errors will cause the program to halt (`croak`), since the problem is so severe that it would be dangerous to continue. (This can always be trapped with `eval`, but it's not a good idea. Under the circumstances, dying is the best thing to do).

SEVERE errors may be trapped using the modern interface. If the they are not trapped, or if the old interface is used, such an error will cause the program will halt.

All other errors may be trapped using the modern interface, otherwise they will be `carp`ed about. Program execution will not be halted.

=item mkdir [path]: [errmsg] (SEVERE)

`make_path` was unable to create the path. Probably some sort of permissions error at the point of departure or insufficient resources (such as free inodes on Unix).

=item No root path(s) specified

`make_path` was not given any paths to create. This message is only emitted if the routine is called with the traditional interface. The modern interface will remain silent if given nothing to do.

=item No such file or directory

On Windows, if `make_path` gives you this warning, it may mean that you have exceeded your filesystem's maximum path length.
=item cannot fetch initial working directory: [errmsg]

C<remove_tree> attempted to determine the initial directory by calling 
C<Cwd::getcwd>, but the call failed for some reason. No attempt 
will be made to delete anything.

=item cannot stat initial working directory: [errmsg]

C<remove_tree> attempted to stat the initial directory (after having 
successfully obtained its name via C<getcwd>), however, the call 
failed for some reason. No attempt will be made to delete anything.

=item cannot chdir to [dir]: [errmsg]

C<remove_tree> attempted to set the working directory in order to 
begin deleting the objects therein, but was unsuccessful. This is 
usually a permissions issue. The routine will continue to delete 
other things, but this directory will be left intact.

=item directory [dir] changed before chdir, expected dev=[n] ino=[n], actual dev=[n] ino=[n], aborting. (FATAL)

C<remove_tree> recorded the device and inode of a directory, and then 
moved into it. It then performed a C<stat> on the current directory 
and detected that the device and inode were no longer the same. As 
this is at the heart of the race condition problem, the program 
will die at this point.

=item cannot make directory [dir] read+writeable: [errmsg]

C<remove_tree> attempted to change the permissions on the current directory 
to ensure that subsequent unlinkings would not run into problems, 
but was unable to do so. The permissions remain as they were, and 
the program will carry on, doing the best it can.

=item cannot read [dir]: [errmsg]

C<remove_tree> tried to read the contents of the directory in order 
to acquire the names of the directory entries to be unlinked, but 
was unsuccessful. This is usually a permissions issue. The 
program will continue, but the files in this directory will remain 
after the call.

=item cannot reset chmod [dir]: [errmsg]

C<remove_tree>, after having deleted everything in a directory, attempted 
to restore its permissions to the original state but failed. The 
directory may wind up being left behind.
=item cannot remove [dir] when cwd is [dir]

The current working directory of the program is F</some/path/to/here> and you are attempting to remove an ancestor, such as F</some/path>. The directory tree is left untouched.

The solution is to chdir out of the child directory to a place outside the directory tree to be removed.

=item cannot chdir to [parent-dir] from [child-dir]: [errmsg], aborting. (FATAL)

C<remove_tree>, after having deleted everything and restored the permissions of a directory, was unable to chdir back to the parent. The program halts to avoid a race condition from occurring.

=item cannot stat prior working directory [dir]: [errmsg], aborting. (FATAL)

C<remove_tree> was unable to stat the parent directory after having returned from the child. Since there is no way of knowing if we returned to where we think we should be (by comparing device and inode) the only way out is to croak.

=item previous directory [parent-dir] changed before entering [child-dir], expected dev=[n] ino=[n], actual dev=[n] ino=[n], aborting. (FATAL)

When C<remove_tree> returned from deleting files in a child directory, a check revealed that the parent directory it returned to wasn't the one it started out from. This is considered a sign of malicious activity.

=item cannot make directory [dir] writeable: [errmsg]

Just before removing a directory (after having successfully removed everything it contained), C<remove_tree> attempted to set the permissions on the directory to ensure it could be removed and failed. Program execution continues, but the directory may possibly not be deleted.

=item cannot remove directory [dir]: [errmsg]

C<remove_tree> attempted to remove a directory, but failed. This may be because some objects that were unable to be removed remain in the directory, or it could be a permissions issue. The directory will be left behind.

=item cannot restore permissions of [dir] to [0nnn]: [errmsg]

After having failed to remove a directory, C<remove_tree> was unable to restore its permissions from a permissive state back to a possibly more restrictive setting. (Permissions given in octal).
item cannot make file [file] writeable: [errmsg]

C<remove_tree> attempted to force the permissions of a file to ensure it could be deleted, but failed to do so. It will, however, still attempt to unlink the file.

=item cannot unlink file [file]: [errmsg]

C<remove_tree> failed to remove a file. Probably a permissions issue.

=item cannot restore permissions of [file] to [0nnn]: [errmsg]

After having failed to remove a file, C<remove_tree> was also unable to restore the permissions on the file to a possibly less permissive setting. (Permissions given in octal).

=item unable to map [owner] to a uid, ownership not changed"

C<make_path> was instructed to give the ownership of created directories to the symbolic name [owner], but C<getpwnam> did not return the corresponding numeric uid. The directory will be created, but ownership will not be changed.

=item unable to map [group] to a gid, group ownership not changed

C<make_path> was instructed to give the group ownership of created directories to the symbolic name [group], but C<getgrnam> did not return the corresponding numeric gid. The directory will be created, but group ownership will not be changed.

=back

=head1 SEE ALSO

=over 4

=item *

L<File::Remove>

Allows files and directories to be moved to the Trashcan/Recycle Bin (where they may later be restored if necessary) if the operating system supports such functionality. This feature may one day be made available directly in C<File::Path>.
When removing directory trees, if you want to examine each file to decide whether to delete it (and possibly leaving large swathes alone), \texttt{File::Find::Rule} offers a convenient and flexible approach to examining directory trees.

=back

=head1 BUGS AND LIMITATIONS

The following describes \texttt{File::Path} limitations and how to report bugs.

=head2 MULTITHREADED APPLICATIONS

\texttt{File::Path} \texttt{rmtree} and \texttt{remove_tree} will not work with multithreaded applications due to its use of \texttt{chdir}. At this time, no warning or error is generated in this situation. You will certainly encounter unexpected results.

The implementation that surfaces this limitation will not be changed. See the \texttt{File::Path::Tiny} module for functionality similar to \texttt{File::Path} but which does not \texttt{chdir}.

=head2 NFS Mount Points

\texttt{File::Path} is not responsible for triggering the automounts, mirror mounts, and the contents of network mounted filesystems. If your NFS implementation requires an action to be performed on the filesystem in order for \texttt{File::Path} to perform operations, it is strongly suggested you assure filesystem availability by reading the root of the mounted filesystem.

=head2 REPORTING BUGS

Please report all bugs on the RT queue, either via the web interface:

\url{http://rt.cpan.org/NoAuth/Bugs.html?Dist=File-Path}

or by email:

\texttt{bug-File-Path@rt.cpan.org}

In either case, please attach patches to the bug report rather than including them inline in the web post or the body of the email.

You can also send pull requests to the Github repository:

\url{https://github.com/rpcme/File-Path}
=head1 ACKNOWLEDGEMENTS

Paul Szabo identified the race condition originally, and Brendan O'Dea wrote an implementation for Debian that addressed the problem. That code was used as a basis for the current code. Their efforts are greatly appreciated.

Gisle Aas made a number of improvements to the documentation for 2.07 and his advice and assistance is also greatly appreciated.

=head1 AUTHORS

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1.585 sphinx-rtd-theme 0.4.2

1.585.1 Available under license:

sphinx_rtd_theme/static/fonts/Lato/*

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kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
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1.589 docker-ce-rootless-extras 20.10.14-3.el8

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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-----------------------------------------------
dateutil - Extensions to the standard Python datetime module.

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The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

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Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

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Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following
artifacts may be included in the distribution or downloaded when ALPN
module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions. 
http://openjdk.java.net/legal/gplv2+ce.html

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OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm

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Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

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MortBay

The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api
The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

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**1.621 numpy 1.17.0**

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SFC64

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Adapted from a C++ implementation of Chris Doty-Humphrey's SFC PRNG.

https://gist.github.com/imneme/f1f7821f07cf76504a97f6537c818083

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The rk_random and rk_seed functions algorithms and the original design of the Mersenne Twister RNG:

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Original algorithm for the implementation of rk_interval function from Richard J. Wagner's implementation of the Mersenne Twister RNG, optimised by Magnus Jonsson.

Constants used in the rk_double implementation by Isaku Wada.

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1.623 lang-expression 7.10.2
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1.624 python 3.6.13

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A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property.
Zope Corporation was a sponsoring member of the PSF.

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<th>Owner</th>
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Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

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tomb - support for clean goroutine termination in Go.

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/**
 * Constructs a new {@link SerialVersionUIDAdder}. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the {@link #SerialVersionUIDAdder(int, ClassVisitor)}
 * version.
 *
 * @param classVisitor a {@link ClassVisitor} to which this visitor will delegate calls.
 * @throws IllegalStateException If a subclass calls this constructor.
 */

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/**
 * Constructs a new GeneratorAdapter. <i>Subclasses must not use this constructor</i>.
 * Instead, they must use the GeneratorAdapter(int, MethodVisitor, int, String, String)
 * version.
 *
 * @param methodVisitor the method visitor to which this adapter delegates calls.
 * @param access access flags (see Opcode).
 * @param name the method's name.
 * @param descriptor the method's descriptor (see Type).
 * @throws IllegalStateException if a subclass calls this constructor.
 */

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/**
 * Constructs a new {@link LocalVariablesSorter}. <i>Subclasses must not use this constructor</i>.
 * Instead, they must use the {@link #LocalVariablesSorter(int, int, String, MethodVisitor)}
 * version.
 *
 * @param access access flags of the adapted method.
 * @param descriptor the method's descriptor (see {@link Type}).
 * @param methodVisitor the method visitor to which this adapter delegates calls.
 * @throws IllegalStateException if a subclass calls this constructor.
 */

Found in path(s):
* /opt/cola/permits/1135935692_1613638422.89/0/asm-commons-7-2-sources-4-
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source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the
Library, but is designed to work with the Library by being compiled or
linked with it, is called a "work that uses the Library". Such a
work, in isolation, is not a derivative work of the Library, and
therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library
creates an executable that is a derivative of the Library (because it
contains portions of the Library), rather than a "work that uses the
library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file
that is part of the Library, the object code for the work may be a
derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
file is unrestricted, regardless of whether it is legally a derivative
work. (Executables containing this object code plus portions of the
Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or
link a "work that uses the Library" with the Library to produce a
work containing portions of the Library, and distribute that work
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modification of the work for the customer's own use and reverse
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Library is used in it and that the Library and its use are covered by
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of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.
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This option is useful when you wish to copy part of the code of
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4. You may copy and distribute the Library (or a portion or
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under the terms of Sections 1 and 2 above provided that you accompany
it with the complete corresponding machine-readable source code, which
must be distributed under the terms of Sections 1 and 2 above on a
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1.632 typing-extensions 3.10.0.2

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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1.635 python 3.6.8-41.el8.alma
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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became
Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

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1.637 metrics 3.2.2

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1.639 go-monitoring 0.2.0

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package compute_test

import {
    "context"
}

compute "cloud.google.com/go/compute/apiv1"
"google.golang.org/api/iterator"
computepb "google.golang.org/genproto/googleapis/cloud/compute/v1"
}

func ExampleNewLicensesRESTClient() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    // TODO: Use client.
    _ = c
}

func ExampleLicensesClient_Delete() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
    // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
    // TODO: Fill request struct fields.
    // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#DeleteLicenseRequest.
}
resp, err := c.Delete(ctx, req)
if err != nil {
    // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Get() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.GetLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetLicenseRequest.
    }
    resp, err := c.Get(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.GetIamPolicyLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetIamPolicyLicenseRequest.
    }

func ExampleLicensesClient_Insert() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
        defer c.Close()
    }
    req := &computepb.InsertLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/clou...#InsertLicenseRequest.
    }
    resp, err := c.Insert(ctx, req)
    if err != nil {
        // TODO: Handle error.
        defer c.Close()
    }
    // TODO: Use resp.
    _ = resp
}

func ExampleLicensesClient_List() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
        defer c.Close()
    }
    req := &computepb.ListLicensesRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/clou...#ListLicensesRequest.
    }
    it := c.List(ctx, req)
    for {
        resp, err := it.Next()
        if err == iterator.Done {
            break
        }
        if err != nil {
            // TODO: Handle error.
        }
    }
}
// TODO: Handle error.

// TODO: Use resp.
_ = resp

func ExampleLicensesClient_SetIamPolicy() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.SetIamPolicyLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#SetIamPolicyLicenseRequest.
    }
    resp, err := c.SetIamPolicy(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.TestIamPermissionsLicenseRequest{
        // TODO: Fill request struct fields.
        // See
        // https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#TestIamPermissionsLicenseRequest.
    }
    resp, err := c.TestIamPermissions(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
}
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package compute_test

import (
    "context"
    compute "cloud.google.com/go/compute/apiv1"
    computepb "google.golang.org/genproto/googleapis/cloud/compute/v1"
)

func ExampleNewLicenseCodesRESTClient() {
    ctx := context.Background()
    c, err := compute.NewLicenseCodesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    // TODO: Use client.
    _ = c
}

func ExampleLicenseCodesClient_Get() {
    ctx := context.Background()
    c, err := compute.NewLicenseCodesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.GetLicenseCodeRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetLicenseCodeRequest.
func ExampleLicenseCodesClient_TestIamPermissions() {
    ctx := context.Background()
    c, err := compute.NewLicenseCodesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.TestIamPermissionsLicenseCodeRequest{
        // TODO: Fill request struct fields.
        // See
        // https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#TestIamPermissionsLicenseCodeRequ
        // est.
    }
    resp, err := c.TestIamPermissions(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
}

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
  "bytes"
  "context"
  "fmt"
  "io/ioutil"
  "net/http"
  "net/url"

  gax "github.com/googleapis/gax-go/v2"
  "google.golang.org/api/googleapi"
  "google.golang.org/api/option"
  "google.golang.org/api/option/internaloption"
  httptransport "google.golang.org/api/transport/http"
  computepb "google.golang.org/genproto/googleapis/cloud/compute/v1"
  "google.golang.org/grpc"
  "google.golang.org/grpc/metadata"
  "google.golang.org/protobuf/encoding/protojson"
)

var newLicenseCodesClientHook clientHook
// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
    Get       []gax.CallOption
    TestIamPermissions []gax.CallOption
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
    Close() error
    setGoogleClientInfo(...string)
    Connection() *grpc.ClientConn
    Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
    TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
        (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
    // The internal transport-dependent client.
    internalClient internalLicenseCodesClient

    // The call options for this service.
    CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
    return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
    c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
    return c.internalClient.Get(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
    return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
    // The http endpoint to connect to.
    endpoint string

    // The http client.
    httpClient *http.Client

    // The x-goog-* metadata to be sent with each request.
    xGoogMetadata metadata.MD
}

// NewLicenseCodesRESTClient creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
    clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
    httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
    if err != nil {
        return nil, err
    }

    c := &licenseCodesRESTClient{
        endpoint: endpoint,
        httpClient: httpClient,
    }
    c.setGoogleClientInfo()
return &LicenseCodesClient{internalClient: c, CallOptions: &LicenseCodesCallOptions{ }, nil }

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
    return []option.ClientOption{
        internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
        internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
        internaloption.WithDefaultAudience("https://compute.googleapis.com/")
    }
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
    kv := append([]string{"gl-go", versionGo()}, keyval...)
    kv = append(kv, "gapic", versionClient, "gax", gax.Version, "rest", "UNKNOWN")
    c.xGoogMetadata = metadata.Pairs("x-goog-api-client", gax.XGoogHeader(kv...))
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
    // Replace httpClient with nil to force cleanup.
    c.httpClient = nil
    return nil
}

// Connection returns a connection to the API service.
//
// Deprecated.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
    return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...
gax.CallOption) (*computepb.LicenseCode, error) {
    baseUrl, _ := url.Parse(c.endpoint)
    req.GetLicenseCode())
    if err != nil {
        return nil, err
    }
    return &LicenseCodesClient{internalClient: c, CallOptions: &LicenseCodesCallOptions{ }, nil }, nil
}
httpReq = httpReqWithContext(ctx)

// Set the headers
for k, v := range c.xGoogMetadata {
    httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}

httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := iouil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.LicenseCode{}

return rsp, unm.Unmarshal(buf, rsp)

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
    m := protojson.MarshalOptions{AllowPartial: true}
    body := req.GetTestPermissionsRequestResource()
    jsonReq, err := m.Marshal(body)
    if err != nil {
        return nil, err
    }
    baseUrl, _ := url.Parse(c.endpoint)
    baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
        req.GetProject(), req.GetResource())

    if err != nil {
        return nil, err
    }
httpReq = httpReqWithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
    httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}

httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
def httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.TestPermissionsResponse{

return rsp, unm.Unmarshal(buf, rsp)
}

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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (  
    "bytes"
var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
    Delete             []gax.CallOption
    Get                []gax.CallOption
    GetIamPolicy       []gax.CallOption
    Insert             []gax.CallOption
    List               []gax.CallOption
    SetIamPolicy       []gax.CallOption
    TestIamPermissions []gax.CallOption
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
    Close() error
    setGoogleClientInfo(...string)
    Connection() *grpc.ClientConn
    Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
    Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
    GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy, error)
    Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
    List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
    SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy, error)
    TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.

// The Licenses API.
type LicensesClient struct {
    // The internal transport-dependent client.
    internalClient internalLicensesClient

    // The call options for this service.
    CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
    return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the ‘x-goog-api-client’ header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
    c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
// Deprecated.
func (c *LicensesClient) Connection() *grpc.ClientConn {
    return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
    return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
    return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
    return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
    return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
    return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
    return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
    // The http endpoint to connect to.
    endpoint string
}
// The http client.
httpClient *http.Client

// The x-goog-* metadata to be sent with each request.
xGoogMetadata metadata.MD

// NewLicensesRESTClient creates a new licenses rest client.

// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
    clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
    httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
    if err != nil {
        return nil, err
    }

c := &licensesRESTClient{
    endpoint:   endpoint,
    httpClient: httpClient,
}
c.setGoogleClientInfo()

return &LicensesClient{internalClient: c, CallOptions: &LicensesCallOptions{}}, nil

func defaultLicensesRESTClientOptions() []option.ClientOption {
    return []option.ClientOption{
        internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
        internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
        internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
        internaloption.WithDefaultScopes(DefaultAuthScopes()...),
    }
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
    kv := append([]string{"gl-go", versionGo()}, keyval...)
    kv = append(kv, "gapic", gax.Version, "rest", "UNKNOWN")
    c.xGoogMetadata = metadata.Pairs("x-goog-api-client", gax.XGoogHeader(kv...))
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
    // Replace httpClient with nil to force cleanup.
}
c.httpClient = nil
return nil
}

// Connection returns a connection to the API service.
// // Deprecated.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...
gax.CallOption) (*Operation, error) {
baseUrl, _ := url.Parse(c.endpoint)

params := url.Values{
}
if req != nil && req.RequestId != nil {
params.Add(“requestId”, fmt.Sprintf(“%v”, req.GetRequestId()))
}
baseUrl.RawQuery = params.Encode()

if err != nil {
return nil, err
}
httpReq = httpReqWithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
httpReq.Header[k] = v
}
httpReq.Header[“Content-Type”] = []string{“application/json”}

httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
return nil, err
}
defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {


return nil, err

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.Operation{

if err := unm.Unmarshal(buf, rsp); err != nil {
return nil, err
}
op := &Operation{proto: rsp}
return op, err

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
baseUrl, _ := url.Parse(c.endpoint)

if err != nil {
return nil, err
}
httpReq = httpReq.WithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}

httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
return nil, err
}
deferal httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
return nil, err
}
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.License{

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
    baseUrl, _ := url.Parse(c.endpoint)

    params := url.Values{}
    if req != nil && req.OptionsRequestedPolicyVersion != nil {
    }
    baseUrl.RawQuery = params.Encode()

    if err != nil {
        return nil, err
    }
    httpReq = httpReqWithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = []string{"application/json"}

    httpRsp, err := c.httpClient.Do(httpReq)
    if err != nil {
        return nil, err
    }
    defer httpRsp.Body.Close()
    if err = googleapi.CheckResponse(httpRsp); err != nil {
        return nil, err
    }

    buf, err := ioutil.ReadAll(httpRsp.Body)
    if err != nil {
        return nil, err
    }

    unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
    rsp := &computepb.Policy{}
    return rsp, unm.Unmarshal(buf, rsp)
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
    m := protojson.MarshalOptions{AllowPartial: true}
    body := req.GetLicenseResource()
    jsonReq, err := m.Marshal(body)
    if err != nil {
        return nil, err
    }

    baseUrl, _ := url.Parse(c.endpoint)
    params := url.Values{
        "requestId": fmt.Sprintf("%v", req.GetRequestId()),
    }
    baseUrl.RawQuery = params.Encode()

    if err != nil {
        return nil, err
    }
    httpReq = httpReq.WithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = [][]string{"application/json"}

    httpRsp, err := c.httpClient.Do(httpReq)
    if err != nil {
        return nil, err
    }
    defer httpRsp.Body.Close()

    if err = googleapi.CheckResponse(httpRsp); err != nil {
        return nil, err
    }

    buf, err := ioutil.ReadAll(httpRsp.Body)
    if err != nil {
        return nil, err
    }
    return rsp, unm.Unmarshal(buf, rsp)
}
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.Operation{}

if err := unm.Unmarshal(buf, rsp); err != nil {
    return nil, err
}
op := &Operation{proto: rsp}
return op, err

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...
gax.CallOption) *LicenseIterator {
    it := &LicenseIterator{}
    req = proto.Clone(req).(*computepb.ListLicensesRequest)
    unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
    it.InternalFetch = func(pageSize int, pageToken string) ([][]*computepb.License, string, error) {
        resp := &computepb.LicensesListResponse{}
        if pageToken != "" {
            req.PageToken = proto.String(pageToken)
        }
        if pageSize > math.MaxInt32 {
            req.MaxResults = proto.Uint32(math.MaxInt32)
        } else if pageSize != 0 {
            req.MaxResults = proto.Uint32(uint32(pageSize))
        }
        baseUrl, _ := url.Parse(c.endpoint)

        params := url.Values{}
        if req.Filter != nil && req.Filter != nil {
        }
        if req.MaxResults != nil {
            params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
        }
        if req.OrderBy != nil {
            params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
        }
        if req.PageToken != nil {
        }
        return it.fetchPaginated(ctx, req, &resp, params)
    }
    return it
}
if req != nil && req.ReturnPartialSuccess != nil {
}

baseUrl.RawQuery = params.Encode()

if err != nil {
    return nil, "", err
}

// Set the headers
for k, v := range c.xGoogMetadata {
    httpReq.Header[k] = v
}

httpReq.Header["Content-Type"] = []string{"application/json"}
httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, "", err
}
defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, "", err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, "", err
}

unm.Unmarshal(buf, resp)
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
    items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
    if err != nil {
        return "", err
    }
    it.items = append(it.items, items...)
    return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
    m := protojson.MarshalOptions{AllowPartial: true}
    body := req.GetGlobalSetPolicyRequestResource()
    jsonReq, err := m.Marshal(body)
    if err != nil {
        return nil, err
    }

    baseUrl, _ := url.Parse(c.endpoint)

    if err != nil {
        return nil, err
    }
    httpReq = httpReqWithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = []string{"application/json"}

    httpRsp, err := c.httpClient.Do(httpReq)
    if err != nil {
        return nil, err
    }
    defer httpRsp.Body.Close()
    if err = googleapi.CheckResponse(httpRsp); err != nil {
        return nil, err
    }

    buf, err := ioutil.ReadAll(httpRsp.Body)
    if err != nil {
        return nil, err
    }

    unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
    rsp := &computepb.Policy{}
    unm.Unmarshal(buf, &rsp)
    return rsp, nil
}
// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
    m := protojson.MarshalOptions{AllowPartial: true}
    body := req.GetTestPermissionsRequestResource()
    jsonReq, err := m.Marshal(body)
    if err != nil {
        return nil, err
    }
    return rsp, unm.Unmarshal(buf, rsp)
}

baseUrl, _ := url.Parse(c.endpoint)

if err != nil {
    return nil, err
}
httpReq = httpReq.WithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
    httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}

httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
delay httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}
buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.TestPermissionsResponse{ }
return rsp, unm.Unmarshal(buf, rsp)
}

// LicenseIterator manages a stream of *computepb.License.
type LicenseIterator struct {
    items   []*computepb.License
    pageInfo *iterator.PageInfo
    nextFunc func() error

    // Response is the raw response for the current page.
    // It must be cast to the RPC response type.
    // Calling Next() or InternalFetch() updates this value.
    Response interface{}
}

// PageInfo supports pagination. See the google.golang.org/api/iterator package for details.
func (it *LicenseIterator) PageInfo() *iterator.PageInfo {
    return it.pageInfo
}

// Next returns the next result. Its second return value is iterator.Done if there are no more
// results. Once Next returns Done, all subsequent calls will return Done.
func (it *LicenseIterator) Next() (*computepb.License, error) {
    var item *computepb.License
    if err := it.nextFunc(); err != nil {
        return item, err
    }
    item = it.items[0]
it.items = it.items[1:]
    return item, nil
}

func (it *LicenseIterator) bufLen() int {
    return len(it.items)
}

func (it *LicenseIterator) takeBuf() interface{} {
    b := it.items
    it.items = nil
    return b
}
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1.648 go-jose 2.6.0

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1.649 rfkill util-linux-2.32.1

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import (  
"context"  
"fmt"  
"net/http"  
"testing"

"github.com/google/go-cmp/cmp"
)

func TestRepositoryLicense.Marshal(t *testing.T) {

testJSONMarshal(t, &RepositoryLicense{}, `{ "name": "n", 
  "path": "p",
  "sha": "s",
  "size": 1,
  "url": "u",
  "html_url": "h",
  "git_url": "g",
  "download_url": "d",
  "type": "t",
  "content": "c",
  "encoding": "e",
  "license": {
    "key": "k",
    "name": "n",
    "url": "u",
    "spdx_id": "s",
    "html_url": "h",
    "featured": true,
    "description": "d",
    "implementation": "i",
    "permissions": "p",
    "conditions": "c",
    "limitations": "l",
    "body": "b",
  }
}

want := `{
  "name": "n",
  "path": "p",
  "sha": "s",
  "size": 1,
  "url": "u",
  "html_url": "h",
`
```
"git_url": "g",
"download_url": "d",
"type": "t",
"content": "c",
"encoding": "e",
"license": {
  "key": "k",
  "name": "n",
  "url": "u",
  "spdx_id": "s",
  "html_url": "h",
  "featured": true,
  "description": "d",
  "implementation": "i",
  "permissions": ["p"],
  "conditions": ["c"],
  "limitations": ["l"],
  "body": "b"
}
}`

testJSONMarshal(t, rl, want)

func TestLicense_Marshal(t *testing.T) {

testJSONMarshal(t, &License{}, "{}")

l := &License{
  Key: String("k"),
  Name: String("n"),
  URL: String("u"),
  SPDXID: String("s"),
  HTMLURL: String("h"),
  Featured: Bool(true),
  Description: String("d"),
  Implementation: String("i"),
  Permissions: &[]string{"p"},
  Conditions: &[]string{"c"},
  Limitations: &[]string{"l"},
  Body: String("b"),
}
want := `{
  "key": "k",
  "name": "n",
  "url": "u",
  "spdx_id": "s",
  "html_url": "h",
  "featured": true,
  "description": "d",
`
"implementation": "i",
"permissions": ["p"],
"conditions": ["c"],
"limitations": ["l"],
"body": "b"
}
testJSONMarshal(t, l, want)
}

func TestLicensesService_List(t *testing.T) {
  client, mux, _, teardown := setup()
  defer teardown()

  mux.HandleFunc("/licenses", func(w http.ResponseWriter, r *http.Request) {
    testMethod(t, r, "GET")
    fmt.Fprint(w, `[
      {"key":"mit","name":"MIT","spdx_id":"MIT","url":"https://api.github.com/licenses/mit","featured":true}
    ]`)
  })

  ctx := context.Background()
  licenses, _, err := client.Licenses.List(ctx)
  if err != nil {
    t.Errorf("Licenses.List returned error: %v", err)
  }
  want := []*License{ {
    Key: String("mit"),
    Name: String("MIT"),
    SPDXID: String("MIT"),
    URL: String("https://api.github.com/licenses/mit"),
    Featured: Bool(true),
  }}
  if !cmp.Equal(licenses, want) {
    t.Errorf("Licenses.List returned %+v, want %+v", licenses, want)
  }

  const methodName = "List"
  testNewRequestAndDoFailure(t, methodName, client, func() (*Response, error) {
    got, resp, err := client.Licenses.List(ctx)
    if got != nil {
      t.Errorf("testNewRequestAndDoFailure %v = %#v, want nil", methodName, got)
    }
    return resp, err
  })
}

func TestLicensesService_Get(t *testing.T) {
  client, mux, _, teardown := setup()
defer teardown()

mux.HandleFunc("/licenses/mit", func(w http.ResponseWriter, r *http.Request) {
    testMethod(t, r, "GET")
    fmt.Fprintf(w, "{"key": "mit", "name": "MIT"}
})

ctx := context.Background()
license, _, err := client.Licenses.Get(ctx, "mit")
if err != nil {
    t.Errorf("Licenses.Get returned error: %v", err)
}

want := &License{Key: String("mit"), Name: String("MIT")}
if !cmp.Equal(license, want) {
    t.Errorf("Licenses.Get returned %+v, want %+v", license, want)
}

const methodName = "Get"
testBadOptions(t, methodName, func() (err error) {
    _, _, err = client.Licenses.Get(ctx, "\n")
    return err
})

testNewRequestAndDoFailure(t, methodName, client, func() (*Response, error) {
    got, resp, err := client.Licenses.Get(ctx, "mit")
    if got != nil {
        t.Errorf("testNewRequestAndDoFailure %v = %#v, want nil", methodName, got)
    }
    return resp, err
})

}

func TestLicensesService_Get_invalidTemplate(t *testing.T) {
    client, _, _, teardown := setup()
    defer teardown()

ctx := context.Background()
    _, _, err := client.Licenses.Get(ctx, "\")
    testURLParseError(t, err)

// Copyright 2013 The go-github AUTHORS. All rights reserved.
import (
    "context"
    "fmt"
)

// LicensesService handles communication with the license related
// methods of the GitHub API.
//
// GitHub API docs: https://docs.github.com/en/free-pro-team@latest/rest/reference/licenses/
type LicensesService service

// RepositoryLicense represents the license for a repository.
type RepositoryLicense struct {
    Name *string `json:"name,omitempty"
    Path *string `json:"path,omitempty"
    SHA *string `json:"sha,omitempty"
    Size *int `json:"size,omitempty"
    URL *string `json:"url,omitempty"
    HTMLURL *string `json:"html_url,omitempty"
    GitURL *string `json:"git_url,omitempty"
    DownloadURL *string `json:"download_url,omitempty"
    Type *string `json:"type,omitempty"
    Content *string `json:"content,omitempty"
    Encoding *string `json:"encoding,omitempty"
    License *License `json:"license,omitempty"
}

func (l RepositoryLicense) String() string {
    return Stringify(l)
}

// License represents an open source license.
type License struct {
    Key *string `json:"key,omitempty"
    Name *string `json:"name,omitempty"
    URL *string `json:"url,omitempty"
    SPDXID *string `json:"spdx_id,omitempty"
    HTMLURL *string `json:"html_url,omitempty"
    Featured *bool `json:"featured,omitempty"
    Description *string `json:"description,omitempty"
    Implementation *string `json:"implementation,omitempty"
    Permissions *[]string `json:"permissions,omitempty"
    Conditions *[]string `json:"conditions,omitempty"
    Limitations *[]string `json:"limitations,omitempty"
    Body *string `json:"body,omitempty"
}
func (l License) String() string {
    return Stringify(l)
}

// List popular open source licenses.
//
// GitHub API docs: https://docs.github.com/en/free-pro-team@latest/rest/reference/licenses/#list-all-licenses
func (s *LicensesService) List(ctx context.Context) ([][2]*License, *Response, error) {
    req, err := s.client.NewRequest("GET", "licenses", nil)
    if err != nil {
        return nil, nil, err
    }

    var licenses [][2]*License
    resp, err := s.client.Do(ctx, req, &licenses)
    if err != nil {
        return nil, resp, err
    }

    return licenses, resp, nil
}

// Get extended metadata for one license.
//
// GitHub API docs: https://docs.github.com/en/free-pro-team@latest/rest/reference/licenses/#get-a-license
func (s *LicensesService) Get(ctx context.Context, licenseName string) (*License, *Response, error) {
    u := fmt.Sprintf("licenses/%s", licenseName)

    req, err := s.client.NewRequest("GET", u, nil)
    if err != nil {
        return nil, nil, err
    }

    license := new(License)
    resp, err := s.client.Do(ctx, req, license)
    if err != nil {
        return nil, resp, err
    }

    return license, resp, nil
}

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1.654 govmomi 0.26.0

1.654.1 Available under license :

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*/

class license

import (  
  "context"
  "flag"
type assign struct {
  *flags.ClientFlag
  *flags.OutputFlag
  *flags.HostSystemFlag
  *flags.ClusterFlag

  name   string
  remove bool
}

func init() {
  cli.Register("license.assign", &assign{})
}

func (cmd *assign) Register(ctx context.Context, f *flag.FlagSet) {
  cmd.ClientFlag, ctx = flags.NewClientFlag(ctx)
  cmd.ClientFlag.Register(ctx, f)

  cmd.OutputFlag, ctx = flags.NewOutputFlag(ctx)
  cmd.OutputFlag.Register(ctx, f)

  cmd.HostSystemFlag, ctx = flags.NewHostSystemFlag(ctx)
  cmd.HostSystemFlag.Register(ctx, f)

  cmd.ClusterFlag, ctx = flags.NewClusterFlag(ctx)
  cmd.ClusterFlag.Register(ctx, f)

  f.StringVar(&cmd.name, "name", "", "Display name")
  f.BoolVar(&cmd.remove, "remove", false, "Remove assignment")
}

func (cmd *assign) Process(ctx context.Context) error {
  if err := cmd.ClientFlag.Process(ctx); err != nil {
    return err
  }

  if err := cmd.OutputFlag.Process(ctx); err != nil {
    return err
  }

  if err := cmd.HostSystemFlag.Process(ctx); err != nil {
    return err
  }

  return cmd.ClusterFlag.Process(ctx)
func (cmd *assign) Usage() string {
    return "KEY"
}

func (cmd *assign) Description() string {
    return `Assign licenses to HOST or CLUSTER.

Examples:
govc license.assign $VCSA_LICENSE_KEY
govc license.assign -host a_host.example.com $ESX_LICENSE_KEY
govc license.assign -cluster a_cluster $VSAN_LICENSE_KEY`
}

func (cmd *assign) Run(ctx context.Context, f *flag.FlagSet) error {
    if f.NArg() != 1 {
        return flag.ErrHelp
    }
    key := f.Arg(0)

    client, err := cmd.Client()
    if err != nil {
        return err
    }

    m, err := license.NewManager(client).AssignmentManager(ctx)
    if err != nil {
        return err
    }

    host, err := cmd.HostSystemIfSpecified()
    if err != nil {
        return err
    }

    var id string
    id := ""

    if host == nil {
        cluster, cerr := cmd.ClusterIfSpecified()
        if cerr != nil {
            return cerr
        }
        if cluster == nil {
            // Default to vCenter UUID
            id = client.ServiceContent.About.InstanceUuid
        } else {
    }
id = cluster.Reference().Value
}
} else {
    id = host.Reference().Value
}

if cmd.remove {
    return m.Remove(ctx, id)
}

info, err := m.Update(ctx, id, key, cmd.name)
if err != nil {
    return err
}

return cmd.WriteResult(licenseOutput([]types.LicenseManagerLicenseInfo{*info}))
}
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*/

package simulator

import (  
    "context"  
    "reflect"  
    "testing"

    "github.com/vmware/govmomi"  
    "github.com/vmware/govmomi/find"  
    "github.com/vmware/govmomi/license"
)

func TestLicenseManagerVPX(t *testing.T) {
    ctx := context.Background()
    m := VPX()
defer m.Remove()

err := m.Create()
if err != nil {
    t.Fatal(err)
}

s := m.Service(NewServer())
defer s.Close()

c, err := govmomi.NewClient(ctx, s.URL, true)
if err != nil {
    t.Fatal(err)
}

lm := license.NewManager(c.Client)
am, err := lm.AssignmentManager(ctx)
if err != nil {
    t.Fatal(err)
}

la, err := am.QueryAssigned(ctx, "enoent")
if err != nil {
    t.Fatal(err)
}

if len(la) != 0 {
    t.Errorf("unexpected license")
}

finder := find.NewFinder(c.Client, false)
hosts, err := finder.HostSystemList(ctx, "/...")
if err != nil {
    t.Fatal(err)
}

host := hosts[0].Reference().Value

for _, name := range []string{"", host, vcid} {
    la, err = am.QueryAssigned(ctx, name)
    if err != nil {
        t.Fatal(err)
    }
}

if len(la) != 1 {
    t.Fatal("no licenses")
}
if !reflect.DeepEqual(la[0].AssignedLicense, EvalLicense) {
    t.Fatal("invalid license")
}

func TestLicenseManagerESX(t *testing.T) {
    ctx := context.Background()
    m := ESX()
    defer m.Remove()

    err := m.Create()
    if err != nil {
        t.Fatal(err)
    }

    s := m.Service.NewServer()
    defer s.Close()

    c, err := govmomi.NewClient(ctx, s.URL, true)
    if err != nil {
        t.Fatal(err)
    }

    lm := license.NewManager(c.Client)
    _, err = lm.AssignmentManager(ctx)
    if err == nil {
        t.Fatal("expected error")
    }

    la, err := lm.List(ctx)
    if err != nil {
        t.Fatal(err)
    }

    if len(la) != 1 {
        t.Fatal("no licenses")
    }

    if !reflect.DeepEqual(la[0], EvalLicense) {
        t.Fatal("invalid license")
    }
}

func TestAddRemoveLicense(t *testing.T) {
ctx := context.Background()
m := ESX()

def err := m.Create()
if err != nil {
t.Fatal(err)
}

s := m.Service.NewServer()
def s.Close()

c, err := govmomi.NewClient(ctx, s.URL, true)
if err != nil {
t.Fatal(err)
}

lm := license.NewManager(c.Client)
key := "00000-00000-00000-00000-11111"
labels := map[string]string{"key": "value"}

info, err := lm.Add(ctx, key, labels)
if err != nil {
t.Fatal(err)
}

if info.LicenseKey != key {
t.Fatalf("expect info.LicenseKey equal to %q; got %q", key, info.LicenseKey)
}

if len(info.Labels) != len(labels) {
t.Fatalf("expect len(info.Labels) equal to %d; got %d", len(labels), len(info.Labels))
}

if info.Labels[0].Key != "key" || info.Labels[0].Value != "value" {
t.Fatalf("expect label to be {key:value}; got {%s:%s}", info.Labels[0].Key, info.Labels[0].Value)
}

la, err := lm.List(ctx)
if err != nil {
t.Fatal(err)
}

if len(la) != 2 {
t.Fatal("no licenses")
}
if la[1].LicenseKey != key {
    t.Fatalf("expect info.LicenseKey equal to %q; got %q", key, la[1].LicenseKey)
}

if len(la[1].Labels) != len(labels) {
    t.Fatalf("expect len(info.Labels) equal to %d; got %d", len(labels), len(la[1].Labels))
}

if la[1].Labels[0].Key != "key" || la[1].Labels[0].Value != "value" {
    t.Fatalf("expect label to be {key:value}; got {%s:%s}", la[1].Labels[0].Key, la[1].Labels[0].Value)
}

er = lm.Remove(ctx, key)
if err != nil {
    t.Fatal(err)
}

la, err = lm.List(ctx)
if err != nil {
    t.Fatal(err)
}

if len(la) != 1 {
    t.Fatal("no licenses")
}

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*/

package license
import (
    "context"
    "flag"

    "github.com/vmware/govmomi/govc/cli"
    "github.com/vmware/govmomi/govc/flags"
    "github.com/vmware/govmomi/license"
)

var featureUsage = "List licenses with given feature"

type ls struct {
    *flags.ClientFlag
    *flags.OutputFlag
    feature string
}

func init() {
    cli.Register("license.ls", &ls{ })
}

func (cmd *ls) Register(ctx context.Context, f *flag.FlagSet) {
    cmd.ClientFlag, ctx = flags.NewClientFlag(ctx)
    cmd.ClientFlag.Register(ctx, f)
    cmd.OutputFlag, ctx = flags.NewOutputFlag(ctx)
    cmd.OutputFlag.Register(ctx, f)

    f.StringVar(&cmd.feature, "feature", "", featureUsage)
}

func (cmd *ls) Process(ctx context.Context) error {
    if err := cmd.ClientFlag.Process(ctx); err != nil {
        return err
    }
    if err := cmd.OutputFlag.Process(ctx); err != nil {
        return err
    }
    return nil
}

func (cmd *ls) Run(ctx context.Context, f *flag.FlagSet) error {
    client, err := cmd.Client()
    if err != nil {
        return err
    }

cmd.ExecuteCtxAndFlagSet(ctx, f)
m := license.NewManager(client)
result, err := m.List(ctx)
if err != nil {
    return err
}

if cmd.feature != "" {
    result = result.WithFeature(cmd.feature)
}

return cmd.WriteResult(licenseOutput(result))

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*/

package license

import (  
    "context"
    "flag"
    "fmt"

    "github.com/vmware/govmomi/govc/cli"
    "github.com/vmware/govmomi/govc/flags"
    "github.com/vmware/govmomi/license"
    "github.com/vmware/govmomi/vim25/types"
)

type add struct {  
    *flags.ClientFlag  
    *flags.OutputFlag
}

func init() {
cli.Register("license.add", &add{})
}

func (cmd *add) Register(ctx context.Context, f *flag.FlagSet) {
    cmd.ClientFlag, ctx = flags.NewClientFlag(ctx)
    cmd.ClientFlag.Register(ctx, f)

    cmd.OutputFlag, ctx = flags.NewOutputFlag(ctx)
    cmd.OutputFlag.Register(ctx, f)
}

func (cmd *add) Process(ctx context.Context) error {
    if err := cmd.ClientFlag.Process(ctx); err != nil {
        return err
    }
    if err := cmd.OutputFlag.Process(ctx); err != nil {
        return err
    }
    return nil
}

func (cmd *add) Usage() string {
    return "KEY..."
}

func (cmd *add) Run(ctx context.Context, f *flag.FlagSet) error {
    client, err := cmd.Client()
    if err != nil {
        return err
    }
    m := license.NewManager(client)

    // From the vSphere 5.5 documentation:
    //
    // To specify the edition type and any optional functions, use
    // updateLicense for ESX Server and addLicense follow by
    // LicenseAssignmentManager.updateAssignedLicense for VirtualCenter.
    //
    var addFunc func(ctx context.Context, key string, labels map[string]string) (types.LicenseManagerLicenseInfo, error)
    switch t := client.ServiceContent.About.ApiType; t {
        case "HostAgent":
            addFunc = m.Update
        case "VirtualCenter":
            addFunc = m.Add
        default:
            return fmt.Errorf("unsupported ApiType: %s", t)
    }

    return addFunc(ctx, "KEY...", labels)
result := make(licenseOutput, 0)
for _, v := range f.Args() {
    license, err := addFunc(ctx, v, nil)
    if err != nil {
        return err
    }
}
result = append(result, license)
}
return cmd.WriteResult(licenseOutput(result))

#!/usr/bin/env bats
load test_helper

# These tests should only run against a server running an evaluation license.
verify_evaluation() {
    if !["$(govc license.ls -json | jq -r .[0].EditionKey)" != "eval" ]; then
        skip "requires evaluation license"
    fi
}

get_key() {
    jq ".[1] | select(.LicenseKey == "$1")"
}

get_property() {
    jq -r ".Properties[] | select(.Key == "$1") | .Value"
}

get_label() {
    govc license.ls -json | jq -r ".[] | select(.LicenseKey == "$1") | .Labels[] | select(.Key == "$2") | .Value"
}

get_nlabel() {
    govc license.ls -json | jq ".[] | select(.LicenseKey == "$1") | .Labels[].Key" | wc -l
}

@test "license.add" {
    esx_env

    verify_evaluation

    run govc license.add -json 00000-00000-00000-00000-00001 00000-00000-00000-00000-00000-00000-00002
    assert_success
# Expect to see an entry for both the first and the second key
assert_equal "License is not valid for this product" "$(get_key 00000-00000-00000-00000-00000-00000-00000-00000 <<<${output} | get_property diagnostic)"
assert_equal "License is not valid for this product" "$(get_key 00000-00000-00000-00000-00000-00000-00000-00000 <<<${output} | get_property diagnostic)"

@test "license.remove" {
esx_env

verify_evaluation

run govc license.remove -json 00000-00000-00000-00000-00000-00000-00000-00000
assert_success
}

@test "license.ls" {
vcsim_env

verify_evaluation

run govc license.ls -json
assert_success

# Expect the test instance to run in evaluation mode
assert_equal "Evaluation Mode" "$(get_key 00000-00000-00000-00000-00000-00000-00000-00000 <<<${output} | jq -r ".Name")"
}

@test "license.decode" {
esx_env

verify_evaluation

key=00000-00000-00000-00000-00000
assert_equal "eval" $(govc license.decode $key | grep $key | awk '{print $2}')
}

@test "license.label.set" {
vcsim_env

key=00000-00000-00000-00000-00000

assert_equal 0 "$(get_nlabel $key)"
assert_equal "" "$(get_label $key foo)"

run govc license.label.set $key foo bar
assert_success
assert_equal 1 "$(get_nlabel $key)"
assert_equal bar "$(get_label $key foo)"

run govc license.label.set $key biz baz
assert_success
run govc license.label.set $key foo bar2
assert_success

assert_equal 2 "$(get_nlabel $key)"
assert_equal bar2 "$(get_label $key foo)"

run govc license.label.set $key foo ""
assert_success

assert_equal 1 "$(get_nlabel $key)"
assert_equal "" "$(get_label $key foo)"
}
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package simulator
import (  
    "github.com/vmware/govmomi/vim25/methods"  
    "github.com/vmware/govmomi/vim25/mo"  
    "github.com/vmware/govmomi/vim25/soap"  
    "github.com/vmware/govmomi/vim25/types"  
)

// EvalLicense is the default license  
var EvalLicense = types.LicenseManagerLicenseInfo{  
    LicenseKey: "00000-00000-00000-00000-00000",  
    EditionKey: "eval",  
    Name: "Evaluation Mode",  
    Properties: []types.KeyAnyValue{  
        {  
            Key: "feature",  
            Value: types.KeyValue{  
                Key: "serialuri:2",  
                Value: "Remote virtual Serial Port Concentrator",  
            },  
        },  
        {  
            Key: "feature",  
            Value: types.KeyValue{  
                Key: "dvs",  
                Value: "vSphere Distributed Switch",  
            },  
        },  
    },  
}

type LicenseManager struct {  
    mo.LicenseManager  
}

func (m *LicenseManager) init(r *Registry) {  
    m.Licenses = []types.LicenseManagerLicenseInfo{EvalLicense}

    if r.IsVPX() {  
        am := Map.Put(&LicenseAssignmentManager{ }).Reference()  
        m.LicenseAssignmentManager = &am  
    }
}

func (m *LicenseManager) AddLicense(req *types.AddLicense) soap.HasFault {  
    body := &methods.AddLicenseBody{  
        Res: &types.AddLicenseResponse{},  
    }
for _, license := range m.Licenses {
    if license.LicenseKey == req.LicenseKey {
        body.Res.Returnval = licenseInfo(license.LicenseKey, license.Labels)
        return body
    }
}

m.Licenses = append(m.Licenses, types.LicenseManagerLicenseInfo{
    LicenseKey: req.LicenseKey,
    Labels:     req.Labels,
})

body.Res.Returnval = licenseInfo(req.LicenseKey, req.Labels)

return body

func (m *LicenseManager) RemoveLicense(req *types.RemoveLicense) soap.HasFault {
    body := &methods.RemoveLicenseBody{
        Res: &types.RemoveLicenseResponse{},
    }

    for i, license := range m.Licenses {
        if req.LicenseKey == license.LicenseKey {
            m.Licenses = append(m.Licenses[:i], m.Licenses[i+1:...])
            return body
        }
    }

    return body
}

func (m *LicenseManager) UpdateLicenseLabel(req *types.UpdateLicenseLabel) soap.HasFault {
    body := &methods.UpdateLicenseLabelBody{
        Res: new(types.UpdateLicenseLabelResponse)
    }

    for i := range m.Licenses {
        license := &m.Licenses[i]
        if req.LicenseKey != license.LicenseKey {
            continue
        }

        body.Res = new(types.UpdateLicenseLabelResponse)

        for j := range license.Labels {
            label := &license.Labels[j]
            if label.Key == req.LabelKey {
if req.LabelValue == "" {
    license.Labels = append(license.Labels[:i], license.Labels[i+1:]...)  
} else {
    label.Value = req.LabelValue

return body

}

license.Labels = append(license.Labels, types.KeyValue{
    Key:   req.LabelKey,
    Value: req.LabelValue,
})

return body

}

body.Fault_ = Fault("", &types.InvalidArgument{InvalidProperty: "licenseKey"})

return body

}

type LicenseAssignmentManager struct {
    mo.LicenseAssignmentManager
}

func (m *LicenseAssignmentManager) QueryAssignedLicenses(req *types.QueryAssignedLicenses) soap.HasFault {
    body := &methods.QueryAssignedLicensesBody{
        Res: &types.QueryAssignedLicensesResponse{
    }

    // EntityId can be a HostSystem or the vCenter InstanceUuid
    if req.EntityId != "" {
        if req.EntityId != Map.content().About.InstanceUuid {
            id := types.ManagedObjectReference{
                Type: "HostSystem",
                Value: req.EntityId,
            }

            if Map.Get(id) == nil {
                return body
            }

        }

    } else {
        return body
    }

    body.Res.Returnval = []types.LicenseAssignmentManagerLicenseAssignment{
        { EntityId: req.EntityId,}}
func licenseInfo(key string, labels []types.KeyValue) types.LicenseManagerLicenseInfo {
    info := EvalLicense
    info.LicenseKey = key
    info.Labels = labels
    return info
}
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*/

package license

import {
    "context"
    "flag"

    "github.com/vmware/govmomi/govc/cli"
    "github.com/vmware/govmomi/govc/flavors"
    "github.com/vmware/govmomi/license"
    "github.com/vmware/govmomi/vim25/methods"
    "github.com/vmware/govmomi/vim25/types"
})

type label struct {
    *flags.ClientFlag
}
func init() {
    cli.Register("license.label.set", &label{})
}

func (cmd *label) Register(ctx context.Context, f *flag.FlagSet) {
    cmd.ClientFlag, ctx = flags.NewClientFlag(ctx)
    cmd.ClientFlag.Register(ctx, f)
}

func (cmd *label) Usage() string {
    return "LICENSE KEY VAL"
}

func (cmd *label) Description() string {
    return `Set license labels.
Examples:
govc license.label.set 00000-00000-00000-00000-00000 team cnx # add/set label
govc license.label.set 00000-00000-00000-00000-00000 team "" # remove label
govc license.ls -json | jq ".[] | select(.Labels[].Key == "team") | .LicenseKey"
`}

func (cmd *label) Run(ctx context.Context, f *flag.FlagSet) error {
    client, err := cmd.Client()
    if err != nil {
        return err
    }

    m := license.NewManager(client)

    if f.NArg() != 3 {
        return flag.ErrHelp
    }

    req := types.UpdateLicenseLabel{
        This:       m.Reference(),
        LicenseKey: f.Arg(0),
        LabelKey:   f.Arg(1),
        LabelValue: f.Arg(2),
    }

    _, err = methods.UpdateLicenseLabel(ctx, m.Client(), &req)
    return err
}

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*/

package license

import (  
"context"  
"flag"

"github.com/vmware/govmomi/govc/cli"  
"github.com/vmware/govmomi/govc/flags"  
"github.com/vmware/govmomi/license"
type decode struct {
    *flags.ClientFlag
    *flags.OutputFlag
    feature string
}

func init() {
    cli.Register("license.decode", &decode{})
}

func (cmd *decode) Register(ctx context.Context, f *flag.FlagSet) {
    cmd.ClientFlag, ctx = flags.NewClientFlag(ctx)
    cmd.ClientFlag.Register(ctx, f)
    cmd.OutputFlag, ctx = flags.NewOutputFlag(ctx)
    cmd.OutputFlag.Register(ctx, f)
    f.StringVar(&cmd.feature, "feature", "", featureUsage)
}

func (cmd *decode) Process(ctx context.Context) error {
    if err := cmd.ClientFlag.Process(ctx); err != nil {
        return err
    }
    if err := cmd.OutputFlag.Process(ctx); err != nil {
        return err
    }
    return nil
}

func (cmd *decode) Usage() string {
    return "KEY..."
}

func (cmd *decode) Run(ctx context.Context, f *flag.FlagSet) error {
    client, err := cmd.Client()
    if err != nil {
        return err
    }
    var result license.InfoList
    m := license.NewManager(client)
    for _, v := range f.Args() {
        license, err := m.Decode(ctx, v)
        if err != nil {
            return err
        }
        result = append(result, license)
    }
    return
}
return err
}

result = append(result, license)
}

if cmd.feature != "" {  
result = result.WithFeature(cmd.feature)
}

return cmd.WriteResult(licenseOutput(result))

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*/
package license

import (
    "context"
    "strconv"
    "strings"
    "github.com/vmware/govmomi/object"
    "github.com/vmware/govmomi/vim25"
    "github.com/vmware/govmomi/vim25/methods"
    "github.com/vmware/govmomi/vim25/mo"
    "github.com/vmware/govmomi/vim25/types"
)

type Manager struct {
    object.Common
}

func NewManager(c *vim25.Client) *Manager {
    m := Manager{
        object.NewCommon(c, &c.ServiceContent.LicenseManager),
    }
    return &m
}

func mapToKeyValueSlice(m map[string]string) []types.KeyValue {
    var r []types.KeyValue
    for k, v := range m {
        r = append(r, types.KeyValue{Key: k, Value: v})
    }
    return r
}

func (m Manager) Add(ctx context.Context, key string, labels map[string]string) (types.LicenseManagerLicenseInfo, error) {
    req := types.AddLicense{
        This:       m.Reference(),
        LicenseKey: key,
        Labels:     mapToKeyValueSlice(labels),
    }
    res, err := methods.AddLicense(ctx, m.Client(), &req)
    if err != nil {
        return types.LicenseManagerLicenseInfo{}, err
    }
    return res.Returnval, nil
}
func (m Manager) Decode(ctx context.Context, key string) (types.LicenseManagerLicenseInfo, error) {
    req := types.DecodeLicense{
        This:       m.Reference(),
        LicenseKey: key,
    }

    res, err := methods.DecodeLicense(ctx, m.Client(), &req)
    if err != nil {
        return types.LicenseManagerLicenseInfo{}, err
    }

    return res.Returnval, nil
}

func (m Manager) Remove(ctx context.Context, key string) error {
    req := types.RemoveLicense{
        This:       m.Reference(),
        LicenseKey: key,
    }

    _, err := methods.RemoveLicense(ctx, m.Client(), &req)
    return err
}

func (m Manager) Update(ctx context.Context, key string, labels map[string]string) (types.LicenseManagerLicenseInfo, error) {
    req := types.UpdateLicense{
        This:       m.Reference(),
        LicenseKey: key,
        Labels:     mapToKeyValueSlice(labels),
    }

    res, err := methods.UpdateLicense(ctx, m.Client(), &req)
    if err != nil {
        return types.LicenseManagerLicenseInfo{}, err
    }

    return res.Returnval, nil
}

func (m Manager) List(ctx context.Context) (InfoList, error) {
    var mlm mo.LicenseManager

    err := m.Properties(ctx, m.Reference(), []string{"licenses"}, &mlm)
    if err != nil {
        return nil, err
    }

    return mlm.InfoList, nil
}
func (m Manager) AssignmentManager(ctx context.Context) (*AssignmentManager, error) {
    var mlm mo.LicenseManager
    err := m.Properties(ctx, m.Reference(), []string{"licenseAssignmentManager"}, &mlm)
    if err != nil {
        return nil, err
    }

    if mlm.LicenseAssignmentManager == nil {
        return nil, object.ErrNotSupported
    }

    am := AssignmentManager{
        object.NewCommon(m.Client(), *mlm.LicenseAssignmentManager),
    }

    return &am, nil
}

type licenseFeature struct {
    name  string
    level int
}

func parseLicenseFeature(feature string) *licenseFeature {
    lf := new(licenseFeature)
    f := strings.Split(feature, ":")
    if name = f[0]
    if len(f) > 1 {
        var err error
        lf.level, err = strconv.Atoi(f[1])
        if err != nil {
            lf.name = feature
        }
    }

    return lf
}

func HasFeature(license types.LicenseManagerLicenseInfo, key string) bool {

feature := parseLicenseFeature(key)

for _, p := range license.Properties {
    if p.Key != "feature" {
        continue
    }

    kv, ok := p.Value.(types.KeyValue)
    if !ok {
        continue
    }

    lf := parseLicenseFeature(kv.Key)

    if lf.name == feature.name && lf.level >= feature.level {
        return true
    }
}

return false

// InfoList provides helper methods for []types.LicenseManagerLicenseInfo
type InfoList []types.LicenseManagerLicenseInfo

func (l InfoList) WithFeature(key string) InfoList {
    var result InfoList

    for _, license := range l {
        if HasFeature(license, key) {
            result = append(result, license)
        }
    }

    return result
}

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package license

import (
    "context"
    "flag"
    "fmt"
    "io"
    "os"
    "text/tabwriter"
    
    "github.com/vmware/govmomi/govc/cli"
    "github.com/vmware/govmomi/govc/flags"
    "github.com/vmware/govmomi/license"
    "github.com/vmware/govmomi/vim25/types"
)

type assigned struct {
    *flags.ClientFlag
*flags.OutputFlag

id string

func init() {
cli.Register("license.assigned.ls", &assigned{})
}

func (cmd *assigned) Register(ctx context.Context, f *flag.FlagSet) {
    cmd.ClientFlag, ctx = flags.NewClientFlag(ctx)
    cmd.ClientFlag.Register(ctx, f)
    cmd.OutputFlag, ctx = flags.NewOutputFlag(ctx)
    cmd.OutputFlag.Register(ctx, f)
    f.StringVar(&cmd.id, "id", ",", "Entity ID")
}

func (cmd *assigned) Process(ctx context.Context) error {
    if err := cmd.ClientFlag.Process(ctx); err != nil {
        return err
    }
    if err := cmd.OutputFlag.Process(ctx); err != nil {
        return err
    }
    return nil
}

func (cmd *assigned) Run(ctx context.Context, f *flag.FlagSet) error {
    client, err := cmd.Client()
    if err != nil {
        return err
    }
    m, err := license.NewManager(client).AssignmentManager(ctx)
    if err != nil {
        return err
    }
    assigned, err := m.QueryAssigned(ctx, cmd.id)
    if err != nil {
        return err
    }
    return cmd.WriteResult(assignedOutput(assigned))
}
type assignedOutput [types.LicenseAssignmentManager.LicenseAssignment]

func (res assignedOutput) Write(w io.Writer) error {
    tw := tabwriter.NewWriter(os.Stdout, 4, 0, 2, ' ', 0)
    fmt.Fprintf(tw, `Id:	Scope:	Name:	License:
`)
    for _, v := range res {
        fmt.Fprintf(tw, `%s
`, v.EntityId)
        fmt.Fprintf(tw, `%s
`, v.Scope)
        fmt.Fprintf(tw, `%s
`, v.EntityDisplayName)
        fmt.Fprintf(tw, `%s
`, v.AssignedLicense.LicenseKey)
    }
    return tw.Flush()
}
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*/

package license

import {
    "context"
    "flag"
    "fmt"
    "github.com/vmware/govmomi/govc/cli"
    "github.com/vmware/govmomi/govc/flags"
    "github.com/vmware/govmomi/license"
}

type remove struct {
    *flags.ClientFlag
    *flags.OutputFlag
}

func init() {
func cli.Register("license.remove", &remove{ })

func (cmd *remove) Register(ctx context.Context, f *flag.FlagSet) {
    cmd.ClientFlag, ctx = flags.NewClientFlag(ctx)
    cmd.ClientFlag.Register(ctx, f)

    cmd.OutputFlag, ctx = flags.NewOutputFlag(ctx)
    cmd.OutputFlag.Register(ctx, f)
}

func (cmd *remove) Process(ctx context.Context) error {
    if err := cmd.ClientFlag.Process(ctx); err != nil {
        return err
    }
    if err := cmd.OutputFlag.Process(ctx); err != nil {
        return err
    }
    return nil
}

func (cmd *remove) Usage() string {
    return "KEY..."
}

func (cmd *remove) Run(ctx context.Context, f *flag.FlagSet) error {
    client, err := cmd.Client()
    if err != nil {
        return err
    }
    m := license.NewManager(client)
    for _, v := range f.Args() {
        err = m.Remove(ctx, v)
        if err != nil {
            return err
        }
    }

    list, err := m.List(ctx)
    if err != nil {
        return err
    }

    for _, v := range f.Args() {
        for _, l := range list {
            if v == l.LicenseKey {
                return fmt.Errorf("cannot remove license %q", v)
            }
        }
    }
    return nil
}
package license

import (
    "fmt"
    "io"
    "os"
    "text/tabwriter"
    "github.com/vmware/govmomi/vim25/types"
)

type licenseOutput []types.LicenseManagerLicenseInfo

func (res licenseOutput) Write(w io.Writer) error {
    tw := tabwriter.NewWriter(os.Stdout, 4, 0, 2, ' ', 0)
    fmt.Fprintf(tw, "Key:	Edition:	Used:	Total:
"
    for _, v := range res {
        fmt.Fprintf(tw, "%s	", v.LicenseKey)
        fmt.Fprintf(tw, "%s	", v.EditionKey)
        fmt.Fprintf(tw, "%d	", v.Used)
        fmt.Fprintf(tw, "%d	", v.Total)
        fmt.Fprintf(tw, "\n")
    }
    return tw.Flush()
}

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    "context"
    "github.com/vmware/govmomi/object"
    "github.com/vmware/govmomi/vim25/methods"
    "github.com/vmware/govmomi/vim25/types"
)

type AssignmentManager struct {
    object.Common
}

func (m AssignmentManager) QueryAssigned(ctx context.Context, id string) ([]types.LicenseAssignmentManagerLicenseAssignment, error) {
    req := types.QueryAssignedLicenses{
        This:     m.Reference(),
        EntityId: id,
    }
    res, err := methods.QueryAssignedLicenses(ctx, m.Client(), &req)
    return res, err
}
if err != nil {
    return nil, err
}

return res.Returnval, nil

func (m AssignmentManager) Remove(ctx context.Context, id string) error {
    req := types.RemoveAssignedLicense{
        This:     m.Reference(),
        EntityId: id,
    }

    _, err := methods.RemoveAssignedLicense(ctx, m.Client(), &req)

    return err
}

func (m AssignmentManager) Update(ctx context.Context, id string, key string, name string) (*types.LicenseManagerLicenseInfo, error) {
    req := types.UpdateAssignedLicense{
        This:              m.Reference(),
        Entity:            id,
        LicenseKey:        key,
        EntityDisplayName: name,
    }

    res, err := methods.UpdateAssignedLicense(ctx, m.Client(), &req)
    if err != nil {
        return nil, err
    }

    return &res.Returnval, nil
}

1.655 json-smart 2.3
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* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/JSONObject.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/JSONNavi.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/JSONArray.java
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* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/JSONStreamAwareEx.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/FakeMapper.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/JSONValue.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/BeansMapper.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/DefaultMapperOrdered.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/JSONParserString.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/JSONParserReader.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/JSONParserMemory.java
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* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/JSONParser.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/ArraysMapper.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/CollectionMapper.java
* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/CompessorMapper.java

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* /opt/cola/permits/1177952445_1625583906.57/0/json-smart-2-3-sources-4-jar/net/minidev/json/parser/DefaultMapper.java

1.656 lucene-sandbox 8.7.0
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1.666 urllib3 1.26.3
1.666.1 Available under license :
    # Contributions to the urllib3 project

    ## Creator & Maintainer

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    ## Contributors

    In chronological order:

    * victor.vde <http://code.google.com/u/victor.vde/>
      * HTTPS patch (which inspired HTTPSConnectionPool)

    * erikcederstrand <http://code.google.com/u/erikcederstrand/>
      * NTLM-authenticated HTTPSConnectionPool
      * Basic-authenticated HTTPSConnectionPool (merged into make_headers)

    * niphlod <niphlod@gmail.com>
      * Client-verified SSL certificates for HTTPSConnectionPool
      * Response gzip and deflate encoding support
      * Better unicode support for filepost using StringIO buffers

    * btoconnor <brian@btoconnor.net>
      * Non-multipart encoding for POST requests

    * p.dobrogost <http://code.google.com/u/@WBRSRlBZDhBFXQB6/>
      * Code review, PEP8 compliance, benchmark fix

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* Design review, bugfixes, test coverage.

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* IPv6 url support and test coverage

* Shivaram Lingamneni <slingamn@cs.stanford.edu>
* Support for explicitly closing pooled connections

* hartator <hartator@gmail.com>
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* Thomas Weischuh <thomas@t-8ch.de>
* Support for TLS SNI
* API unification of ssl_version/cert_reqs
* SSL fingerprint and alternative hostname verification
* Bugfixes in testsuite

* Sune Kirkeby <mig@ibofobi.dk>
* Optional SNI-support for Python 2 via PyOpenSSL.

* Marc Schlaich <marc.schlaich@gmail.com>
* Various bugfixes and test improvements.

* Bryce Boe <bbzbryce@gmail.com>
* Correct six.moves conflict
* Fixed pickle support of some exceptions

* Boris Figovsky <boris.figovsky@ravellosystems.com>
* Allowed to skip SSL hostname verification

* Cory Benfield <https://lukasa.co.uk/about/>
* Stream method for Response objects.
* Return native strings in header values.
* Generate 'Host' header when using proxies.

* Jason Robinson <jaywink@basshero.org>
* Add missing WrappedSocket.fileno method in PyOpenSSL

* Audrius Butkevicius <audrius.butkevicius@elastichosts.com>
* Fixed a race condition
* Stanislav Vitkovskiy <stas.vitkovsky@gmail.com>
  * Added HTTPS (CONNECT) proxy support

* Stephen Holsapple <sholsapp@gmail.com>
  * Added abstraction for granular control of request fields

* Martin von Gagern <Martin.vGagern@gmx.net>
  * Support for non-ASCII header parameters

* Kevin Burke <kev@inburke.com> and Pavel Kirichenko <juanych@yandex-team.ru>
  * Support for separate connect and request timeouts

* Peter Waller <p@pwaller.net>
  * HTTPResponse.tell() for determining amount received over the wire

* Nipunn Koorapati <nipunn1313@gmail.com>
  * Ignore default ports when comparing hosts for equality

* Danilo @dbrgn <https://dbrgn.ch/>
  * Disabled TLS compression by default on Python 3.2+
  * Disabled TLS compression in pyopenssl contrib module
  * Configurable cipher suites in pyopenssl contrib module

* Roman Bogorodskiy <roman.bogorodskiy@ericsson.com>
  * Account retries on proxy errors

* Nicolas Delaby <nicolas.delaby@ezeep.com>
  * Use the platform-specific CA certificate locations

* Josh Schneier <https://github.com/jschneier>
  * HTTPHeaderDict and associated tests and docs
  * Bugfixes, docs, test coverage

* Tahia Khan <http://tahia.tk/>
  * Added Timeout examples in docs

* Arthur Grunseid <https://grunseid.com>
  * source_address support and tests (with https://github.com/bui)

* Ian Cordasco <graffatcolmingov@gmail.com>
  * PEP8 Compliance and Linting
  * Add ability to pass socket options to an HTTP Connection

* Erik Tollerud <erik.tollerud@gmail.com>
  * Support for standard library io module.

* Krishna Prasad <kprasad.iitd@gmail.com>
  * Google App Engine documentation
* Aaron Meurer <asmeurer@gmail.com>
  * Added Url.url, which unparses a Url

* Evgeny Kapun <abacabadabacaba@gmail.com>
  * Bugfixes

* Benjamen Meyer <bm_witness@yahoo.com>
  * Security Warning Documentation update for proper capture

* Shivan Sornarajah <github@sornars.com>
  * Support for using ConnectionPool and PoolManager as context managers.

* Alex Gaynor <alex.gaynor@gmail.com>
  * Updates to the default SSL configuration

* Tomas Tomecek <ttomecek@redhat.com>
  * Implemented generator for getting chunks from chunked responses.

* tlynn <https://github.com/tlynn>
  * Respect the warning preferences at import.

* David D. Riddle <ddriddle@illinois.edu>
  * IPv6 bugfixes in testsuite

* Thea Flowers <magicalgirl@google.com>
  * App Engine environment tests.
  * Documentation re-write.

* John Krauss <https://github.com/talos>
  * Clues to debugging problems with `cryptography` dependency in docs

* Disassem <https://github.com/Disassem>
  * Fix pool-default headers not applying for url-encoded requests like GET.

* James Atherfold <jlatherfold@hotmail.com>
  * Bugfixes relating to cleanup of connections during errors.

* Christian Pedersen <https://github.com/chripede>
  * IPv6 HTTPS proxy bugfix

* Jordan Moldow <https://github.com/jmoldow>
  * Fix low-level exceptions leaking from `HTTPResponse.stream()`.
  * Bugfix for `ConnectionPool.urlopen(release_conn=False)`.
  * Creation of `HTTPConnectionPool.ResponseCls`.

* Predrag Gruevski <https://github.com/obi1kenobi>
  * Made cert digest comparison use a constant-time algorithm.
* Adam Talsma <https://github.com/a-tal>
  * Bugfix to ca_cert file paths.

* Evan Meagher <https://evanmeagher.net>
  * Bugfix related to `memoryview` usage in PyOpenSSL adapter

* John Vandenberg <jayvdb@gmail.com>
  * Python 2.6 fixes; pyflakes and pep8 compliance

* Andy Caldwell <andy.m.caldwell@googlemail.com>
  * Bugfix related to reusing connections in indeterminate states.

* Ville Skytt <ville.skytta@iki.fi>
  * Logging efficiency improvements, spelling fixes, Travis config.

* Shige Takeda <smtakeda@gmail.com>
  * Started Recipes documentation and added a recipe about handling concatenated gzip data in HTTP response

* Jess Shapiro <jesse@jesseshapiro.net>
  * Various character-encoding fixes/tweaks
  * Disabling IPv6 DNS when IPv6 connections not supported

* David Foster <http://dafoster.net/>
  * Ensure order of request and response headers are preserved.

* Jeremy Cline <jeremy@jcline.org>
  * Added connection pool keys by scheme

* Aviv Palivoda <palaviv@gmail.com>
  * History list to Retry object.
  * HTTPResponse contains the last Retry object.

* Nate Prewitt <nate.prewitt@gmail.com>
  * Ensure timeouts are not booleans and greater than zero.
  * Fixed infinite loop in `stream` when amt=None.
  * Added length_remaining to determine remaining data to be read.
  * Added enforce_content_length to raise exception when incorrect content-length received.

* Seth Michael Larson <sethmichaellarson@protonmail.com>
  * Created selectors backport that supports PEP 475.

* Alexandre Dias <alex.dias@smarkets.com>
  * Don't retry on timeout if method not in whitelist

* Moinuddin Quadri <moin18@gmail.com>
  * Lazily load idna package
* Tom White <s6ygl1ez3@mail2tor.com>
  * Made SOCKS handler differentiate socks5h from socks5 and socks4a from socks4.

* Tim Burke <tim.burke@gmail.com>
  * Stop buffering entire deflate-encoded responses.

* Tuukka Mustonen <tuukka.mustonen@gmail.com>
  * Add counter for status_forcelist retries.

* Erik Rose <erik@mozilla.com>
  * Bugfix to pyopenssl vending

* Wolfgang Richter <wolfgang.richter@gmail.com>
  * Bugfix related to loading full certificate chains with PyOpenSSL backend.

* Mike Miller <github@mikeage.net>
  * Logging improvements to include the HTTP(S) port when opening a new connection

* Ioannis Tziakos <mail@itziakos.gr>
  * Fix `util.selectors._fileobj_to_fd` to accept `long`.
  * Update appveyor tox setup to use the 64bit python.

* Akamai (through Jess Shapiro) <jshapiro@akamai.com>
  * Ongoing maintenance; 2017-2018

* Dominique Leuenberger <dimstar@opensuse.org>
  * Minor fixes in the test suite

* Will Bond <will@wbond.net>
  * Add Python 2.6 support to `contrib.securetransport`

* Aleksei Alekseev <alekseev.yeskela@gmail.com>
  * using auth info for socks proxy

* Chris Wilcox <git@crwilcox.com>
  * Improve contribution guide
  * Add ```HTTPResponse.geturl`` method to provide `urllib2.urlopen().geturl()`` behavior

* Bruce Merry <https://www.brucemerry.org.za>
  * Fix leaking exceptions when system calls are interrupted with zero timeout

* Hugo van Kemenade <https://github.com/hugovk>
  * Drop support for EOL Python 2.6

* Tim Bell <https://github.com/timb07>
  * Bugfix for responses with Content-Type: message/* logging warnings

* Justin Bramley <https://github.com/jbramleycl>
* Add ability to handle multiple Content-Encodings

* Katsuhiko YOSHIDA <https://github.com/kyoshidajp>
* Remove Authorization header regardless of case when redirecting to cross-site

* James Meickle <https://permadeath.com/>
* Improve handling of Retry-After header

* Chris Jerdonek <chris.jerdonek@gmail.com>
* Remove a spurious TypeError from the exception chain inside HTTPConnectionPool._make_request(), also for BaseExceptions.

* Jorge Lopez Silva <https://github.com/jalopezsilva>
* Added support for forwarding requests through HTTPS proxies.

* Benno Rice <benno@jeamland.net>
* Allow cadata parameter to be passed to underlying ```SSLContext.load_verify_locations()```.

* Keiichi Kobayashi <abok.1k@gmail.com>
* Rename VerifiedHTTPSConnection to HTTPSConnection

* Himanshu Garg <garg_himanshu@outlook.com>
* DOC & LICENSE Update

* Hod Bin Noon <bin.noon.hod@gmail.com>
* Test improvements

* Chris Olufson <tycarac@gmail.com>
* Fix for connection not being released on HTTP redirect and response not preloaded

* [Bastiaan Bakker] <https://github.com/bastiaanb>
* Support for logging session keys via environment variable ```SSLKEYLOGFILE``` (Python 3.8+)

* [Ezzeri Esa] <https://github.com/savarin>
* Ports and extends on types from typeshed

* [Your name or handle] <[email or website]>
* [Brief summary of your changes]

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/**
 * Not supported. <b>You are attempting to create a map that may contain a non-{@code Comparable} key.</b> Proper calls will resolve to the version in {@code ImmutableSortedMap}, not this dummy version.
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 * @deprecated Pass a key of type {@link Comparable} to use {@link ImmutableSortedMap#of(Comparable, Object)}. <b></link>
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    jar/com/google/common/reflect/package-info.java
  * /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
    jar/com/google/common/math/StatsAccumulator.java
  * /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
    jar/com/google/common/math/PairedStats.java
  * /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
    jar/com/google/common/cache/LongAddables.java

jar/com/google/common/util/concurrent/ForwardingFuture.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/escape/Escapers.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/cache/ReferenceEntry.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/escape/ArrayBasedEscaperMap.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/util/concurrent/AbstractExecutionThreadService.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/net/HostSpecifier.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/cache/CacheBuilder.java

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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collect/ImmutableClassToInstanceMap.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collect/ImmutableEnumSet.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collect/ComputationException.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collect/SingletonImmutableList.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collect/AbstractIndexedListIterator.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collect/RegularImmutableSortedSet.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collect/ImmutableSortedMap.java
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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/base/CommonMatcher.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/base/JdkPattern.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/base/PatternCompiler.java
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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/collections/regularImmutableMap.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/collections/Collections2.java
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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/collections/TreeBasedTable.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/collections/immutableMapValues.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/ImmutableCollection.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/ImmutableMultiset.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/ImmutableMultimap.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/Range.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/UnmodifiableIterator.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/thirdparty/publicsuffix/PublicSuffixPatterns.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/SingletonImmutableBiMap.java
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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/ImmutableMapKeySet.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/Platform.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/PeakIterator.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/StandardRowSortedTable.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/ImmutableEntry.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/Tables.java
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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/ImmutableListMultimap.java
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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collection/HashBasedTable.java
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*
* As of 2010/06/11, this method is identical to the (package private) hash method in OpenJDK 7's
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*/

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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/graph/ImmutableGraph.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/graph/MutableNetwork.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/graph/Graphs.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/graph/ImmutableNetwork.java
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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/graph/SuccessorsFunction.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/io/RecursiveDeleteOption.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/graph/PredecessorsFunction.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/graph/MutableGraph.java

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 */
/**
 * Returns an array containing all of the elements in the specified collection. This method
 * returns the elements in the order they are returned by the collection's iterator. The returned
 * array is "safe" in that no references to it are maintained by the collection. The caller is
 * thus free to modify the returned array.
 *
 * <p>This method assumes that the collection size doesn't change while the method is running.
<p>TODO(kevinb): support concurrently modified collections?</p>

<p>* @param c the collection for which to return an array of elements</p>

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jar/com/google/common/util/concurrent/AggregateFutureState.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/io/ReaderInputStream.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/hash/LittleEndianByteArray.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/hash/MacHashFunction.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/util/concurrent/Platform.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
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jar/com/google/common/base/CaseFormat.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/util/concurrent/SimpleTimeLimiter.java
* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/util/concurrent/AggregateFuture.java
* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/util/concurrent/CollectionFuture.java
* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/util/concurrent/UncheckedTimeoutException.java
* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/escape/CharEscaper.java
* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/escape/CharEscaperBuilder.java
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* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/io/AppendableWriter.java
* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/util/concurrent/ImmediateFuture.java
* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/util/concurrent/GwtFuturesCatchingSpecialization.java
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* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/util/concurrent/TimeLimiter.java
* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/util/concurrent/Futures.java
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* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/io/PatternFilenameFilter.java
* /opt/cola/permits/110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/reflect/TypeToken.java

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jar/com/google/common/collect/LinkedHashMultimap.java
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jar/com/google/common/collect/Multimaps.java
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jar/com/google/common/collect/AbstractListMultimap.java
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jar/com/google/common/collect/AbstractMultiset.java

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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collect/Ordering.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/collect/ForwardingListIterator.java
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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/io/LittleEndianDataOutputStream.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/base/Functions.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2.jar/com/google/common/base/Throwables.java
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* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/primitives/ImmutableIntArray.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/util/concurrent/ForwardingLock.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/primitives/ImmutableDoubleArray.java

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Found in path(s):
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/hash/Striped64.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/cache/LongAdder.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/cache/Striped64.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/util/concurrent/AtomicDoubleArray.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-jar/com/google/common/hash/LongAdder.java

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Found in path(s):
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/ImmutableSortedMultiset.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/ImmutableSortedMultisetFauxverideShim.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/RegularImmutableSortedMultiset.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/RangeSet.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/SortedIterables.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/SortedIterable.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/ForwardingSortedMultiset.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/GeneralRange.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/AbstractRangeSet.java
* /opt/cola/permits/1110923413_1606872220.46/0/guava-27-1-jre-sources-2-
jar/com/google/common/collection/Count.java

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1.670 nornir-utils 0.1.2

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1.671 jasmine-core 3.3.0

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Found in path(s):
* /opt/cola/permits/1110633107_1614361079.98/0/jasmine-core-3-3-0-tar-gz/jasmine-core-3.3.0/lib/jasmine-core/jasmine.js
* /opt/cola/permits/1110633107_1614361079.98/0/jasmine-core-3-3-0-tar-gz/jasmine-core-3.3.0/lib/jasmine-core/boot.js
* /opt/cola/permits/1110633107_1614361079.98/0/jasmine-core-3-3-0-tar-gz/jasmine-core-3.3.0/lib/jasmine-core/jasmine-html.js
* /opt/cola/permits/1110633107_1614361079.98/0/jasmine-core-3-3-0-tar-gz/jasmine-core-3.3.0/lib/jasmine-core/node_boot.js

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from setuptools import setup, find_packages, os
import json

with open('package.json') as packageFile:
    version = json.load(packageFile)['version']

setup(
    name="jasmine-core",
    version=version,
    url="http://jasmine.github.io",
    author="Pivotal Labs",
    author_email="jasmine-js@googlegroups.com",
    description=('Jasmine is a Behavior Driven Development testing framework for JavaScript. It does not rely on '+
        'browsers, DOM, or any JavaScript framework. Thus it\'s suited for websites, '+
        'Node.js (http://nodejs.org) projects, or anywhere that JavaScript can run.'),
    license='MIT',
    classifiers=[
        'Development Status :: 5 - Production/ Stable',
        'Environment :: Console',
        'Environment :: Web Environment',
        'Framework :: Django',
        'Intended Audience :: Developers',
        'License :: OSI Approved :: MIT License',
        'Operating System :: OS Independent',
        'Programming Language :: Python',
        'Programming Language :: Python :: 3',
        'Programming Language :: Python :: 3.2',
        'Programming Language :: Python :: 3.3',
        'Programming Language :: Python :: Implementation :: PyPy',
        'Topic :: Internet :: WWW/ HTTP',
        'Topic :: Software Development :: Libraries :: Python Modules',
        'Topic :: Software Development :: Build Tools',
        'Topic :: Software Development :: Quality Assurance',
        'Topic :: Software Development :: Testing',
    ]
)
packages=['jasmine_core', 'jasmine_core.images'],
package_dir={'jasmine_core': 'lib/jasmine-core', 'jasmine_core.images': 'images'},
package_data={'jasmine_core': ['*.js', '*.css'], 'jasmine_core.images': ['*.png']},
include_package_data=True,
install_requires=['glob2>=0.4.1', 'ordereddict==1.1']
)

Found in path(s):
* /opt/cola/permits/1110633107_1614361079.98/0/jasmine-core-3-3-0-tar-gz/jasmine-core-3.3.0/setup.py
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/*
 json2.js
 2014-02-04

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See http://www.JSON.org/js.html

This code should be minified before deployment.
See http://javascript.crockford.com/jsmin.html

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NOT CONTROL.

This file creates a global JSON object containing two methods: stringify
and parse.

JSON.stringify(value, replacer, space)
    value    any JavaScript value, usually an object or array.
    replacer an optional parameter that determines how object
             values are stringified for objects. It can be a
             function or an array of strings.
    space    an optional parameter that specifies the indentation
             of nested structures. If it is omitted, the text will
             be packed without extra whitespace. If it is a number,
             it will specify the number of spaces to indent at each
             level. If it is a string (such as \t or '&nbsp;'},


it contains the characters used to indent at each level.

This method produces a JSON text from a JavaScript value.

When an object value is found, if the object contains a toJSON method, its toJSON method will be called and the result will be stringified. A toJSON method does not serialize: it returns the value represented by the name/value pair that should be serialized, or undefined if nothing should be serialized. The toJSON method will be passed the key associated with the value, and this will be bound to the value.

For example, this would serialize Dates as ISO strings.

```javascript
Date.prototype.toJSON = function (key) {
    function f(n) {
        // Format integers to have at least two digits.
        return n < 10 ? '0' + n : n;
    }

    return this.getUTCFullYear()   + '-' +
        f(this.getUTCMonth() + 1) + '-' +
        f(this.getUTCDate())      + 'T' +
        f(this.getUTCHours())     + ':' +
        f(this.getUTCMinutes())   + ':' +
        f(this.getUTCSeconds())   + 'Z';
};
```

You can provide an optional replacer method. It will be passed the key and value of each member, with this bound to the containing object. The value that is returned from your method will be serialized. If your method returns undefined, then the member will be excluded from the serialization.

If the replacer parameter is an array of strings, then it will be used to select the members to be serialized. It filters the results such that only members with keys listed in the replacer array are stringified.

Values that do not have JSON representations, such as undefined or functions, will not be serialized. Such values in objects will be dropped; in arrays they will be replaced with null. You can use a replacer function to replace those with JSON values. JSON.stringify(undefined) returns undefined.

The optional space parameter produces a stringification of the value that is filled with line breaks and indentation to make it easier to read.
If the space parameter is a non-empty string, then that string will be used for indentation. If the space parameter is a number, then the indentation will be that many spaces.

Example:

    text = JSON.stringify(['e', {pluribus: 'unum'}]);
    // text is '["e",{"pluribus":"unum"}]'

    text = JSON.stringify(['e', {pluribus: 'unum'}], null, 't');
    // text is '\n\t"e",\n\t{"\n\t\t"pluribus": "unum\"\n\t\n\t\n"
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\t\n\t\nusercontent
myData = JSON.parse('"Date(09/09/2001)"', function (key, value) {
    var d;
    if (typeof value === 'string' &&
        value.slice(0, 5) === 'Date(' &&
        value.slice(-1) === ')') {
        d = new Date(value.slice(5, -1));
        if (d) {
            return d;
        }
    }
    return value;
});

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*/

Found in path(s):
*/opt/cola/permits/1110633107_1614361079.98/0/jasmine-core-3-3-0-tar-gz/jasmine-core-3.3.0/lib/jasmine-core/json2.js
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Metadata-Version: 1.1
Name: jasmine-core
Version: 3.3.0
Summary: Jasmine is a Behavior Driven Development testing framework for JavaScript. It does not rely on browsers, DOM, or any JavaScript framework. Thus it's suited for websites, Node.js (http://nodejs.org) projects, or anywhere that JavaScript can run.
Home-page: http://jasmine.github.io
Author: Pivotal Labs
Author-email: jasmine-js@googlegroups.com
License: MIT
Description: UNKNOWN
Platform: UNKNOWN
Classifier: Development Status :: 5 - Production/Stable
Classifier: Environment :: Console
Classifier: Environment :: Web Environment
Classifier: Framework :: Django
Classifier: Intended Audience :: Developers
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Classifier: Operating System :: OS Independent
Classifier: Programming Language :: Python
Classifier: Programming Language :: Python :: 3
Classifier: Programming Language :: Python :: 3.2
Classifier: Programming Language :: Python :: 3.3
Classifier: Programming Language :: Python :: Implementation :: PyPy
# A JavaScript Testing Framework

Jasmine is a Behavior Driven Development testing framework for JavaScript. It does not rely on browsers, DOM, or any JavaScript framework. Thus it's suited for websites, [Node.js](http://nodejs.org) projects, or anywhere that JavaScript can run.

Documentation & guides live here: [http://jasmine.github.io](http://jasmine.github.io)

For a quick start guide of Jasmine, see the beginning of [http://jasmine.github.io/edge/introduction.html](http://jasmine.github.io/edge/introduction.html)

Upgrading from Jasmine 2.x? Check out the [3.0 release notes](https://github.com/jasmine/jasmine/blob/v3.0.0/release_notes/3.0.md) for a list of what's new (including breaking changes).

## Contributing

Please read the [contributors' guide](https://github.com/jasmine/jasmine/blob/master/.github/CONTRIBUTING.md)

## Installation

For the Jasmine NPM module:<br>
[https://github.com/jasmine/jasmine-npm](https://github.com/jasmine/jasmine-npm)

For the Jasmine Ruby Gem:<br>
[https://github.com/jasmine/jasmine-gem](https://github.com/jasmine/jasmine-gem)
For the Jasmine Python Egg: <br>[https://github.com/jasmine/jasmine-py](https://github.com/jasmine/jasmine-py)

For the Jasmine headless browser gulp plugin: <br>[https://github.com/jasmine/gulp-jasmine-browser](https://github.com/jasmine/gulp-jasmine-browser)

To install Jasmine standalone on your local box (where **_{#.#.#}_** below is substituted by the release number downloaded):

* Download the standalone distribution for your desired release from the [releases page](https://github.com/jasmine/jasmine/releases)
* Create a Jasmine directory in your project - `mkdir my-project/jasmine`
* Move the dist to your project directory - `mv jasmine/dist/jasmine-standalone-{#.#.#}.zip my-project/jasmine`
* Change directory - `cd my-project/jasmine`
* Unzip the dist - `unzip jasmine-standalone-{#.#.#}.zip`

Add the following to your HTML file:

```html
```html
<link rel="shortcut icon" type="image/png" href="jasmine/lib/jasmine-{#.#.#}/jasmine_favicon.png">
<link rel="stylesheet" type="text/css" href="jasmine/lib/jasmine-{#.#.#}/jasmine.css">

<script type="text/javascript" src="jasmine/lib/jasmine-{#.#.#}/jasmine.js"></script>
<script type="text/javascript" src="jasmine/lib/jasmine-{#.#.#}/jasmine-html.js"></script>
<script type="text/javascript" src="jasmine/lib/jasmine-{#.#.#}/boot.js"></script>
```

## Supported environments

Jasmine tests itself across many browsers (Safari, Chrome, Firefox, PhantomJS, Microsoft Edge, and new Internet Explorer) as well as nodejs. To see the exact version tests are run against look at our [.travis.yml](https://github.com/jasmine/jasmine/blob/master/.travis.yml)

## Support

* Search past discussions: [http://groups.google.com/group/jasmine-js](http://groups.google.com/group/jasmine-js)
* Send an email to the list: [jasmine-js@googlegroups.com](mailto:jasmine-js@googlegroups.com)
* View the project backlog at Pivotal Tracker: [http://www.pivotaltracker.com/projects/10606](http://www.pivotaltracker.com/projects/10606)
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## Maintainers

* [Gregg Van Hove](mailto:gvanhove@pivotal.io), Pivotal Labs

### Maintainers Emeritus
## License


Found in path(s):

- /opt/cola/permits/1110633107_1614361079.98/0/jasmine-core-3-3-0-tar-gz/jasmine-core-3.3.0/README.md

### 1.672 sysfsutils 2.1.0 24.el8

#### 1.672.1 Available under license:

The GNU General Public License (GPL)

Version 2, June 1991

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%global srcname Deprecated
%global pkgname deprecated

Name: python-%{pkgname}
Version: 1.2.13
Release: 1%{?dist}
Summary: Python decorator to deprecate old python classes, functions or methods
License: MIT
URL: https://github.com/tantale/%{pkgname}
Source0: %{pypi_source}
BuildArch: noarch

%description
Python @deprecated decorator to deprecate old python classes, functions or methods.

%package -n python3-%{pkgname}
Summary: %{summary}
BuildRequires: python3-devel
BuildRequires: python3-setuptools
%{?python_provide:%python_provide python3-%{pkgname}}

%description -n python3-%{pkgname}
Python @deprecated decorator to deprecate old python classes, functions or methods.

%prep
%autosetup -n %{srcname}-%{version}
rm -rf %{pkgname}.egg-info

%build
%py3_build

%install
%py3_install

%files -n python3-%{pkgname}
%license LICENSE.rst
%doc README.md
%{python3_sitelib}/%{pkgname}/
%{python3_sitelib}/%{srcname}-*.egg-info/

%changelog
* Fri Jul 26 2019 Petr Hracek <phracek@redhat.com> - 1.2.6-2
  - Fix python3_sitelib issue
* Fri Jul 26 2019 Petr Hracek <phracek@redhat.com> - 1.2.6-1
- Initial package

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* /opt/cola/permits/1201203897_1631116519.19/0/deprecated-1-2-13-tar-gz/Deprecated-1.2.13/.github/CODE_OF_CONDUCT.md

### 1.680 opensaml-xmlsec-api 3.4.5

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#

# (Massachusetts Institute of Technology,
1.681 ingest-geoip 7.10.2

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* /opt/cola/permits/1147228763_1616894513.37/0/ingest-geoip-7-10-2-sources-jar/org/elasticsearch/ingest/geoip/GeoIpProcessor.java
* /opt/cola/permits/1147228763_1616894513.37/0/ingest-geoip-7-10-2-sources-jar/org/elasticsearch/ingest/geoip/DatabaseReaderLazyLoader.java
* /opt/cola/permits/1147228763_1616894513.37/0/ingest-geoip-7-10-2-sources-jar/org/elasticsearch/ingest/geoip/IngestGeoIpPlugin.java

1.682 netty 4.1.62.Final
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Manifest-Version: 1.0
Implementation-Title: Netty/Buffer
Bundle-Description: Netty is an asynchronous event-driven network application framework for rapid development of maintainable high performance protocol servers and clients.
Automatic-Module-Name: io.netty.buffer
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0
Bundle-SymbolicName: io.netty.buffer
Implementation-Version: 4.1.62.Final
Built-By: norman
Bnd-LastModified: 1617128225125
Bundle-ManifestVersion: 2
Implementation-Vendor-Id: io.netty
Bundle-DocURL: https://netty.io/
Bundle-Vendor: The Netty Project
Import-Package: io.netty.util;version="[4.1,5)";io.netty.util.concurrent;version="[4.1,5)";io.netty.util.internal;version="[4.1,5)";io.netty.util.internal.logging;version="[4.1,5)";sun.nio.ch;resolution=optional,org.eclipse.jetty.npn;version="[1,2)";resolution=optional,org.eclipse.jetty.alpn;version="[1,2)";resolution=optional
Require-Capability: osgi.ee;filter="(&osgi.ee=JavaSE)(version=1.6))"
Tool: Bnd-2.4.1.201501161923
Implementation-Vendor: The Netty Project
Export-Package: io.netty.buffer;uses="io.netty.util";version="4.1.62";io.netty.buffer.search;uses="io.netty.util";version="4.1.62"
Bundle-Name: Netty/Buffer
Bundle-Version: 4.1.62.Final
Created-By: Apache Maven Bundle Plugin
Build-Jdk: 1.8.0_252
Implementation-URL: https://netty.io/netty-buffer/

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=head1 NAME

Pod::Escapes - for resolving Pod EE<lt>...E<gt> sequences

=head1 SYNOPSIS

use Pod::Escapes qw(e2char);
...la la la, parsing POD, la la la...
$text = e2char($e_node->label);
unless(defined $text) {
    print "Unknown E sequence \"", $e_node->label, "\"!";
}
...else print/interpolate $text...

=head1 DESCRIPTION

This module provides things that are useful in decoding Pod EE<lt>...E<gt> sequences. Presumably, it should be used only by Pod parsers and/or formatters.

By default, Pod::Escapes exports none of its symbols. But you can request any of them to be exported. Either request them individually, as with C<use Pod::Escapes qw(symbolname symbolname2...)>; or you can do C<use Pod::Escapes qw(:ALL)> to get all exportable symbols.

=head1 GOODIES

=over
Given a name or number that could appear in a \texttt{<NAME>\_OR\_NUM> sequence, this returns the string that it stands for. For example, \texttt{e2char('sol')}, \texttt{e2char('47')}, \texttt{e2char('0x2F')}, and \texttt{e2char('057')} all return "/", because \texttt{<NAME>\_OR\_NUM>}, \texttt{<NAME>\_OR\_NUM>}, \texttt{<NAME>\_OR\_NUM>}, and \texttt{<NAME>\_OR\_NUM>}, all mean "/". If the name has no known value (as with a name of "qacute") or is syntactically invalid (as with a name of "1/4"), this returns \texttt{undef}.

Given a name or number that could appear in a \texttt{<NAME>\_OR\_NUM> sequence, this returns the number of the Unicode character that this stands for. For example, \texttt{e2charnum('sol')}, \texttt{e2charnum('47')}, \texttt{e2charnum('0x2F')}, and \texttt{e2charnum('057')} all return 47, because \texttt{<NAME>\_OR\_NUM>}, \texttt{<NAME>\_OR\_NUM>}, \texttt{<NAME>\_OR\_NUM>}, and \texttt{<NAME>\_OR\_NUM>}, all mean "/", whose Unicode number is 47. If the name has no known value (as with a name of "qacute") or is syntactically invalid (as with a name of "1/4"), this returns \texttt{undef}.

Maps from names (as in \texttt{<NAME>\_OR\_NUM>}) like "eacute" or "sol" to the string that each stands for. Note that this does not include numerics (like "64" or "x981e"). Under old Perl versions (before 5.7) you get a "?" in place of characters whose Unicode value is over 255.

Maps from names (as in \texttt{<NAME>\_OR\_NUM>}) like "eacute" or "sol" to the Unicode value that each stands for. For example, \texttt{Name2character\_number('eacute')} is 201, and \texttt{Name2character\_number('eacute')} is 8364. You get the correct Unicode value, regardless of the version of Perl you're using -- which differs from \texttt{Name2character\_number}'s behavior under pre-5.7 Perls.

Note that this hash does not include numerics (like "64" or "x981e").

For numbers in the range 160 (0x00A0) to 255 (0x00FF), this maps from the character code for a Latin-1 character (like 233 for
lowercase e-acute) to the US-ASCII character that best approximates it (like "e"). You may find this useful if you are rendering POD in a format that you think deals well only with US-ASCII characters.

=item $\text{Latin1Char_to_fallback}(<$character><)}$

Just as above, but maps from characters (like "xE9", lowercase e-acute) to characters (like "e").

=item $\text{Code2USASCII}(<$integer><}$

This maps from US-ASCII codes (like 32) to the corresponding character (like space, for 32). Only characters 32 to 126 are defined. This is meant for use by \texttt{C<e2char($x)>} when it senses that it's running on a non-ASCII platform (where \texttt{chr(32)} doesn't get you a space -- but \texttt{Code2USASCII[32]} will). It's documented here just in case you might find it useful.

=back

=head1 CAVEATS

On Perl versions before 5.7, Unicode characters with a value over 255 (like lambda or emdash) can't be conveyed. This module does work under such early Perl versions, but in the place of each such character, you get a "?". Latin-1 characters (characters 160-255) are unaffected.

Under EBCDIC platforms, \texttt{C<e2char($n)>} may not always be the same as \texttt{C<chr(e2charnum($n))>}, and ditto for \texttt{C<$Name2character[$name]>} and \texttt{C<chr($Name2character_number[$name])>}, because the strings are returned as native, and the numbers are returned as Unicode. However, for Perls starting with v5.8, \texttt{C<e2char($n)>} is the same as \texttt{C<chr(utf8::unicode_to_native(e2charnum($n)))>}, and ditto for \texttt{C<$Name2character[$name]>} and \texttt{C<chr(utf8::unicode_to_native($Name2character_number[$name])>).</p>

=head1 SEE ALSO

L<\texttt{Pod::Browser}> - a pod web server based on L<\texttt{Catalyst}>.

L<\texttt{Pod::Checker}> - check pod documents for syntax errors.

L<\texttt{Pod::Coverage}> - check if the documentation for a module is comprehensive.

L<\texttt{perlpod}> - description of pod format (for people documenting with pod).
L<perlpodspec> - specification of pod format (for people processing it).

L<Text::Unidecode> - ASCII transliteration of Unicode text.

=head1 REPOSITORY

L<https://github.com/neilbowers/Pod-Escapes>

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Portions of the data tables in this module are derived from the entity declarations in the W3C XHTML specification.

Currently (October 2001), that's these three:

http://www.w3.org/TR/xhtml1/DTD/xhtml-lat1.ent
http://www.w3.org/TR/xhtml1/DTD/xhtml-special.ent
http://www.w3.org/TR/xhtml1/DTD/xhtml-symbol.ent

=head1 AUTHOR

Sean M. Burke C<sburke@cpan.org>

Now being maintained by Neil Bowers E<lt>neilb@cpan.orgE<gt>

=cut

#~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
# What I used for reading the XHTML .ent files:

my (@norms, @good, @bad);
my $dir = 'c:/sgml/docbook/';
my %escapes;
foreach my $file (qw( xhtml-symbol.ent xhtml-lat1.ent xhtml-special.ent )) {
open(IN, "<$dir$file") or die "can't read-open $dir$file: $!";
print "Reading $file...\n";
while(<IN>) {
    if(m/<!ENTITY\s+(\S+)\s+"&(\[^;]+);">/) {
        my($name, $value) = ($1,$2);
        next if $name eq 'quot' or $name eq 'apos' or $name eq 'gt';

        $value = hex $1 if $value =~ m/^x([a-fA-F0-9]+)$/s;
        print "ILLEGAL VALUE $value" unless $value =~ m/^\d+$/s;
        if($value > 255) {
            push @good, sprintf "   %-10s , chr(%s),\n", "$name", $value;
            push @bad, sprintf "   %-10s , \$bad,\n", "$name", $value;
        } else {
            push @norms, sprintf " %-10s , chr(%s),\n", "$name", $value;
        }
    } elsif(m/<!ENT/) {
        print "# Skipping $_";
    }
}

close(IN);

print @norms;
print "\n( \$\] .= 5.006001 ? (\n";
print @good;
print " ) : (\n";
print @bad;
print " )\n);\n"

__END__
#~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548111_1591901918.14/0/perl-Pod-Escapes-1.07-395.el8.src.rpm-cosi-expand-archive-AcQE8bnL/Pod-Escapes-1.07.tar.gz-cosi-expand-archive-GKGiQNjB/Pod-Escapes-1.07/lib/Pod/Escapes.pm
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---
abstract: unknown
author:
    - unknown
build_requires:
    ExtUtils::MakeMaker: '0'
configure_requires:
    ExtUtils::MakeMaker: '0'
dynamic_config: 1
1.685 go-yaml 2.4.0

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1.689 transport-nio-client 7.10.2

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<groupId>com.google.guava</groupId>
<artifactId>guava-testlib</artifactId>
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</build>
<licenses>
    <license>
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        <distribution>repo</distribution>
    </license>
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<scm>
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    <connection>scm:git:https://github.com/JCTools/JCTools</connection>
    <tag>HEAD</tag>
</scm>

<developers>
    <developer>
        <url>https://github.com/nitsanw</url>
    </developer>
    <developer>
        <url>https://github.com/mjpt777</url>
    </developer>
    <developer>
        <url>https://github.com/RichardWarburton</url>
    </developer>
    <developer>
        <url>https://github.com/kay</url>
    </developer>
    <developer>
        <url>https://github.com/franz1981</url>
    </developer>
</developers>

<prerequisites>
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</prerequisites>

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    <java.test.version>1.8</java.test.version>
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    <maven.compiler.target>${java.version}</maven.compiler.target>
    <maven.compiler.testSource>${java.test.version}</maven.compiler.testSource>
    <maven.compiler.testTarget>${java.test.version}</maven.compiler.testTarget>
    <hamcrest.version>1.3</hamcrest.version>

<junit.version>4.12</junit.version>
<guava-testlib.version>21.0</guava-testlib.version>
</properties>
</project>

Found in path(s):
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/META-INF/maven/org.jctools/jctools-core/pom.xml

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 */

Found in path(s):
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/MessagePassingQueueUtil.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/util/UnsafeJvmInfo.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/atomic/MpscAtomicArrayQueue.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/queues/atomic/MpscLinkedAtomicQueue.java
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* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/util/Pow2.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources-jar/org/jctools/maps/spec/ConcurrentQueueSpec.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources.jar/jctools/queues/MpscUnboundedXaddChunk.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources.jar/jctools/queues/atomic/SpscAtomicArrayQueue.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources.jar/jctools/queues/SupportsIterator.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources.jar/jctools/queues/SpmcArrayQueue.java
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* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources.jar/jctools/queues/atomic/SequencedAtomicReferenceArrayQueue.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources.jar/jctools/queues/MessagePassingQueue.java
* /opt/cola/permits/1257637630_1642977964.98/0/jctools-core-3-0-0-sources.jar/jctools/queues/atomic/SequencedAtomicReferenceArrayQueue.java
1.694 packaging 21.3

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1.696 cronie 1.5.2 4.el8

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## Installation

[Download JSON directly](https://raw.githubusercontent.com/shinnn/spdx-license-ids/master/index.json), or [use](https://docs.npmjs.com/cli/install) [npm](https://docs.npmjs.com/about-npm):

```sh
npm install spdx-license-ids
```

## Node.js API

### require('spdx-license-ids')

Type: `string[]`

All license IDs except for the currently deprecated ones.

```javascript
const ids = require('spdx-license-ids');
//=> ['0BSD', 'AAL', 'ADSL', 'AFL-1.1', 'AFL-1.2', 'AFL-2.0', 'AFL-2.1', 'AFL-3.0', 'AGPL-1.0-only', ...]
```

```javascript
ids.includes('BSD-3-Clause'); //=> true
ids.includes('CC-BY-1.0'); //=> true
ids.includes('GPL-3.0'); //=> false
```

### require('spdx-license-ids/deprecated')

Type: `string[]`

Deprecated license IDs.

```javascript
const deprecatedIds = require('spdx-license-ids/deprecated');
```
//=> ['AGPL-1.0', 'AGPL-3.0', 'GFDL-1.1', 'GFDL-1.2', 'GFDL-1.3', 'GPL-1.0', 'GPL-2.0', ...]

deprecatedIds.includes('BSD-3-Clause'); //=> false
deprecatedIds.includes('CC-BY-1.0'); //=> false
deprecatedIds.includes('GPL-3.0'); //=> true
```

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wcwidth.js: JavaScript Porting of Markus Kuhn's wcwidth() Implementation
=======================================================================
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This package is a JavaScript porting of `wcwidth()` implementation

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SOFTWARE.
{
  'variables': {
    'openssl_defines_BSD-x86_64': [
      'NDEBUG',
      'L_ENDIAN',
      'OPENSSL_PIC',
    ],
    'openssl_cflags_BSD-x86_64': [
      '-Wall -O3',
      '-pthread',
      '-Wall -O3',
    ],
    'openssl_ex_libs_BSD-x86_64': [
      '-pthread',
    ],
    'openssl_cli_srcs_BSD-x86_64': [
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      'openssl/apps/ca.c',
      'openssl/apps/ciphers.c',
      'openssl/apps/cms.c',
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      'openssl/apps/pkeyutl.c',
      'openssl/apps/prime.c',
      'openssl/apps/rand.c',
      'openssl/apps/rehash.c',
    ]
  }
}
Minizlib was created by Isaac Z. Schlueter.
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{
    'variables': {
        'openssl_sources': [
            'openssl/ssl/bio_ssl.c',
            'openssl/ssl/d1_lib.c',
            'openssl/ssl/d1_msg.c',
            'openssl/ssl/d1_srtp.c',
            'openssl/ssl/methods.c',
            'openssl/ssl/packet.c',
            'openssl/ssl/pqueue.c',
            'openssl/ssl/record/dtls1_bitmap.c',
            'openssl/ssl/record/rec_layer_d1.c',
            'openssl/ssl/record/rec_layer_s3.c',
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            'openssl/ssl/statem/extensions_clnt.c',
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    }
}
```
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'openssl/ssl/statem/statem_dtls.c',
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'openssl/crypto/asn1/bio_ndef.c',
'openssl/crypto/asn1/d2i_pr.c',
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'openssl/crypto/bf/bf_skey.c',
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'openssl/crypto/bio/b_dump.c',
'openssl/crypto/bio/b_print.c',

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}
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Open Source Used In BGP TE Controller Version 4.3.0 8898
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'openssl/crypto/x509v3/v3_bitst.c',
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  '/config/archs/bsd-x86_64/asm/crypto/bn/x86_64-mont5.s',
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  '/config/archs/bsd-x86_64/asm/crypto/ec/ecn-x25519-x86_64.s',
  '/config/archs/bsd-x86_64/asm/crypto/md5/md5-x86_64.s',
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'POLY1305_ASM',
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],
'include_dirs': [ }
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validate-npm-package-license
============================

Give me a string and I'll tell you if it's a valid npm package license string.

```javascript
var valid = require('validate-npm-package-license');
```

SPDX license identifiers are valid license strings:

```javascript
var assert = require('assert');
var validSPDXExpression = {
  validForNewPackages: true,
  validForOldPackages: true,
  spdx: true
};

assert.deepEqual(valid('MIT'), validSPDXExpression);
assert.deepEqual(valid('BSD-2-Clause'), validSPDXExpression);
assert.deepEqual(valid('Apache-2.0'), validSPDXExpression);
assert.deepEqual(valid('ISC'), validSPDXExpression);
```

The function will return a warning and suggestion for nearly-correct license identifiers:

```javascript
assert.deepEqual(
  valid('Apache 2.0'),
  {
    validForOldPackages: false,
    validForNewPackages: false,
    warnings: [
      'license should be ' +
      'a valid SPDX license expression (without "LicenseRef"), ' +
      '"UNLICENSED", or ' +
      '"SEE LICENSE IN <filename>"",
```
"license is similar to the valid expression "Apache-2.0"
]
}
);
```

SPDX expressions are valid, too ...

```javascript
// Simple SPDX license expression for dual licensing
assert.deepEqual(
  valid('GPL-3.0-only OR BSD-2-Clause'),
  validSPDXExpression
);
```

... except if they contain `LicenseRef`:

```javascript
var warningAboutLicenseRef = {
  validForOldPackages: false,
  validForNewPackages: false,
  spdx: true,
  warnings: [
    'license should be ’ +
    'a valid SPDX license expression (without "LicenseRef"), ’ +
    '"UNLICENSED", or ’ +
    '"SEE LICENSE IN <filename>”',
  ]
};

assert.deepEqual(
  valid('LicenseRef-Made-Up'),
  warningAboutLicenseRef
);

assert.deepEqual(
  valid('MIT OR LicenseRef-Made-Up'),
  warningAboutLicenseRef
);
```

If you can't describe your licensing terms with standardized SPDX identifiers, put the terms in a file in the package and point users there:

```javascript
assert.deepEqual(
  valid('SEE LICENSE IN LICENSE.txt'),
);
```javascript
var unlicensed = {
  validForNewPackages: true,
  validForOldPackages: true,
  unlicensed: true
};
assert.deepEqual(valid('UNLICENSED'), unlicensed);
assert.deepEqual(valid('UNLICENCED'), unlicensed);
```

If there aren't any licensing terms, use `UNLICENSED`:

```javascript
...javascript
var unlicensed = {
  validForNewPackages: true,
  validForOldPackages: true,
  unlicensed: true
};
assert.deepEqual(valid('UNLICENSED'), unlicensed);
assert.deepEqual(valid('UNLICENCED'), unlicensed);
```
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1.699 zlib 1.1.0

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1.700 icu4j 62.1

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

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* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

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**Oracle**

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

-------

**Oracle OpenJDK**

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.
* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

------

OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm

------

Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

------

MortBay

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org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api
The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

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1.708 ncurses 6.1-9.20180224.el8

1.708.1 Available under license :

Upstream source https://invisible-island.net/ncurses/ncurses-examples.html

Current ncurses maintainer: Thomas Dickey <dickey@invisible-island.net>

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--- vile: txtmode fc=72
--- $Id: COPYING,v 1.6 2018/01/01 12:00:00 tom Exp $
Upstream source https://invisible-island.net/ncurses/ncurses.html
This package is used for testing builds of ncurses.

Current ncurses maintainer: Thomas Dickey <dickey@invisible-island.net>

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1.709 certifi 2018.08.24

1.709.1 Available under license:

This package contains a modified version of ca-bundle.crt:

c-a-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#
This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:
It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication.
Just configure this file as the SSLCACertificateFile.

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**1.718 pycparser 2.21**

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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1.723 flask-restful 0.3.8

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1.724 zlib 1.2.11 r3

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1.725 python-memcached 1.59

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Julian Seward, Cambridge, UK.
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bzip2/libbzip2 version 1.0.3 of 15 February 2005

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1.726 gd 2.2.5-7.el8

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1.727 perl-digest-sha 6.02-1.el8

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 * sha.h: header file for SHA-1/224/256/384/512 routines
 * Ref: NIST FIPS PUB 180-4 Secure Hash Standard
 * Copyright (C) 2003-2018 Mark Shelor, All Rights Reserved
 * Version: 6.02
 * Fri Apr 20 16:25:30 MST 2018
 */

Found in path(s):
* /opt/cola/permits/1137994381_1614192640.86/0/perl-Digest-SHA-6.02-1.el8-1.src.rpm-cosi-expand-archive-tWM6GeIu/Digest-SHA-6.02.tar.gz-cosi-expand-archive-L4u9iy7z/Digest-SHA-6.02/src/sha.h
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 * Version: 6.02
 * Fri Apr 20 16:25:30 MST 2018
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#!perl
BEGIN { pop @INC if $INC[-1] eq '.' }

use strict;
use warnings;
use Fcntl;
use Getopt::Long;
use Digest::SHA qw($errmsg);

my $POD = <<'END_OF_POD';

=head1 NAME
shasum - Print or Check SHA Checksums

=head1 SYNOPSIS
Usage: shasum [OPTION][... [FILE][...]
Print or check SHA checksums.
With no FILE, or when FILE is -, read standard input.

-a, --algorithm   1 (default), 224, 256, 384, 512, 512224, 512256
-b, --binary      read in binary mode
-c, --check       read SHA sums from the FILEs and check them
     --tag        create a BSD-style checksum
-t, --text       read in text mode (default)
-U, --UNIVERSAL   read in Universal Newlines mode
        produces same digest on Windows/Unix/Mac
-0, --01         read in BITS mode
        ASCII '0' interpreted as 0-bit,
        ASCII '1' interpreted as 1-bit,
        all other characters ignored

The following five options are useful only when verifying checksums:
     --ignore-missing don't fail or report status for missing files
     -q, --quiet     don't print OK for each successfully verified file

END_OF_POD
-s, --status          don't output anything, status code shows success
--strict          exit non-zero for improperly formatted checksum lines
-w, --warn          warn about improperly formatted checksum lines

-h, --help        display this help and exit
-v, --version     output version information and exit

When verifying SHA-512/224 or SHA-512/256 checksums, indicate the algorithm explicitly using the -a option, e.g.

shasum -a 512224 -c checksumfile

The sums are computed as described in FIPS PUB 180-4. When checking, the input should be a former output of this program. The default mode is to print a line with checksum, a character indicating type ('*' for binary, ' ' for text, 'U' for UNIVERSAL, '^' for BITS), and name for each FILE. The line starts with a `\' character if the FILE name contains either newlines or backslashes, which are then replaced by the two-character sequences `\n' and `\' respectively.

Report shasum bugs to mshelor@cpan.org

=head1 DESCRIPTION

Running I<shasum> is often the quickest way to compute SHA message digests. The user simply feeds data to the script through files or standard input, and then collects the results from standard output.

The following command shows how to compute digests for typical inputs such as the NIST test vector "abc":

perl -e "print qq(abc)" | shasum

Or, if you want to use SHA-256 instead of the default SHA-1, simply say:

perl -e "print qq(abc)" | shasum -a 256

Since I<shasum> mimics the behavior of the combined GNU I<sha1sum>, I<sha224sum>, I<sha256sum>, I<sha384sum>, and I<sha512sum> programs, you can install this script as a convenient drop-in replacement.

Unlike the GNU programs, I<shasum> encompasses the full SHA standard by allowing partial-byte inputs. This is accomplished through the BITS option (I<-0>). The following example computes the SHA-224 digest of the 7-bit message I<0001100>:  

perl -e "print qq(0001100)" | shasum -0 -a 224
=head1 AUTHOR
Copyright (C) 2003-2018 Mark Shelor <mshelor@cpan.org>.
=head1 SEE ALSO
I<shasum> is implemented using the Perl module L<Digest::SHA>.
=cut
END_OF_POD
my $VERSION = "6.02";
sub usage {
my($err, $msg) = @_;
$msg = "" unless defined $msg;
if ($err) {
warn($msg . "Type shasum -h for help\n");
exit($err);
}
my($USAGE) = $POD =~ /SYNOPSIS(.+?)^=/sm;
$USAGE =~ s/^\s*//;
$USAGE =~ s/\s*$//;
$USAGE =~ s/^ //gm;
print $USAGE, "\n";
exit($err);
}

## Sync stdout and stderr by forcing a flush after every write
select((select(STDOUT), $| = 1)[0]);
select((select(STDERR), $| = 1)[0]);

## Collect options from command line
my ($alg, $binary, $check, $text, $status, $quiet, $warn, $help);
my ($version, $BITS, $UNIVERSAL, $tag, $strict, $ignore_missing);
eval { Getopt::Long::Configure ("bundling") };
GetOptions(
'b|binary' => \$binary, 'c|check' => \$check,
't|text' => \$text, 'a|algorithm=i' => \$alg,
's|status' => \$status, 'w|warn' => \$warn,
'q|quiet' => \$quiet,

Open Source Used In BGP TE Controller Version 4.3.0 9079


'help' => $help, 'version' => $version,
'001' => $BITS,
'UNIVERSAL' => $UNIVERSAL,
'tag' => $tag,
'strict' => $strict,
'ignore-missing' => $ignore_missing,
) or usage(1, "");

## Deal with help requests and incorrect uses

usage(0)
if $help;
usage(1, "shasum: Ambiguous file mode\n")
if scalar(grep {defined $_} ($binary, $text, $BITS, $UNIVERSAL)) > 1;
usage(1, "shasum: --warn option used only when verifying checksums\n")
if $warn && !$check;
usage(1, "shasum: --status option used only when verifying checksums\n")
if $status && !$check;
usage(1, "shasum: --quiet option used only when verifying checksums\n")
if $quiet && !$check;
usage(1, "shasum: --ignore-missing option used only when verifying checksums\n")
if $ignore_missing && !$check;
usage(1, "shasum: --strict option used only when verifying checksums\n")
if $strict && !$check;
usage(1, "shasum: --tag does not support --text mode\n")
if $tag && $text;
usage(1, "shasum: --tag does not support Universal Newlines mode\n")
if $tag && $UNIVERSAL;
usage(1, "shasum: --tag does not support BITS mode\n")
if $tag && $BITS;

## Default to SHA-1 unless overridden by command line option

my %isAlg = map { $_ => 1 } (1, 224, 256, 384, 512, 512224, 512256);
$alg = 1 unless defined $alg;
usage(1, "shasum: Unrecognized algorithm\n") unless $isAlg{$alg};

my %Tag = map { $_ => "SHA$_" } (1, 224, 256, 384, 512);
$Tag{512224} = "SHA512/224";
$Tag{512256} = "SHA512/256";

## Display version information if requested

if ($version) {
print "$VERSION
";
exit(0);
}

## Try to figure out if the OS is DOS-like. If it is,
## default to binary mode when reading files, unless
## explicitly overridden by command line "--text" or
## "--UNIVERSAL" options.
my $isDOSish = ($^O =~ /^(MSWin\d\d|os2|dos|mint|cygwin)$/);
if ($isDOSish) { $binary = 1 unless $text || $UNIVERSAL }

my $modesym = $binary ? '*' : ($UNIVERSAL ? 'U' : ($BITS ? '^' : ' '));

## Read from STDIN (-) if no files listed on command line
ARGV = ('-') unless ARGV;

## sumfile($file): computes SHA digest of $file
sub sumfile {
  my $file = shift;
  my $mode = $binary ? 'b' : ($UNIVERSAL ? 'U' : ($BITS ? '0' : ' '));
  my $digest = eval { Digest::SHA->new($alg)->addfile($file, $mode) };
  if ($@) { warn "shasum: $file: $errmsg\n"; return }
  $digest->hexdigest;
}

## %len2alg: maps hex digest length to SHA algorithm
my %len2alg = (40 => 1, 56 => 224, 64 => 256, 96 => 384, 128 => 512);
$len2alg{56} = 512224 if $alg == 512224;
$len2alg{64} = 512256 if $alg == 512256;

## unescape: convert backslashed filename to plain filename
sub unescape {
  $_[0] =~ s/\\/\0/g;
  s/\n/\n/g;
  s/\0/\0/g;
  return $_[0];
}
}

## verify: confirm the digest values in a checksum file
sub verify {
my $checkfile = shift;
my ($err, $fmt_errs, $read_errs, $match_errs) = (0, 0, 0, 0);
my ($num_fmt_OK, $num_OK) = (0, 0);
my ($bslash, $sum, $fname, $rsp, $digest, $isOK);
local *FH;
$checkfile eq '-' and open(FH, '< -')
and $checkfile = 'standard input'
or sysopen(FH, $checkfile, O_RDONLY)
or die "shasum: $checkfile: $!\n";
while (<FH>) {
next if /^#/;
if (/^[ \t]*\\?SHA/) {
$modesym = '*';
($bslash, $alg, $fname, $sum) =
/^[ \t]*(\\?)SHA(\S+) \((.+)\) = ([\da-fA-F]+)/;
$alg =~ tr{/}{}d if defined $alg;
}
else {
($bslash, $sum, $modesym, $fname) =
/^[ \t]*(\\?)([\da-fA-F]+)[ \t]([ *^U])(.+)/;
$alg = defined $sum ? $len2alg{length($sum)} : undef;
}
if (grep { ! defined $_ } ($alg, $sum, $modesym, $fname) or
! $isAlg{$alg}) {
warn("shasum: $checkfile: $.: improperly " .
"formatted SHA checksum line\n") if $warn;
$fmt_errs++;
$err = 1 if $strict;
next;
}
$num_fmt_OK++;
$fname = unescape($fname) if $bslash;
next if $ignore_missing && ! -e $fname;
$rsp = "$fname: ";
($binary, $text, $UNIVERSAL, $BITS) =
map { $_ eq $modesym } ('*', ' ', 'U', '^');
$isOK = 0;
unless ($digest = sumfile($fname)) {
$rsp .= "FAILED open or read\n";
$err = 1; $read_errs++;
}

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elsif (lc($sum) eq $digest) {
    $rsp .= "OK\n";
    $isOK = 1;
    $num_OK++;
} else { $rsp .= "FAILED\n"; $err = 1; $match_errs++
    print $rsp unless ($status || ($quiet && $isOK));
}
close(FH);
if (! $num_fmt_OK) {
    warn("shasum: $checkfile: no properly formatted " .
    "SHA checksum lines found\n");
    $err = 1;
} elsif (! $status) {
    warn("shasum: WARNING: $fmt_errs line" . ($fmt_errs>1?
        's are':'s') . " improperly formatted\n") if $fmt_errs;
    warn("shasum: WARNING: $read_errs listed file" .
        ($read_errs>1?'s':'') . " could not be read\n") if $read_errs;
    warn("shasum: WARNING: $match_errs computed checksum" .
        ($match_errs>1?'s':'') . " did NOT match\n") if $match_errs;
} if ($ignore_missing && ! $num_OK && $num_fmt_OK) {
    warn("shasum: $checkfile: no file was verified\n")
    unless $status;
    $err = 1;
} return($err == 0);

## Verify or compute SHA checksums of requested files

my($file, $digest);
my $STATUS = 0;
for $file (@ARGV) {
    if ($check) { $STATUS = 1 unless verify($file) }
    elsif ($digest = sumfile($file)) {
        if ($file =~ /
\]/) {
            $file =~ s/\/\\/g; $file =~ s/\n/\n/g;
        }
        unless ($tag) { print "$digest $modesym$file\n" }
        else          { print "$Tag{$alg} ($file) = $digest\n" }
    } else { $STATUS = 1 }
}
exit($STATUS);
license: perl

/* sha.c: routines to compute SHA-1/224/256/384/512 digests
 *
 * Copyright (C) 2003-2018 Mark Shelor, All Rights Reserved
 * 
 * Version: 6.02
 * Fri Apr 20 16:25:30 MST 2018
 * 
 */

/* sha64bit.h: placeholder values for 64-bit data and routines
 *
 * Copyright (C) 2003-2018 Mark Shelor, All Rights Reserved
 * 
 * Version: 6.02
 * Fri Apr 20 16:25:30 MST 2018
 * 
 * The following macros supply placeholder values that enable the
 * sha.c module to successfully compile when 64-bit integer types
 * aren't present.
 * 
 * They are appropriately redefined in sha64bit.c if the compiler
 * provides a 64-bit type (i.e. when SHA_384_512 is defined).
 * 
 */
Digest::SHA version 6.02

Digest::SHA is a complete implementation of the NIST Secure Hash Standard. It gives Perl programmers a convenient way to calculate SHA-1, SHA-224, SHA-256, SHA-384, SHA-512, SHA-512/224, and SHA-512/256 message digests. The module can handle all types of input, including partial-byte data.

Digest::SHA is written in C for speed. If your platform lacks a C compiler, you can install the functionally-equivalent (but much slower) Digest::SHA::PurePerl module.

The tests subdirectory (t/*.t) contains an extensive set of SHA vectors compiled from various sources.

INSTALLATION

To install this module type the following:

perl Makefile.PL [ options ]
make
make test
make install

The Makefile.PL options are:

-x : exclude support for SHA-384/512

DEPENDENCIES

None

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=head1 NAME

Digest::SHA - Perl extension for SHA-1/224/256/384/512

=head1 SYNOPSIS

In programs:

# Functional interface

use Digest::SHA qw(sha1 sha1_hex sha1_base64 ...);

$digest = sha1($data);
$digest = sha1_hex($data);
$digest = sha1_base64($data);

$digest = sha256($data);
$digest = sha384_hex($data);
$digest = sha512_base64($data);

# Object-oriented

use Digest::SHA;

$sha = Digest::SHA->new($alg);

$sha->add($data); # feed data into stream

$sha->addfile(*F);
$sha->addfile($filename);

$sha->add_bits($bits);
$sha->add_bits($data, $nbits);

$sha_copy = $sha->clone; # make copy of digest object
$state = $sha->getstate; # save current state to string
$sha->putstate($state); # restore previous $state

$digest = $sha->digest; # compute digest
$digest = $sha->hexdigest;
$digest = $sha->b64digest;
From the command line:

$ shasum files

$ shasum --help

=head1 SYNOPSIS (HMAC-SHA)

# Functional interface only

use Digest::SHA qw(hmac_sha1 hmac_sha1_hex ...);

$digest = hmac_sha1($data, $key);
$digest = hmac_sha224_hex($data, $key);
$digest = hmac_sha256_base64($data, $key);

=head1 ABSTRACT

Digest::SHA is a complete implementation of the NIST Secure Hash Standard. It gives Perl programmers a convenient way to calculate SHA-1, SHA-224, SHA-256, SHA-384, SHA-512, SHA-512/224, and SHA-512/256 message digests. The module can handle all types of input, including partial-byte data.

=head1 DESCRIPTION

Digest::SHA is written in C for speed. If your platform lacks a C compiler, you can install the functionally equivalent (but much slower) L<Digest::SHA::PurePerl> module.

The programming interface is easy to use: it's the same one found in CPAN's L<Digest> module. So, if your applications currently use L<Digest::MD5> and you'd prefer the stronger security of SHA, it's a simple matter to convert them.

The interface provides two ways to calculate digests: all-at-once, or in stages. To illustrate, the following short program computes the SHA-256 digest of "hello world" using each approach:

use Digest::SHA qw(sha256_hex);

$data = "hello world";
@frags = split(//, $data);

# all-at-once (Functional style)
$digest1 = sha256_hex($data);

# in-stages (OOP style)
To calculate the digest of an n-bit message where I<n> is not a multiple of 8, use the I<add_bits()> method. For example, consider the 446-bit message consisting of the bit-string "110" repeated 148 times, followed by "11". Here's how to display its SHA-1 digest:

use Digest::SHA;
$bits = "110" x 148 . "11";
$sha = Digest::SHA->new(1)->add_bits($bits);
print $sha->hexdigest, "n";

Note that for larger bit-strings, it's more efficient to use the two-argument version I<add_bits($data, $nbits)>, where I<$data> is in the customary packed binary format used for Perl strings.

The module also lets you save intermediate SHA states to a string. The I<getstate()> method generates portable, human-readable text describing the current state of computation. You can subsequently restore that state with I<putstate()> to resume where the calculation left off.

To see what a state description looks like, just run the following:

use Digest::SHA;
print Digest::SHA->new->add(\"Shaw\" x 1962)->getstate;

As an added convenience, the Digest::SHA module offers routines to calculate keyed hashes using the HMAC-SHA-1/224/256/384/512 algorithms. These services exist in functional form only, and mimic the style and behavior of the I<sha()>, I<sha_hex()> and I<sha_base64()> functions.

# Test vector from draft-ietf-ipsec-ciph-sha-256-01.txt

use Digest::SHA qw(hmac_sha256_hex);
print hmac_sha256_hex("Hi There", chr(0x0b) x 32), "n";

=head1 UNICODE AND SIDE EFFECTS

Perl supports Unicode strings as of version 5.6. Such strings may contain wide characters, namely, characters whose ordinal values are greater than 255. This can cause problems for digest algorithms such
The rule by which Digest::SHA handles a Unicode string is easy to state, but potentially confusing to grasp: the string is interpreted as a sequence of byte values, where each byte value is equal to the ordinal value (viz. code point) of its corresponding Unicode character. That way, the Unicode string 'abc' has exactly the same digest value as the ordinary string 'abc'.

Since a wide character does not fit into a byte, the Digest::SHA routines croak if they encounter one. Whereas if a Unicode string contains no wide characters, the module accepts it quite happily.

The following code illustrates the two cases:

```perl
$str1 = pack('U*', (0..255));
print sha1_hex($str1); # ok
$str2 = pack('U*', (0..256));
print sha1_hex($str2); # croaks
```

Be aware that the digest routines silently convert UTF-8 input into its equivalent byte sequence in the native encoding (cf. utf8::downgrade). This side effect influences only the way Perl stores the data internally, but otherwise leaves the actual value of the data intact.

The Digest::SHA routines silently convert UTF-8 input into its equivalent byte sequence in the native encoding (cf. utf8::downgrade). This side effect influences only the way Perl stores the data internally, but otherwise leaves the actual value of the data intact.
To illustrate, \texttt{sha256_base64("abc")} is computed to be

\texttt{ungWv48Bz+pBQUDeXa4iI7ADYaOWF3qctBD/YfIAF0}

which has a length of 43. So, the properly padded version is

\texttt{ungWv48Bz+pBQUDeXa4iI7ADYaOWF3qctBD/YfIAF0=}

=head1 EXPORT

None by default.

=head1 EXPORTABLE FUNCTIONS

Provided your C compiler supports a 64-bit type (e.g. the I\texttt{long long} of C99, or I\texttt{__int64} used by Microsoft C/C++), all of these functions will be available for use. Otherwise, you won't be able to perform the SHA-384 and SHA-512 transforms, both of which require 64-bit operations.

=over 4

=item B<sha1($data, ...)>  
     Logically joins the arguments into a single string, and returns its SHA-1/224/256/384/512 digest encoded as a binary string.

=item B<sha1_hex($data, ...)> 

=item B<sha224($data, ...)> 

=item B<sha224_hex($data, ...)> 

=item B<sha256($data, ...)> 

=item B<sha256_hex($data, ...)> 

=item B<sha256($data, ...)> 

=item B<sha384($data, ...)> 

=item B<sha384_hex($data, ...)> 

=item B<sha512($data, ...)> 

=item B<sha512_hex($data, ...)> 

=item B<sha512224($data, ...)> 

=item B<sha512256($data, ...)> 

=item B<sha512224($data, ...)> 

=item B<sha512256($data, ...)> 

=item B<sha512256($data, ...)>
Logically joins the arguments into a single string, and returns its SHA-1/224/256/384/512 digest encoded as a hexadecimal string.

Logically joins the arguments into a single string, and returns its SHA-1/224/256/384/512 digest encoded as a Base64 string.

It's important to note that the resulting string does not contain the padding characters typical of Base64 encodings. This omission is deliberate, and is done to maintain compatibility with the family of CPAN Digest modules. See L</"PADDING OF BASE64 DIGESTS"> for details.

Returns a new Digest::SHA object. Allowed values for I<$alg> are 1, 224, 256, 384, 512, 512224, or 512256. It's also possible to use common string representations of the algorithm (e.g. "sha256", "SHA-384"). If the argument is missing, SHA-1 will be used by default.

Invoking I<new> as an instance method will reset the object to the
initial state associated with \texttt{$\alg$}. If the argument is missing, the object will continue using the same algorithm that was selected at creation.

\textbf{reset($\alg$)}

This method has exactly the same effect as \texttt{new($\alg$)}. In fact, \texttt{reset} is just an alias for \texttt{new}.

\textbf{hashsize}

Returns the number of digest bits for this object. The values are 160, 224, 256, 384, 512, 224, and 256 for SHA-1, SHA-224, SHA-256, SHA-384, SHA-512, SHA-512/224 and SHA-512/256, respectively.

\textbf{algorithm}

Returns the digest algorithm for this object. The values are 1, 224, 256, 384, 512, 512224, and 512256 for SHA-1, SHA-224, SHA-256, SHA-384, SHA-512, SHA-512/224, and SHA-512/256, respectively.

\textbf{clone}

Returns a duplicate copy of the object.

\textbf{add($\data$, ...)}

Logically joins the arguments into a single string, and uses it to update the current digest state. In other words, the following statements have the same effect:

\begin{verbatim}
$sha->add("a"); $sha->add("b"); $sha->add("c");
$sha->add("a")->add("b")->add("c");
$sha->add("a", "b", "c");
$sha->add("abc");
\end{verbatim}

The return value is the updated object itself.

\textbf{add_bits($\data$, $\nbits$)}

\textbf{add_bits($\bits$)}

Updates the current digest state by appending bits to it. The return value is the updated object itself.

The first form causes the most-significant $\nbits$ of $\data$ to be appended to the stream. The $\data$ argument is in the customary binary format used for Perl strings.
The second form takes an ASCII string of "0" and "1" characters as its argument. It's equivalent to

```perl
$sha->add_bits(pack("B*", $bits), length($bits));
```

So, the following two statements do the same thing:

```perl
$sha->add_bits("111100001010");
$sha->add_bits("xF0xA0", 12);
```

Note that SHA-1 and SHA-2 use I<most-significant-bit ordering> for their internal state. This means that

```perl
$sha3->add_bits("110");
```

is equivalent to

```perl
$sha3->add_bits("1")->add_bits("1")->add_bits("0");
```

=item B<addfile(*FILE)>

Reads from I<FILE> until EOF, and append that data to the current state. The return value is the updated object itself.

=item B<addfile($filename [, $mode])>

Reads the contents of I<$filename>, and append that data to the current state. The return value is the updated object itself.

By default, I<$filename> is simply opened and read; no special modes or I/O disciplines are used. To change this, set the optional I<$mode> argument to one of the following values:

'b' read file in binary mode

"U" use universal newlines

"0" use BITS mode

The "U" mode is modeled on Python's "Universal Newlines" concept, whereby DOS and Mac OS line terminators are converted internally to UNIX newlines before processing. This ensures consistent digest values when working simultaneously across multiple file systems. B<The "U" mode influences only text files>, namely those passing Perl's I<-T> test; binary files are processed with no translation whatsoever.

The BITS mode ("0") interprets the contents of I<$filename> as a logical
stream of bits, where each ASCII '0' or '1' character represents a 0 or 1 bit, respectively. All other characters are ignored. This provides a convenient way to calculate the digest values of partial-byte data by using files, rather than having to write separate programs employing the \texttt{add_bits} method.

=item B<getstate>

Returns a string containing a portable, human-readable representation of the current SHA state.

=item B<putstate($str)>

Returns a Digest::SHA object representing the SHA state contained in \texttt{$str}. The format of \texttt{$str} matches the format of the output produced by method \texttt{getstate}. If called as a class method, a new object is created; if called as an instance method, the object is reset to the state contained in \texttt{$str}.

=item B<dump($filename)>

Writes the output of \texttt{getstate} to \texttt{$filename}. If the argument is missing, or equal to the empty string, the state information will be written to STDOUT.

=item B<load($filename)>

Returns a Digest::SHA object that results from calling \texttt{putstate} on the contents of \texttt{$filename}. If the argument is missing, or equal to the empty string, the state information will be read from STDIN.

=item B<digest>

Returns the digest encoded as a binary string.

Note that the \texttt{digest} method is a read-once operation. Once it has been performed, the Digest::SHA object is automatically reset in preparation for calculating another digest value. Call \texttt{$sha-clone-digest} if it's necessary to preserve the original digest state.

=item B<hexdigest>

Returns the digest encoded as a hexadecimal string.

Like \texttt{digest}, this method is a read-once operation. Call \texttt{$sha-clone-hexdigest} if it's necessary to preserve the original digest state.
=item B<b64digest>

Returns the digest encoded as a Base64 string.

Like I<digest>, this method is a read-once operation. Call I<$sha-E<gt>clone-E<gt>b64digest> if it's necessary to preserve the original digest state.

It's important to note that the resulting string does B<not> contain the padding characters typical of Base64 encodings. This omission is deliberate, and is done to maintain compatibility with the family of CPAN Digest modules. See L</"PADDING OF BASE64 DIGESTS"> for details.

=back

I<HMAC-SHA-1/224/256/384/512>

=over 4

=item B<hmac_sha1($data, $key)>

=item B<hmac_sha224($data, $key)>

=item B<hmac_sha256($data, $key)>

=item B<hmac_sha384($data, $key)>

=item B<hmac_sha512($data, $key)>

=item B<hmac_sha512224($data, $key)>

=item B<hmac_sha512256($data, $key)>

=item B<hmac_sha512256($data, $key)>

Returns the HMAC-SHA-1/224/256/384/512 digest of I<$data>/I<$key>, with the result encoded as a binary string. Multiple I<$data> arguments are allowed, provided that I<$key> is the last argument in the list.

=item B<hmac_sha1_hex($data, $key)>

=item B<hmac_sha224_hex($data, $key)>

=item B<hmac_sha256_hex($data, $key)>

=item B<hmac_sha384_hex($data, $key)>

=item B<hmac_sha512_hex($data, $key)>
=item B<hmac_sha512224_hex($data, $key)>

=item B<hmac_sha512256_hex($data, $key)>

Returns the HMAC-SHA-1/224/256/384/512 digest of I<$data>/I<$key>, with the result encoded as a hexadecimal string. Multiple I<$data> arguments are allowed, provided that I<$key> is the last argument in the list.

=item B<hmac_sha1_base64($data, $key)>

=item B<hmac_sha224_base64($data, $key)>

=item B<hmac_sha256_base64($data, $key)>

=item B<hmac_sha384_base64($data, $key)>

=item B<hmac_sha512_base64($data, $key)>

=item B<hmac_sha512224_base64($data, $key)>

=item B<hmac_sha512256_base64($data, $key)>

Returns the HMAC-SHA-1/224/256/384/512 digest of I<$data>/I<$key>, with the result encoded as a Base64 string. Multiple I<$data> arguments are allowed, provided that I<$key> is the last argument in the list.

It's important to note that the resulting string does B<not> contain the padding characters typical of Base64 encodings. This omission is deliberate, and is done to maintain compatibility with the family of CPAN Digest modules. See L</"PADDING OF BASE64 DIGESTS"> for details.

=back

=head1 SEE ALSO

L<Digest>, L<Digest::SHA::PurePerl>

The Secure Hash Standard (Draft FIPS PUB 180-4) can be found at:


The Keyed-Hash Message Authentication Code (HMAC):

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"who by trained skill rescued life from such great billows and such thick
darkness and moored it in so perfect a calm and in so brilliant a light"
- Lucretius

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1.748 x-text 0.3.7
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1.751 collector-model 0.37.0
# Telegraf Configuration

# Telegraf is entirely plugin driven. All metrics are gathered from the
# declared inputs, and sent to the declared outputs.
# Plugins must be declared here to be active.
# To deactivate a plugin, comment out the name and any variables.
# Use `telegraf -config telegraf.conf -test` to see what metrics a config
# file would generate.

# Environment variables can be used anywhere in this config file, simply surround
# them with ${}. For strings the variable must be within quotes (ie, "${STR_VAR}");
# for numbers and booleans they should be plain (ie, ${INT_VAR}, ${BOOL_VAR}).

[global_tags]
# dc = "us-east-1" # will tag all metrics with dc=us-east-1
# rack = "1a"
### Environment variables can be used as tags, and throughout the config file
# user = "$USER"

# Configuration for telegraf agent
[agent]
### Default data collection interval for all inputs
interval = "10s"
### Rounds collection interval to 'interval'
### ie, if interval="10s" then always collect on :00, :10, :20, etc.
round_interval = true

### Telegraf will send metrics to outputs in batches of at most
### metric_batch_size metrics.
### This controls the size of writes that Telegraf sends to output plugins.
metric_batch_size = 1000

### Maximum number of unwritten metrics per output. Increasing this value

### Available under license:
No license file was found, but licenses were detected in source scan.

/op/cola/permits/1256570836_1652755641.2988372/0/telegraf-1.21.4-1.x86_64.src.rpm-cosi-expand-archive-MIIUpTSQ/usr/bin/telegraf: binary file matches

Found in path(s):
* /bin/grep
No license file was found, but licenses were detected in source scan.
## allows for longer periods of output downtime without dropping metrics at the
## cost of higher maximum memory usage.
metric_buffer_limit = 10000

## Collection jitter is used to jitter the collection by a random amount.
## Each plugin will sleep for a random time within jitter before collecting.
## This can be used to avoid many plugins querying things like sysfs at the
## same time, which can have a measurable effect on the system.
collection_jitter = "0s"

## Default flushing interval for all outputs. Maximum flush_interval will be
## flush_interval + flush_jitter
flush_interval = "10s"
## Jitter the flush interval by a random amount. This is primarily to avoid
## large write spikes for users running a large number of telegraf instances.
## ie, a jitter of 5s and interval 10s means flushes will happen every 10-15s
flush_jitter = "0s"

## By default or when set to "0s", precision will be set to the same
## timestamp order as the collection interval, with the maximum being 1s.
## ie, when interval = "10s", precision will be "1s"
## when interval = "250ms", precision will be "1ms"
## Precision will NOT be used for service inputs. It is up to each individual
## service input to set the timestamp at the appropriate precision.
## Valid time units are "ns", "us" (or "µs"), "ms", "s".
precision = ""

## Log at debug level.
# debug = false
## Log only error level messages.
# quiet = false

## Log target controls the destination for logs and can be one of "file",
## "stderr" or, on Windows, "eventlog". When set to "file", the output file
## is determined by the "logfile" setting.
# logtarget = "file"

## Name of the file to be logged to when using the "file" logtarget. If set to
## the empty string then logs are written to stderr.
# logfile = ""

## The logfile will be rotated after the time interval specified. When set
## to 0 no time based rotation is performed. Logs are rotated only when
## written to, if there is no log activity rotation may be delayed.
# logfile_rotation_interval = "0d"

## The logfile will be rotated when it becomes larger than the specified
## size. When set to 0 no size based rotation is performed.
# logfile_rotation_max_size = "0MB"

## Maximum number of rotated archives to keep, any older logs are deleted.
## If set to -1, no archives are removed.
# logfile_rotation_max_archives = 5

## Pick a timezone to use when logging or type 'local' for local time.
## Example: America/Chicago
# log_with_timezone = ""

## Override default hostname, if empty use osHostname()
hostname = ""
## If set to true, do no set the "host" tag in the telegraf agent.
omit_hostname = false

# Configuration for sending metrics to InfluxDB
[[outputs.influxdb]]
## The full HTTP or UDP URL for your InfluxDB instance.
## Multiple URLs can be specified for a single cluster, only ONE of the
## urls will be written to each interval.
## The target database for metrics; will be created as needed.
## For UDP url endpoint database needs to be configured on server side.
# database = "telegraf"

## The value of this tag will be used to determine the database. If this
tag is not set the 'database' option is used as the default.
# database_tag = ""

## If true, the 'database_tag' will not be included in the written metric.
# exclude_database_tag = false

## If true, no CREATE DATABASE queries will be sent. Set to true when using
## Telegraf with a user without permissions to create databases or when the
## database already exists.
# skip_database_creation = false

## Name of existing retention policy to write to. Empty string writes to
## the default retention policy. Only takes effect when using HTTP.
# retention_policy = ""

## The value of this tag will be used to determine the retention policy. If this
## tag is not set the 'retention_policy' option is used as the default.
# retention_policy_tag = ""

## If true, the 'retention_policy_tag' will not be included in the written metric.
# exclude_retention_policy_tag = false

## Write consistency (clusters only), can be: "any", "one", "quorum", "all".
## Only takes effect when using HTTP.
# write_consistency = "any"

## Timeout for HTTP messages.
# timeout = "5s"

## HTTP Basic Auth
# username = "telegraf"
# password = "metricsmetricsmetricsmetrics"

## HTTP User-Agent
# user_agent = "telegraf"

## UDP payload size is the maximum packet size to send.
# udp_payload = "512B"

## Optional TLS Config for use on HTTP connections.
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## HTTP Proxy override, if unset values the standard proxy environment
## variables are consulted to determine which proxy, if any, should be used.
# http_proxy = "http://corporate.proxy:3128"

## Additional HTTP headers
# http_headers = {"X-Special-Header" = "Special-Value"}

## HTTP Content-Encoding for write request body, can be set to "gzip" to
## compress body or "identity" to apply no encoding.
# content_encoding = "gzip"

## When true, Telegraf will output unsigned integers as unsigned values,
## i.e.: "42u". You will need a version of InfluxDB supporting unsigned
## integer values. Enabling this option will result in field type errors if
## existing data has been written.
# influx_uint_support = false

## Configuration for Amon Server to send metrics to.
## [[outputs.amon]]
## ### Amon Server Key
## server_key = "my-server-key" # required.
##
## ### Amon Instance URL
## amon_instance = "https://youramoninstance" # required
##
## ### Connection timeout.
## # timeout = "5s"

## Publishes metrics to an AMQP broker
## [[outputs.amqp]]
## ### Broker to publish to.
## # # deprecated in 1.7; use the brokers option
## # url = "amqp://localhost:5672/influxdb"
##
## ### Brokers to publish to. If multiple brokers are specified a random broker
## ### will be selected anytime a connection is established. This can be
## ### helpful for load balancing when not using a dedicated load balancer.
## brokers = ["amqp://localhost:5672/influxdb"]
##
## ### Maximum messages to send over a connection. Once this is reached, the
## ### connection is closed and a new connection is made. This can be helpful for
## ### load balancing when not using a dedicated load balancer.
## # max_messages = 0
##
## ### Exchange to declare and publish to.
## # exchange = "telegraf"
##
## ### Exchange type; common types are "direct", "fanout", "topic", "header", "x-consistent-hash".
## # exchange_type = "topic"
##
## ### If true, exchange will be passively declared.
## # exchange_passive = false
##
## ### Exchange durability can be either "transient" or "durable".
## # exchange_durability = "durable"
##
## ### Additional exchange arguments.
## # exchange_arguments = { }
## # exchange_arguments = {"hash_property" = "timestamp"}
##
## ### Authentication credentials for the PLAIN auth_method.
# # username = ""
# # password = ""
#
# # Auth method. PLAIN and EXTERNAL are supported
# ## Using EXTERNAL requires enabling the rabbitmq_auth_mechanism_ssl plugin as
# ## described here: https://www.rabbitmq.com/plugins.html
# # auth_method = "PLAIN"
#
# # Metric tag to use as a routing key.
# ## ie, if this tag exists, its value will be used as the routing key
# # routing_tag = "host"
#
# # Static routing key. Used when no routing_tag is set or as a fallback
# ## when the tag specified in routing tag is not found.
# # routing_key = ""
# # routing_key = "telegraf"
#
# # Delivery Mode controls if a published message is persistent.
# # One of "transient" or "persistent".
# # delivery_mode = "transient"
#
# # InfluxDB database added as a message header.
# ## deprecated in 1.7; use the headers option
# # database = "telegraf"
#
# # InfluxDB retention policy added as a message header
# ## deprecated in 1.7; use the headers option
# # retention_policy = "default"
#
# # Static headers added to each published message.
# # headers = { }
# # headers = {"database" = "telegraf", "retention_policy" = "default"}
#
# # Connection timeout. If not provided, will default to 5s. 0s means no
# ## timeout (not recommended).
# # timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf.cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # If true use batch serialization format instead of line based delimiting.
# # Only applies to data formats which are not line based such as JSON.
# # Recommended to set to true.
# # use_batch_format = false
# Content encoding for message payloads, can be set to "gzip" to or "identity" to apply no encoding.

# Please note that when use_batch_format = false each amqp message contains only a single metric, it is recommended to use compression with batch format for best results.

# content_encoding = "identity"

# Data format to output.
# Each data format has its own unique set of configuration options, read more about them here:

# data_format = "influx"

# Send metrics to Azure Application Insights
# [[outputs.application_insights]]
# Instrumentation key of the Application Insights resource.

# instrumentation_key = "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxx"  

# Regions that require endpoint modification https://docs.microsoft.com/en-us/azure/azure-monitor/app/custom-endpoints

# endpoint_url = "https://dc.services.visualstudio.com/v2/track"

# Timeout for closing (default: 5s).

# timeout = "5s"

# Enable additional diagnostic logging.

# enable_diagnostic_logging = false

# Context Tag Sources add Application Insights context tags to a tag value.

# For list of allowed context tag keys see:

# https://github.com/microsoft/ApplicationInsights-Go/blob/master/appinsights/contracts/contexttagkeys.go

# [outputs.application_insights.context_tag_sources]

# "ai.cloud.role" = "kubernetes_container_name"

# "ai.cloud.roleInstance" = "kubernetes_pod_name"

# Sends metrics to Azure Data Explorer
# [[outputs.azure_data_explorer]]
# Azure Data Explorer cluster endpoint

# ex: endpoint_url = "https://clusternname.australiasoutheast.kusto.windows.net"

# endpoint_url = ""

# The Azure Data Explorer database that the metrics will be ingested into.

# The plugin will NOT generate this database automatically, it's expected that this database already exists before
ingestion.
#  

#   ## ex: "exampledatabase"
#   database = ""

#   ## Timeout for Azure Data Explorer operations
#   # timeout = "20s"

#   ## Type of metrics grouping used when pushing to Azure Data Explorer.
#   # Default is "TablePerMetric" for one table per different metric.
#   # For more information, please check the plugin README.
#   # metrics_grouping_type = "TablePerMetric"

#   ## Name of the single table to store all the metrics (Only needed if metrics_grouping_type is "SingleTable").
#   # table_name = ""

#   ## Creates tables and relevant mapping if set to true(default).
#   ## Skips table and mapping creation if set to false, this is useful for running Telegraf with the lowest possible permissions i.e. table ingestor role.
#   # create_tables = true

#   ## Send aggregate metrics to Azure Monitor
#   [outputs.azure_monitor]
#   # Timeout for HTTP writes.
#   # timeout = "20s"

#   ## Set the namespace prefix, defaults to "Telegraf<input-name>".
#   # namespace_prefix = "Telegraf/"

#   ## Azure Monitor doesn't have a string value type, so convert string fields to dimensions (a.k.a. tags) if enabled. Azure Monitor allows a maximum of 10 dimensions so Telegraf will only send the first 10 alphanumeric dimensions.
#   # strings_as_dimensions = false

#   ## Both region and resource_id must be set or be available via the Instance Metadata service on Azure Virtual Machines.
#   #
#   ## Azure Region to publish metrics against.
#   #   ex: region = "southcentralus"
#   # region = ""

#   ## The Azure Resource ID against which metric will be logged, e.g.
#   #   ex: resource_id = "subscriptions/<subscription_id>/resourceGroups/<resource_group>/providers/Microsoft.Compute/virtualMachines/<vm_name>"
#   # resource_id = ""
## Optionally, if in Azure US Government, China or other sovereign cloud environment, set appropriate REST endpoint for receiving metrics. (Note: region may be unused in this context)

```yaml
# # endpoint_url = "https://monitoring.core.usgovcloudapi.net"
```

## Configuration for Google Cloud BigQuery to send entries

```yaml
[[outputs.bigquery]]
```

### Credentials File

```yaml
credentials_file = "/path/to/service/account/key.json"
```

### Google Cloud Platform Project

```yaml
project = "my-gcp-project"
```

### The namespace for the metric descriptor

```yaml
dataset = "telegraf"
```

### Timeout for BigQuery operations.

```yaml
timeout = "5s"
```

### Character to replace hyphens on Metric name

```yaml
replace_hyphen_to = "_"
```

## Publish Telegraf metrics to a Google Cloud PubSub topic

```yaml
[[outputs.cloud_pubsub]]
```

### Required. Name of Google Cloud Platform (GCP) Project that owns the given PubSub topic.

```yaml
project = "my-project"
```

### Required. Name of PubSub topic to publish metrics to.

```yaml
topic = "my-topic"
```

### Required. Data format to consume.

```yaml
data_format = "influx"
```

### Optional. Filepath for GCP credentials JSON file to authorize calls to PubSub APIs. If not set explicitly, Telegraf will attempt to use Application Default Credentials, which is preferred.

```yaml
credentials_file = "path/to/my/creds.json"
```

### Optional. If true, will send all metrics per write in one PubSub message.

```yaml
send_batched = true
```

### The following publish_* parameters specifically configures batching
## Configuration for AWS CloudWatch output.

```yaml
[[outputs.cloudwatch]]

### Amazon REGION

region = "us-east-1"

### Amazon Credentials

### Credentials are loaded in the following order

1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified

2) Assumed credentials via STS if role_arn is specified

3) explicit credentials from 'access_key' and 'secret_key'

4) shared profile from 'profile'

5) environment variables

6) shared credentials file

7) EC2 Instance Profile

#access_key = ""

#secret_key = ""

#token = ""

#role_arn = ""

#web_identity_token_file = ""

#role_session_name = ""

#profile = ""
```
# shared_credential_file = ""
#
# Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
default.
# ex: endpoint_url = "http://localhost:8000"
# endpoint_url = ""
#
# Namespace for the CloudWatch MetricDatums
# namespace = "InfluxData/Telegraf"
#
# If you have a large amount of metrics, you should consider to send statistic
# values instead of raw metrics which could not only improve performance but
# also save AWS API cost. If enable this flag, this plugin would parse the required
# CloudWatch statistic fields (count, min, max, and sum) and send them to CloudWatch.
# You could use basicstats aggregator to calculate those fields. If not all statistic
# fields are available, all fields would still be sent as raw metrics.
# write_statistics = false
#
# Enable high resolution metrics of 1 second (if not enabled, standard resolution are of 60 seconds precision)
# high_resolution_metrics = false

# Configuration for AWS CloudWatchLogs output.
[[outputs.cloudwatch_logs]]
# The region is the Amazon region that you wish to connect to.
# Examples include but are not limited to:
# - us-west-1
# - us-west-2
# - us-east-1
# - ap-southeast-1
# - ap-southeast-2
# ...
# region = "us-east-1"
#
# Amazon Credentials
# Credentials are loaded in the following order
# 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# 2) Assumed credentials via STS if role_arn is specified
# 3) explicit credentials from 'access_key' and 'secret_key'
# 4) shared profile from 'profile'
# 5) environment variables
# 6) shared credentials file
# 7) EC2 Instance Profile
# access_key = ""
# secret_key = ""
# token = ""
# role_arn = ""
#web_identity_token_file = ""
#role_session_name = ""
#profile = ""
#shared_credential_file = ""
#
### Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
default.
### ex: endpoint_url = "http://localhost:8000"
#endpoint_url = ""
#
### Cloud watch log group. Must be created in AWS cloudwatch logs upfront!
### For example, you can specify the name of the k8s cluster here to group logs from all cluster in one place
#log_group = "my-group-name"
#
### Log stream in log group
### Either log group name or reference to metric attribute, from which it can be parsed:
### tag:<TAG_NAME> or field:<FIELD_NAME>. If log stream is not exist, it will be created.
### Since AWS is not automatically delete logs streams with expired logs entries (i.e. empty log stream)
### you need to put in place appropriate house-keeping
#log_stream = "tag:location"
#
### Source of log data - metric name
### specify the name of the metric, from which the log data should be retrieved.
### I.e., if you are using docker_log plugin to stream logs from container, then
### specify log_data_metric_name = "docker_log"
#log_data_metric_name = "docker_log"
#
### Specify from which metric attribute the log data should be retrieved:
### tag:<TAG_NAME> or field:<FIELD_NAME>.
### I.e., if you are using docker_log plugin to stream logs from container, then
### specify log_data_source = "field:message"
#log_data_source = "field:message"

### Configuration for CrateDB to send metrics to.
[[outputs.crateDB]]
# A github.com/jackc/pgx/v4 connection string.
# See https://pkg.go.dev/github.com/jackc/pgx/v4#ParseConfig
url = "postgres://user:password@localhost/schema?sslmode=disable"
# Timeout for all CrateDB queries.
#timeout = "5s"
# Name of the table to store metrics in.
table = "metrics"
# If true, and the metrics table does not exist, create it automatically.
table_create = true
# The character(s) to replace any '.' in an object key with
key_separator = "_"

# # Configuration for DataDog API to send metrics to.
# [[outputs.datadog]]
# ## Datadog API key
# apikey = "my-secret-key"
#
# ## Connection timeout.
# # timeout = "5s"
#
# ## Write URL override; useful for debugging.
# # url = "https://app.datadoghq.com/api/v1/series"
#
# ## Set http_proxy (telegraf uses the system wide proxy settings if it isn't set)
# # http_proxy_url = "http://localhost:8888"

# # Send metrics to nowhere at all
# [[outputs.discard]]
# # no configuration

# # Send telegraf metrics to a Dynatrace environment
# [[outputs.dynatrace]]
# ## For usage with the Dynatrace OneAgent you can omit any configuration,
# ## the only requirement is that the OneAgent is running on the same host.
# ## Only setup environment url and token if you want to monitor a Host without the OneAgent present.
# ##
# ## Your Dynatrace environment URL.
# ## For Dynatrace OneAgent you can leave this empty or set it to "http://127.0.0.1:14499/metrics/ingest" (default)
# ## For Dynatrace SaaS environments the URL scheme is "https://{your-environment-id}.live.dynatrace.com/api/v2/metrics/ingest"
# ## For Dynatrace Managed environments the URL scheme is "https://{your-domain}/e/{your-environment-id}/api/v2/metrics/ingest"
# url = ""
#
# ## Your Dynatrace API token.
# ## Create an API token within your Dynatrace environment, by navigating to Settings > Integration > Dynatrace API
# ## The API token needs data ingest scope permission. When using OneAgent, no API token is required.
# api_token = ""
#
# ## Optional prefix for metric names (e.g.: "telegraf")
# prefix = "telegraf"
#
# ## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# ## Optional flag for ignoring tls certificate check
# insecure_skip_verify = false
#
#
# ## Connection timeout, defaults to "5s" if not set.
# timeout = "5s"
#
# ## If you want metrics to be treated and reported as delta counters, add the metric names here
# additional_counters = [ ]
#
# ## Optional dimensions to be added to every metric
# [outputs.dynatrace.default_dimensions]
# default_key = "default value"

# Configuration for Elasticsearch to send metrics to.
[[outputs.elasticsearch]]
# The full HTTP endpoint URL for your Elasticsearch instance
# Multiple urls can be specified as part of the same cluster,
# this means that only ONE of the urls will be written to each interval.
# urls = [ "http://node1.es.example.com:9200" ] # required.
# Elasticsearch client timeout, defaults to "5s" if not set.
# timeout = "5s"
# Set to true to ask Elasticsearch a list of all cluster nodes,
# thus it is not necessary to list all nodes in the urls config option.
# enable_sniffer = false
# Set to true to enable gzip compression
# enable_gzip = false
# Set the interval to check if the Elasticsearch nodes are available
# Setting to "0s" will disable the health check (not recommended in production)
# health_check_interval = "10s"
# HTTP basic authentication details
# username = "telegraf"
# password = "mypassword"
#
# Index Config
# The target index for metrics (Elasticsearch will create if it not exists).
# You can use the date specifiers below to create indexes per time frame.
# The metric timestamp will be used to decide the destination index name
## %Y - year (2016)
## %y - last two digits of year (00..99)
## %m - month (01..12)
## %d - day of month (e.g., 01)
## %H - hour (00..23)
## %V - week of the year (ISO week) (01..53)
## Add a tag name

Additionally, you can specify a tag name using the notation `{tag_name}` which will be used as part of the index name. If the tag does not exist, the default tag value will be used.

```bash
index_name = "telegraf-{{host}}-%Y.%m.%d"
default_tag_value = "none"
```

## TLS Config

### Optional TLS Config

You can configure TLS settings for your Telegraf instance.

```bash
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
```

### Use TLS but skip chain & host verification

If you only want to use TLS but skip the chain and host verification:

```bash
insecure_skip_verify = false
```

## Template Config

### Template Config

You can manage Telegraf's index template.

```bash
manage_template = true
```

### The template name used for telegraf indexes

```bash
template_name = "telegraf"
```

### Set to true if you want telegraf to overwrite an existing template

```bash
overwrite_template = false
```

### If set to true a unique ID hash will be sent as sha256(concat(timestamp,measurement,series-hash)) string

```bash
force_document_id = false
```

## Handling NaN and Inf values

### Configuration for Event Hubs output plugin

You can specify the handling of NaN and Inf values.

```bash
float_handling = "none"
float_replacement_value = 0.0
```

## Event Hubs output plugin

### The full connection string to the Event Hub

```bash
connection_string = "Endpoint=sb://namespace.servicebus.windows.net/;SharedAccessKeyName=RootManageSharedAccessKey;SharedAccessKey=superSecret1234=;EntityPath=hubName"
```

### Client timeout (defaults to 30s)

```bash
timeout = "30s"
```

### Data format to output
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "json"

# ## Send metrics to command as input over stdin
# [[outputs.exec]]
# ## Command to ingest metrics via stdin.
# command = ["tee", "-a", "/dev/null"]
# 
# ## Timeout for command to complete.
# timeout = "5s"

# ## Data format to output.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# ## Run executable as long-running output plugin
# [[outputs.execd]]
# ## Program to run as daemon
# command = ["my-telegraf-output", "--some-flag", "value"]

# ## Delay before the process is restarted after an unexpected termination
# restart_delay = "10s"

# ## Data format to export.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# ## Send telegraf metrics to file(s)
# [[outputs.file]]
# ## Files to write to, "stdout" is a specially handled file.
# files = ["stdout", "/tmp/metrics.out"]
# 
# ## Use batch serialization format instead of line based delimiting. The
# ## batch format allows for the production of non line based output formats and
# ## may more efficiently encode metric groups.
# use_batch_format = false

# ## The file will be rotated after the time interval specified. When set
# ## to 0 no time based rotation is performed.
# rotation_interval = "0d"
#
# The logfile will be rotated when it becomes larger than the specified
# size. When set to 0 no size based rotation is performed.
# rotation_max_size = "0MB"
#
# Maximum number of rotated archives to keep, any older logs are deleted.
# If set to -1, no archives are removed.
# rotation_max_archives = 5
#
# Data format to output.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

## Configuration for Graphite server to send metrics to
[[outputs.graphite]]
# TCP endpoint for your graphite instance.
# Only one of the endpoints will be written to with each iteration.
servers = ["localhost:2003"]
# Prefix metrics name
prefix = ""
# Graphite output template
# see https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# template = "host.tags.measurement.field"
#
# Enable Graphite tags support
# graphite_tag_support = false
#
# Define how metric names and tags are sanitized; options are "strict", or "compatible"
# strict - Default method, and backwards compatible with previous version of Telegraf
# compatible - More relaxed sanitizing when using tags, and compatible with the graphite spec
# graphite_tag_sanitize_mode = "strict"
#
# Character for separating metric name and field for Graphite tags
# graphite_separator = "."
#
# Graphite templates patterns
# 1. Template for cpu
# 2. Template for disk*
# 3. Default template
# templates = [
#  "cpu tags.measurement.host.field",
#  "disk* measurement.field",
#  "host.measurement.tags.field"]
## #
## # timeout in seconds for the write connection to graphite
## timeout = 2
##
## ## Optional TLS Config
## # tls_ca = "/etc/telegraf/ca.pem"
## # tls_cert = "/etc/telegraf/cert.pem"
## # tls_key = "/etc/telegraf/key.pem"
## # Use TLS but skip chain & host verification
## # insecure_skip_verify = false

## # Send telegraf metrics to graylog
## [[outputs.graylog]]
## ## Endpoints for your graylog instances.
## servers = ["udp://127.0.0.1:12201"]
##
## ## Connection timeout.
## # timeout = "5s"
##
## ## The field to use as the GELF short_message, if unset the static string
## ## "telegraf" will be used.
## ## example: short_message_field = "message"
## # short_message_field = ""
##
## ## According to GELF payload specification, additional fields names must be prefixed
## ## with an underscore. Previous versions did not prefix custom field 'name' with underscore.
## ## Set to true for backward compatibility.
## # name_field_no_prefix = false
##
## ## Optional TLS Config
## # tls_ca = "/etc/telegraf/ca.pem"
## # tls_cert = "/etc/telegraf/cert.pem"
## # tls_key = "/etc/telegraf/key.pem"
## # Use TLS but skip chain & host verification
## # insecure_skip_verify = false

## # Send telegraf metrics to GroundWork Monitor
## [[outputs.groundwork]]
## ## URL of your groundwork instance.
## url = "https://groundwork.example.com"
##
## ## Agent uuid for GroundWork API Server.
## # agent_id = ""
##
## ## Username and password to access GroundWork API.
```yaml
# username = ""
# password = ""
#
# ## Default display name for the host with services(metrics).
# # default_host = "telegraf"
#
# ## Default service state.
# # default_service_state = "SERVICE_OK"
#
# ## The name of the tag that contains the hostname.
# # resource_tag = "host"

## Configurable HTTP health check resource based on metrics
[[outputs.health]]
# ## Address and port to listen on.
# ex: service_address = "http://localhost:8080"
# service_address = "unix:///var/run/telegraf-health.sock"
# service_address = "http://:8080"
#
# ## The maximum duration for reading the entire request.
# read_timeout = "5s"
# ## The maximum duration for writing the entire response.
# write_timeout = "5s"
#
# ## Username and password to accept for HTTP basic authentication.
# basic_username = "user1"
# basic_password = "secret"
#
# ## Allowed CA certificates for client certificates.
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# ## TLS server certificate and private key.
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "key.pem"
#
# ## One or more check sub-tables should be defined, it is also recommended to
# use metric filtering to limit the metrics that flow into this output.
# ##
# ## When using the default buffer sizes, this example will fail when the
# ## metric buffer is half full.
# ##
# ## namepass = ["internal_write"]
# ## tagpass = [ output = ["influxdb"] ]
# ##
# [outputs.health.comparies]
# ## field = "buffer_size"
# ## It = 5000.0
```
# A plugin that can transmit metrics over HTTP
# [[outputs.http]]
# URL is the address to send metrics to
# url = "http://127.0.0.1:8080/telegraf"
#
# Timeout for HTTP message
# timeout = "5s"
#
# HTTP method, one of: "POST" or "PUT"
# method = "POST"
#
# HTTP Basic Auth credentials
# username = "username"
# password = "pa$$word"
#
# OAuth2 Client Credentials Grant
# client_id = "clientid"
# client_secret = "secret"
# token_url = "https://identityprovider/oauth2/v1/token"
# scopes = ["urn:opc:idm:__myscopes__"]
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# Optional Cookie authentication
# cookie_auth_url = "https://localhost/authMe"
# cookie_auth_method = "POST"
# cookie_auth_username = "username"
# cookie_auth_password = "pa$$word"
# cookie_auth_body = '{"username": "user", "password": "pa$$word", "authenticate": "me"}'
# cookie_auth_renewal not set or set to "0" will auth once and never renew the cookie
# cookie_auth_renewal = "5m"
#
# Data format to output.
# Each data format has it's own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
# Use batch serialization format (default) instead of line based format.
# Batch format is more efficient and should be used unless line based
# format is really needed.
# use_batch_format = true

# HTTP Content-Encoding for write request body, can be set to "gzip" to
# compress body or "identity" to apply no encoding.
# content_encoding = "identity"

# Additional HTTP headers
# outputs.http.headers
# Should be set manually to "application/json" for json data_format
# Content-Type = "text/plain; charset=utf-8"

# Idle (keep-alive) connection timeout.
# Maximum amount of time before idle connection is closed.
# Zero means no limit.
# idle_conn_timeout = 0

# Configuration for sending metrics to InfluxDB
[[outputs.influxdb_v2]]
# The URLs of the InfluxDB cluster nodes.
# Multiple URLs can be specified for a single cluster, only ONE of the
# urls will be written to each interval.
# ex: urls = ["https://us-west-2-1.aws.cloud2.influxdata.com"]
# urls = ["http://127.0.0.1:8086"]

# Token for authentication.
# token = ""

# Organization is the name of the organization you wish to write to; must exist.
# organization = ""

# Destination bucket to write into.
# bucket = ""

# The value of this tag will be used to determine the bucket. If this
# tag is not set the 'bucket' option is used as the default.
# bucket_tag = ""

# If true, the bucket tag will not be added to the metric.
# exclude_bucket_tag = false

# Timeout for HTTP messages.
# timeout = "5s"
# Additional HTTP headers
# http_headers = {
#   "X-Special-Header" = "Special-Value"
#}
#
# HTTP Proxy override, if unset values the standard proxy environment
# variables are consulted to determine which proxy, if any, should be used.
# http_proxy = "http://corporate.proxy:3128"
#
# HTTP User-Agent
# user_agent = "telegraf"
#
# Content-Encoding for write request body, can be set to "gzip" to
# compress body or "identity" to apply no encoding.
# content_encoding = "gzip"
#
# Enable or disable uint support for writing uints influxdb 2.0.
# influx_uint_support = false
#
# Optional TLS Config for use on HTTP connections.
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Configuration for sending metrics to an Instrumental project
[[outputs.instrumental]]
# Project API Token (required)
# api_token = "API Token" # required
# Prefix the metrics with a given name
# prefix = ""
# Stats output template (Graphite formatting)
# see https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md#graphite
# template = "host.tags.measurement.field"
# Timeout in seconds to connect
# timeout = "2s"
# Display Communication to Instrumental
# debug = false

# Configuration for the Kafka server to send metrics to
[[outputs.kafka]]
# URLs of kafka brokers
# brokers = ["localhost:9092"]
# Kafka topic for producer messages
# topic = "telegraf"
#
# The value of this tag will be used as the topic. If not set the 'topic'
## Option is used.

*topic_tag = ""

## If true, the 'topic_tag' will be removed from to the metric.

*exclude_topic_tag = false

## Optional Client id

*client_id = "Telegraf"

## Set the minimal supported Kafka version. Setting this enables the use of new Kafka features and APIs. Of particular interest, lz4 compression requires at least version 0.10.0.0.

*version = ""

## Optional topic suffix configuration.

If the section is omitted, no suffix is used.

Following topic suffix methods are supported:

- measurement - suffix equals to separator + measurement's name
- tags - suffix equals to separator + specified tags' values interleaved with separator

Suffix equals to "_" + measurement name

*outputs.kafka.topic_suffix*

- method = "measurement"
- separator = "_

Suffix equals to "__" + measurement's "foo" tag value.

If there's no such a tag, suffix equals to an empty string

*outputs.kafka.topic_suffix*

- keys = ["foo"]
- separator = "__"

Suffix equals to "_" + measurement's "foo" and "bar" tag values, separated by "_". If there is no such tags, their values treated as empty strings.

*outputs.kafka.topic_suffix*

- keys = ["foo", "bar"]
- separator = "_"

The routing tag specifies a tagkey on the metric whose value is used as the message key. The message key is used to determine which partition to send the message to. This tag is preferred over the routing_key option.

*routing_tag = "host"

The routing key is set as the message key and used to determine which
# ## partition to send the message to. This value is only used when no
# ## routing_tag is set or as a fallback when the tag specified in routing tag
# ## is not found.
# ##
# ## If set to "random", a random value will be generated for each message.
# ##
# ## When unset, no message key is added and each message is routed to a random
# ## partition.
# ##
# ## ex: routing_key = "random"
# ## routing_key = "telegraf"
# # routing_key = ""
#
# ## Compression codec represents the various compression codecs recognized by
# ## Kafka in messages.
# ## 0 : None
# ## 1 : Gzip
# ## 2 : Snappy
# ## 3 : LZ4
# ## 4 : ZSTD
# # compression_codec = 0
#
# ## Idempotent Writes
# ## If enabled, exactly one copy of each message is written.
# # idempotentWrites = false
#
# ## RequiredAcks is used in Produce Requests to tell the broker how many
# ## replica acknowledgements it must see before responding
# ## 0 : the producer never waits for an acknowledgement from the broker.
# ## This option provides the lowest latency but the weakest durability
# ## guarantees (some data will be lost when a server fails).
# ## 1 : the producer gets an acknowledgement after the leader replica has
# ## received the data. This option provides better durability as the
# ## client waits until the server acknowledges the request as successful
# ## (only messages that were written to the now-dead leader but not yet
# ## replicated will be lost).
# ## -1: the producer gets an acknowledgement after all in-sync replicas have
# ## received the data. This option provides the best durability, we
# ## guarantee that no messages will be lost as long as at least one in
# ## sync replica remains.
# # required acks = -1
#
# ## The maximum number of times to retry sending a metric before failing
# ## until the next flush.
# # max_retry = 3
#
# ## The maximum permitted size of a message. Should be set equal to or
# ## smaller than the broker's 'message.max.bytes'.
# max_message_bytes = 1000000
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
## Optional SASL Config
# sasl_username = "kafka"
# sasl_password = "secret"
#
## Optional SASL:
## one of: OAUTHBEARER, PLAIN, SCRAM-SHA-256, SCRAM-SHA-512, GSSAPI
## (defaults to PLAIN)
# sasl_mechanism = 
#
## used if sasl_mechanism is GSSAPI (experimental)
# sasl_gssapi_service_name = 
# One of: KRB5_USER_AUTH and KRB5_KEYTAB_AUTH
# sasl_gssapi_auth_type = "KRB5_USER_AUTH"
# sasl_gssapi_kerberos_config_path = ""
# sasl_gssapiRealm = "realm"
# sasl_gssapi_key_tab_path = ""
# sasl_gssapi_disable_pafxfast = false
#
## used if sasl_mechanism is OAUTHBEARER (experimental)
# sasl_access_token = ""
#
## SASL protocol version. When connecting to Azure EventHub set to 0.
# sasl_version = 1
#
## Disable Kafka metadata full fetch
# metadata_full = false
#
## Data format to output.
## Each data format has its own unique set of configuration options, read
## more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
#
## Configuration for the AWS Kinesis output.
[[outputs.kinesis]]
## Amazon REGION of kinesis endpoint.
# region = "ap-southeast-2"
# Amazon Credentials

# Credentials are loaded in the following order

# 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# 2) Assumed credentials via STS if role_arn is specified
# 3) explicit credentials from 'access_key' and 'secret_key'
# 4) shared profile from 'profile'
# 5) environment variables
# 6) shared credentials file
# 7) EC2 Instance Profile

#access_key = ""
#secret_key = ""
#token = ""
#role_arn = ""
#web_identity_token_file = ""
#role_session_name = ""
#profile = ""
#shared_credential_file = ""

## Endpoint to make request against, the correct endpoint is automatically determined and this option should only be set if you wish to override the default.

# ex: endpoint_url = "http://localhost:8000"
# endpoint_url = ""

# Kinesis StreamName must exist prior to starting telegraf.
# streamname = "StreamName"

## DEPRECATED: PartitionKey as used for sharding data.
# partitionkey = "PartitionKey"

## DEPRECATED: If set the partitionKey will be a random UUID on every put.

## This allows for scaling across multiple shards in a stream.
## This will cause issues with ordering.

# use_random_partitionkey = false

## The partition key can be calculated using one of several methods:

## Use a static value for all writes:
# [outputs.kinesis.partition]
# method = "static"
# key = "howdy"

## Use a random partition key on each write:
# [outputs.kinesis.partition]
# method = "random"

## Use the measurement name as the partition key:
# [outputs.kinesis.partition]
# method = "measurement"

## Use the value of a tag for all writes, if the tag is not set the empty
# default option will be used. When no default, defaults to "telegraf"
# [outputs.kinesis.partition]
# method = "tag"
# key = "host"
# default = "mykey"
#
## Data format to output.
## Each data format has its own unique set of configuration options, read
## more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
## data_format = "influx"
#
## debug will show upstream aws messages.
## debug = false

## Configuration for Librato API to send metrics to.
## [][outputs.librato]
## Librato API Docs
## http://dev.librato.com/v1/metrics-authentication
## Librato API user
## api_user = "telegraf@influxdb.com" # required.
## Librato API token
## api_token = "my-secret-token" # required.
## Debug
## debug = false
## Connection timeout.
## timeout = "5s"
## Output source Template (same as graphite buckets)
## see https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md#graphite
## This template is used in librato's source (not metric's name)
## template = "host"
#
## Send aggregate metrics to Logz.io
## [][outputs.logzio]
## Connection timeout, defaults to "5s" if not set.
## timeout = "5s"
## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Logz.io account token
## token = "your logz.io token" # required
# Send logs to Loki
# [[outputs.loki]]
# ## The domain of Loki
# domain = "https://loki.domain.tld"
#
# ## Endpoint to write api
# endpoint = "/loki/api/v1/push"
#
# ## Connection timeout, defaults to "5s" if not set.
# timeout = "5s"
#
# ## Basic auth credential
# username = "loki"
# password = "pass"
#
# ## Additional HTTP headers
# http_headers = {"X-Scope-OrgID" = "1"}
#
# ## If the request must be gzip encoded
# gzip_request = false
#
# ## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"

# Sends metrics to MongoDB
# [[outputs.mongodb]]
# ## connection string examples for mongodb
# dsn = "mongodb://localhost:27017"
# dsn = "mongodb://mongod1:27017,mongod2:27017,mongod3:27017/admin&replicaSet=myReplSet&w=1"
#
# ## overrides serverSelectionTimeoutMS in dsn if set
# timeout = "30s"
#
# ## default authentication, optional
# authentication = "NONE"
#
# ## for SCRAM-SHA-256 authentication
# authentication = "SCRAM"
# username = "root"
# password = "***"
# # for x509 certificate authentication
# # authentication = "X509"
# # tls_ca = "ca.pem"
# # tls_key = "client.pem"
# # # tls_key_pwd = "changeme" # required for encrypted tls_key
# # insecure_skip_verify = false
#
# # database to store measurements and time series collections
# # database = "telegraf"
#
# # granularity can be seconds, minutes, or hours.
# # configuring this value will be based on your input collection frequency.
# # see https://docs.mongodb.com/manual/core/timeseries-collections/#create-a-time-series-collection
# # granularity = "seconds"
#
# # optionally set a TTL to automatically expire documents from the measurement collections.
# # ttl = "360h"

### Configuration for MQTT server to send metrics to
### [outputs.mqtt]
### ## MQTT Brokers
### ## The list of brokers should only include the hostname or IP address and the
### ## port to the broker. This should follow the format '{host}:{port}'. For
### ## example, "localhost:1883" or "127.0.0.1:8883".
### servers = ["localhost:1883"]
#
### ## MQTT Topic for Producer Messages
### ## MQTT outputs send metrics to this topic format:
### ## <topic_prefix>/<hostname>/<pluginname>/ (e.g. prefix/web01.example.com/mem)
### # topic_prefix = "telegraf"
#
### ## QoS policy for messages
### ## The mqtt QoS policy for sending messages.
### ## See https://www.ibm.com/support/knowledgecenter/en/SSFKSJ_9.0.0/com.ibm.mq.dev.doc/q029090_.htm
### ## 0 = at most once
### ## 1 = at least once
### ## 2 = exactly once
### # qos = 2
#
### ## Keep Alive
### ## Defines the maximum length of time that the broker and client may not
### ## communicate. Defaults to 0 which turns the feature off.
### ##
### ## For version v2.0.12 and later mosquitto there is a bug
### ## (see https://github.com/eclipse/mosquitto/issues/2117), which requires
### ## this to be non-zero. As a reference eclipse/paho.mqtt.golang defaults to 30.
# # keep_alive = 0
#
# # username and password to connect MQTT server.
# # username = "telegraf"
# # password = "metricsmetricsmetricsmetrics"
#
# # client ID
# # The unique client id to connect MQTT server. If this parameter is not set
# # then a random ID is generated.
# # client_id = ""
#
# # Timeout for write operations. default: 5s
# # timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # When true, metrics will be sent in one MQTT message per flush. Otherwise,
# # metrics are written one metric per MQTT message.
# # batch = false
#
# # When true, metric will have RETAIN flag set, making broker cache entries until someone
# # actually reads it
# # retain = false
#
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# # data_format = "influx"

# # Send telegraf measurements to NATS
# [[outputs.nats]]
# # URLs of NATS servers
# # servers = ["nats://localhost:4222"]
#
# # Optional client name
# # name = ""
#
# # Optional credentials
# # username = ""
# # password = ""
## Optional NATS 2.0 and NATS NGS compatible user credentials
# credentials = "/etc/telegraf/nats.creds"
#
## NATS subject for producer messages
subject = "telegraf"
#
## Use Transport Layer Security
secure = false
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
## Data format to output.
## Each data format has its own unique set of configuration options, read
## more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
data_format = "influx"
# Send metrics to New Relic metrics endpoint
[
outputs.newrelic]
## New Relic Insights API key
insights_key = "insights api key"
#
## Prefix to add to metric name for easy identification.
# metric_prefix = ""
#
## Timeout for writes to the New Relic API.
timeout = "15s"
#
## HTTP Proxy override. If unset use values from the standard
## proxy environment variables to determine proxy, if any.
# http_proxy = "http://corporate.proxy:3128"
#
## Metric URL override to enable geographic location endpoints.
## If not set use values from the standard
# metric_url = "https://metric-api.newrelic.com/metric/v1"

## Send telegraf measurements to NSQD
[
outputs.nsq]
## Location of nsqd instance listening on TCP
server = "localhost:4150"
## NSQ topic for producer messages
# topic = "telegraf"
#
# Data format to output.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

## Send OpenTelemetry metrics over gRPC
# [[outputs.opentelemetry]]
# Override the default (localhost:4317) OpenTelemetry gRPC service
# address:port
# service_address = "localhost:4317"
#
# Override the default (5s) request timeout
# timeout = "5s"
#
# Optional TLS Config.
#
# Root certificates for verifying server certificates encoded in PEM format.
# tls_ca = "/etc/telegraf/ca.pem"
# The public and private keypairs for the client encoded in PEM format.
# May contain intermediate certificates.
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS, but skip TLS chain and host verification.
# insecure_skip_verify = false
# Send the specified TLS server name via SNI.
# tls_server_name = "foo.example.com"
#
# Override the default (gzip) compression used to send data.
# Supports: "gzip", "none"
# compression = "gzip"
#
# Additional OpenTelemetry resource attributes
# [outputs.opentelemetry.attributes]
# "service.name" = "demo"
#
# Additional gRPC request metadata
# [outputs.opentelemetry.headers]
# key1 = "value1"

## Configuration for OpenTSDB server to send metrics to
# [[outputs.opentsdb]]
# prefix for metrics keys
# prefix = "my.specific.prefix."
## Configuration for the Promethues client to spawn

### DNS name of the OpenTSDB server

### Using "opentsdb.example.com" or "tcp://opentsdb.example.com" will use the telnet API. "http://opentsdb.example.com" will use the Http API.

### Port of the OpenTSDB server

### Number of data points to send to OpenTSDB in Http requests.

### Not used with telnet API.

### URI Path for Http requests to OpenTSDB.

### Used in cases where OpenTSDB is located behind a reverse proxy.

### Debug true - Prints OpenTSDB communication

### Separator separates measurement name from field

### Configuration for the Prometheus client to spawn

### Address to listen on

### Metric version controls the mapping from Telegraf metrics into Prometheus format. When using the prometheus input, use the same value in both plugins to ensure metrics are round-tripped without modification.

### Metric version example: metric_version = 1;

### Metric version = 2; recommended version

### Use HTTP Basic Authentication.

### If set, the IP Ranges which are allowed to access metrics.

### Path to publish the metrics on.
# ## Expiration interval for each metric. 0 == no expiration
# # expiration_interval = "60s"
#
# ## Collectors to enable, valid entries are "gocollector" and "process".
# ## If unset, both are enabled.
# # collectors_exclude = ["gocollector", "process"]
#
# ## Send string metrics as Prometheus labels.
# ## Unless set to false all string metrics will be sent as labels.
# # string_as_label = true
#
# ## If set, enable TLS with the given certificate.
# # tls_cert = "/etc/ssl/telegraf.crt"
# # tls_key = "/etc/ssl/telegraf.key"
#
# ## Set one or more allowed client CA certificate file names to
# ## enable mutually authenticated TLS connections
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# ## Export metric collection time.
# # export_timestamp = false

# ## Configuration for the Riemann server to send metrics to
# [[outputs.riemann]]
# ## The full TCP or UDP URL of the Riemann server
# url = "tcp://localhost:5555"
#
# ## Riemann event TTL, floating-point time in seconds.
# ## Defines how long that an event is considered valid for in Riemann
# # ttl = 30.0
#
# ## Separator to use between measurement and field name in Riemann service name
# ## This does not have any effect if `measurement_as_attribute` is set to `true`
# # separator = "/"
#
# ## Set measurement name as Riemann attribute 'measurement', instead of prepending it to the Riemann service name
# # measurement_as_attribute = false
#
# ## Send string metrics as Riemann event states.
# ## Unless enabled all string metrics will be ignored
# # string_as_state = false
#
# ## A list of tag keys whose values get sent as Riemann tags.
# ## If empty, all Telegraf tag values will be sent as tags
# # tag_keys = ["telegraf","custom_tag"]
# ## Additional Riemann tags to send.
# tags = ["telegraf-output"]
#
# ## Description for Riemann event
# description_text = "metrics collected from telegraf"
#
# ## Riemann client write timeout, defaults to "5s" if not set.
# timeout = "5s"

# Configuration for the Riemann server to send metrics to
# [[outputs.riemann_legacy]]
# ## DEPRECATED: The 'riemann_legacy' plugin is deprecated in version 1.3.0, use 'outputs.riemann' instead (see https://github.com/influxdata/telegraf/issues/1878).
# ## URL of server
# url = "localhost:5555"
# ## transport protocol to use either tcp or udp
# transport = "tcp"
# ## separator to use between input name and field name in Riemann service name
# separator = " \\

# Send aggregate metrics to Sensu Monitor
# [[outputs.sensu]]
# ## BACKEND API URL is the Sensu Backend API root URL to send metrics to
# ## (protocol, host, and port only). The output plugin will automatically
# ## append the corresponding backend API path
# ## /api/core/v2/namespaces/:entity_namespace/events/:entity_name/:check_name).
# ## Backend Events API reference:
# ## https://docs.sensu.io/sensu-go/latest/api/events/
# ## AGENT API URL is the Sensu Agent API root URL to send metrics to
# ## (protocol, host, and port only). The output plugin will automatically
# ## append the correspeonding agent API path (/events).
# ## Agent API Events API reference:
# ## https://docs.sensu.io/sensu-go/latest/api/events/
# ## NOTE: if backend_api_url and agent_api_url and api_key are set, the output
# ## plugin will use backend_api_url. If backend_api_url and agent_api_url are
# ## not provided, the output plugin will default to use an agent_api_url of
# ## http://127.0.0.1:3031
# ## API KEY is the Sensu Backend API token
## Generate a new API token via:

```bash
# sensuctl cluster-role create telegraf --verb create --resource events,entities
# sensuctl cluster-role-binding create telegraf --cluster-role telegraf --group telegraf
# sensuctl user create telegraf --group telegraf --password REDACTED
# sensuctl api-key grant telegraf
```

For more information on Sensu RBAC profiles & API tokens, please visit:
- https://docs.sensu.io/sensu-go/latest/reference/rbac/
- https://docs.sensu.io/sensu-go/latest/reference/apikeys/

```bash
# api_key = "$[SENSU_API_KEY]"
```

## Optional TLS Config

```bash
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
```

Use TLS but skip chain & host verification

```bash
# insecure_skip_verify = false
```

## Timeout for HTTP message

```bash
# timeout = "5s"
```

## HTTP Content-Encoding for write request body, can be set to "gzip" to compress body or "identity" to apply no encoding.

```bash
# content_encoding = "identity"
```

## Sensu Event details

Below are the event details to be sent to Sensu. The main portions of the event are the check, entity, and metrics specifications. For more information on Sensu events and its components, please visit:
- Events - https://docs.sensu.io/sensu-go/latest/reference/events
- Checks - https://docs.sensu.io/sensu-go/latest/reference/checks
- Entities - https://docs.sensu.io/sensu-go/latest/reference/entities
- Metrics - https://docs.sensu.io/sensu-go/latest/reference/events#metrics

## Check specification

The check name is the name to give the Sensu check associated with the event created. This maps to check.metadata.name in the event.

```bash
[outputs.sensu.check]
name = "telegraf"
```

## Entity specification

Configure the entity name and namespace, if necessary. This will be part of the entity.metadata in the event.

## NOTE: if the output plugin is configured to send events to a
# backend_api_url and entity_name is not set, the value returned by
# os.Hostname() will be used; if the output plugin is configured to send
# events to an agent_api_url, entity_name and entity_namespace are not used.
# [outputs.sensu.entity]
#   name = "server-01"
#   namespace = "default"
#
# Metrics specification
# Configure the tags for the metrics that are sent as part of the Sensu event
# [outputs.sensu.tags]
#   source = "telegraf"
#
# Configure the handler(s) for processing the provided metrics
# [outputs.sensu.metrics]
#   handlers = ["influxdb","elasticsearch"]

# Send metrics and events to SignalFx
[[outputs.signalfx]]
# SignalFx Org Access Token
# access_token = "my-secret-token"
#
# The SignalFx realm that your organization resides in
# signalfx_realm = "us9"  # Required if ingest_url is not set
#
# You can optionally provide a custom ingest url instead of the
# signalfx_realm option above if you are using a gateway or proxy
# instance. This option takes precedence over signalfx_realm.
# ingest_url = "https://my-custom-ingest/
#
# Event typed metrics are omitted by default,
# If you require an event typed metric you must specify the
# metric name in the following list.
# included_event_names = ["plugin.metric_name"]

# Generic socket writer capable of handling multiple socket types.
[[outputs.socket_writer]]
# URL to connect to
# address = "tcp://127.0.0.1:8094"
# address = "tcp://example.com:http"
# address = "tcp4://127.0.0.1:8094"
# address = "tcp6://127.0.0.1:8094"
# address = "udp://127.0.0.1:8094"
# address = "udp4://127.0.0.1:8094"
# address = "udp6://127.0.0.1:8094"
# address = "unix:///tmp/telegraf.sock"
# # address = "unixgram:///tmp/telegraf.sock"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Period between keep alive probes.
# ## Only applies to TCP sockets.
# ## 0 disables keep alive probes.
# ## Defaults to the OS configuration.
# # keep_alive_period = "5m"
#
# ## Content encoding for packet-based connections (i.e. UDP, unixgram).
# ## Can be set to "gzip" or to "identity" to apply no encoding.
# ##
# # content_encoding = "identity"
#
# ## Data format to generate.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"

# Send metrics to SQL Database
# [[outputs.sql]]
# ## Database driver
# ## Valid options: mssql (Microsoft SQL Server), mysql (MySQL), pgx (Postgres),
# ## sqlite (SQLite3), snowflake (snowflake.com)
# # driver = ""
#
# ## Data source name
# ## The format of the data source name is different for each database driver.
# ## See the plugin readme for details.
# # data_source_name = ""
#
# ## Timestamp column name
# # timestamp_column = "timestamp"
#
# ## Table creation template
# ## Available template variables:
# ## {TABLE} - table name as a quoted identifier
# ## {TABLELITERAL} - table name as a quoted string literal
# ## {COLUMNS} - column definitions (list of quoted identifiers and types)
# # table_template = "CREATE TABLE {TABLE}({COLUMNS})"
## Table existence check template

Available template variables:

- `TABLE` - tablename as a quoted identifier

Initialization SQL:

```sql
SELECT 1 FROM {TABLE} LIMIT 1
```

### Metric type to SQL type conversion

The values on the left are the data types Telegraf has and the values on the right are the data types Telegraf will use when sending to a database.

### The database values used must be data types the destination database understands. It is up to the user to ensure that the selected data type is available in the database they are using. Refer to your database documentation for what data types are available and supported.

<table>
<thead>
<tr>
<th>Telegraf Type</th>
<th>SQL Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>integer</td>
<td>&quot;INT&quot;</td>
</tr>
<tr>
<td>real</td>
<td>&quot;DOUBLE&quot;</td>
</tr>
<tr>
<td>text</td>
<td>&quot;TEXT&quot;</td>
</tr>
<tr>
<td>timestamp</td>
<td>&quot;TIMESTAMP&quot;</td>
</tr>
<tr>
<td>defaultvalue</td>
<td>&quot;TEXT&quot;</td>
</tr>
<tr>
<td>unsigned</td>
<td>&quot;UNSIGNED&quot;</td>
</tr>
</tbody>
</table>

### Configuration for Google Cloud Stackdriver to send metrics to

```
[[outputs.stackdriver]]
```

**Project**

- `project = "erudite-bloom-151019"`

**Namespace**

- `namespace = "telegraf"`

**Custom resource type**

- `resource_type = "generic_node"`

**Additional resource labels**

```
[[outputs.stackdriver.resource_labels]]
```

- `node_id = "$HOSTNAME"`
- `namespace = "myapp"`
- `location = "eu-north0"`

### A plugin that can transmit metrics to Sumo Logic HTTP Source

```
[[outputs.sumologic]]
```

**Unique URL generated for your HTTP Metrics Source.**

**This is the address to send metrics to.**
# url = "https://events.sumologic.net/receiver/v1/http/<UniqueHTTPCollectorCode>"
#
## Data format to be used for sending metrics.
## This will set the "Content-Type" header accordingly.
## Currently supported formats:
## * graphite - for Content-Type of application/vnd.sumologic.graphite
## * carbon2 - for Content-Type of application/vnd.sumologic.carbon2
## * prometheus - for Content-Type of application/vnd.sumologic.prometheus
##
## More information can be found at:
## https://help.sumologic.com/03Send-Data/Sources/02Sources-for-Hosted-Collectors/HTTP-Source/Upload-Metrics-to-an-HTTP-Source#content-type-headers-for-metrics
##
## NOTE:
## When unset, telegraf will by default use the influx serializer which is currently unsupported
## in HTTP Source.
## data_format = "carbon2"
#
## Timeout used for HTTP request
## timeout = "5s"
#
## Max HTTP request body size in bytes before compression (if applied).
## By default 1MB is recommended.
## NOTE:
## Bear in mind that in some serializer a metric even though serialized to multiple
## lines cannot be split any further so setting this very low might not work
## as expected.
## max_request_body_size = 1000000
#
## Additional, Sumo specific options.
## Full list can be found here:
## https://help.sumologic.com/03Send-Data/Sources/02Sources-for-Hosted-Collectors/HTTP-Source/Upload-Metrics-to-an-HTTP-Source#supported-http-headers
#
## Desired source name.
## Useful if you want to override the source name configured for the source.
## source_name = ""
#
## Desired host name.
## Useful if you want to override the source host configured for the source.
## source_host = ""
#
## Desired source category.
## Useful if you want to override the source category configured for the source.
## source_category = ""
#
## Comma-separated key=value list of dimensions to apply to every metric.
## Custom dimensions will allow you to query your metrics at a more granular level.
## Configuration for Syslog server to send metrics to
[[outputs.syslog]]

### URL to connect to

### Optional TLS Config

### Period between keep alive probes.

### Only applies to TCP sockets.

### 0 disables keep alive probes.

### Defaults to the OS configuration.

### The framing technique with which it is expected that messages are

### The trailer to be expected in case of non-transparent framing (default = "LF").

### Must be one of "LF", or "NUL".

### SD-PARAMs settings

### Syslog messages can contain key/value pairs within zero or more

### structured data sections. For each unrecognized metric tag/field a

### Example:

```python
[[outputs.syslog]]

default_sdid = "default@32473"
```
### Configuration for Amazon Timestream output.

```
# [outputs.timestream]
# Amazon Region
# region = "us-east-1"
#
# Amazon Credentials
#
# Credentials are loaded in the following order:
# 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# 2) Assumed credentials via STS if role_arn is specified
# 3) explicit credentials from 'access_key' and 'secret_key'
# 4) shared profile from 'profile'
# 5) environment variables
# 6) shared credentials file
# 7) EC2 Instance Profile
```
# #access_key = ""
# #secret_key = ""
# #token = ""
# #role_arn = ""
# #web_identity_token_file = ""
# #role_session_name = ""
# #profile = ""
# #shared_credential_file = ""
#
# ## Endpoint to make request against, the correct endpoint is automatically
# ## determined and this option should only be set if you wish to override the
# ## default.
# ## ex: endpoint_url = "http://localhost:8000"
# # endpoint_url = ""
#
# ## Timestream database where the metrics will be inserted.
# ## The database must exist prior to starting Telegraf.
# # database_name = "yourDatabaseNameHere"
#
# ## Specifies if the plugin should describe the Timestream database upon starting
# ## to validate if it has access necessary permissions, connection, etc., as a safety check.
# ## If the describe operation fails, the plugin will not start
# ## and therefore the Telegraf agent will not start.
# # describe_database_on_start = false
#
# ## The mapping mode specifies how Telegraf records are represented in Timestream.
# ## Valid values are: single-table, multi-table.
# ## For example, consider the following data in line protocol format:
# ## weather,location=us-midwest,season=summer temperature=82,humidity=71 1465839830100400200
# ## airquality,location=us-west no2=5,pm25=16 1465839830100400200
# ## where weather and airquality are the measurement names, location and season are tags,
# ## and temperature, humidity, no2, pm25 are fields.
# ## In multi-table mode:
# ## - first line will be ingested to table named weather
# ## - second line will be ingested to table named airquality
# ## - the tags will be represented as dimensions
# ## - first table (weather) will have two records:
# ##   one with measurement name equals to temperature,
# ##   another with measurement name equals to humidity
# ## - second table (airquality) will have two records:
# ##   one with measurement name equals to no2,
# ##   another with measurement name equals to pm25
# ## - the Timestream tables from the example will look like this:
# ## TABLE "weather":
# ##   time | location | season | measure_name | measure_value::bigint
# ##   2016-06-13 17:43:50 | us-midwest | summer | temperature | 82
# ##   2016-06-13 17:43:50 | us-midwest | summer | humidity | 71
# ## TABLE "airquality":

In single-table mode:
- the data will be ingested to a single table, which name will be valueOf(single_table_name)
- measurement name will stored in dimension named valueOf(single_table_dimension_name_for_telegraf_measurement_name)
- location and season will be represented as dimensions
- temperature, humidity, no2, pm25 will be represented as measurement name
- the Timestream table from the example will look like this:
  Assuming:
  - single_table_name = "my_readings"
  - single_table_dimension_name_for_telegraf_measurement_name = "namespace"
  TABLE "my_readings":
  time | location | season | namespace | measure_name | measure_value::bigint
  2016-06-13 17:43:50 | us-midwest | summer | weather | temperature | 82
  2016-06-13 17:43:50 | us-midwest | summer | weather | humidity | 71
  2016-06-13 17:43:50 | us-west | NULL | airquality | no2 | 5
  2016-06-13 17:43:50 | us-west | NULL | airquality | pm25 | 16
In most cases, using multi-table mapping mode is recommended.
However, you can consider using single-table in situations when you have thousands of measurement names.
  mapping_mode = "multi-table"

Only valid and required for mapping_mode = "single-table"
Specifies the Timestream table where the metrics will be uploaded.
  single_table_name = "yourTableNameHere"

Only valid and required for mapping_mode = "single-table"
Describes what will be the Timestream dimension name for the Telegraf measurement name.
  single_table_dimension_name_for_telegraf_measurement_name = "namespace"

Specifies if the plugin should create the table, if the table do not exist.
The plugin writes the data without prior checking if the table exists.
When the table does not exist, the error returned from Timestream will cause the plugin to create the table, if this parameter is set to true.
create_table_if_not_exists = true

Only valid and required if create_table_if_not_exists = true
Specifies the Timestream table magnetic store retention period in days.
Check Timestream documentation for more details.
create_table_magnetic_store_retention_period_in_days = 365

Only valid and required if create_table_if_not_exists = true
Specifies the Timestream table memory store retention period in hours.
Check Timestream documentation for more details.
create_table_memory_store_retention_period_in_hours = 24
## Only valid and optional if `create_table_if_not_exists = true`
## Specifies the Timestream table tags.
## Check Timestream documentation for more details
## `create_table_tags = { "foo" = "bar", "environment" = "dev"}`
## Specify the maximum number of parallel go routines to ingest/write data
## If not specified, defaulted to 1 go routines
## `max_write_go_routines = 25`

## Write metrics to Warp 10
```yaml
[[outputs.warp10]]

# Prefix to add to the measurement.
# `prefix = "telegraf."`

# URL of the Warp 10 server
# `warp_url = "http://localhost:8080"`

# Write token to access your app on warp 10
# `token = "Token"`

# Warp 10 query timeout
# `timeout = "15s"`

# Print Warp 10 error body
# `print_error_body = false`

# Max string error size
# `max_string_error_size = 511`

# Optional TLS Config
# `tls_ca = "/etc/telegraf/ca.pem"
# `tls_cert = "/etc/telegraf/cert.pem"
# `tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# `insecure_skip_verify = false`
```

## Configuration for Wavefront server to send metrics to
```yaml
[[outputs.wavefront]]

# Url for Wavefront Direct Ingestion or using HTTP with Wavefront Proxy
# If using Wavefront Proxy, also specify port. example: http://proxyserver:2878
# `url = "https://metrics.wavefront.com"

# Authentication Token for Wavefront. Only required if using Direct Ingestion
# `token = "DUMMY_TOKEN"

# DNS name of the wavefront proxy server. Do not use if url is specified
# #host = "wavefront.example.com"
#
# ## Port that the Wavefront proxy server listens on. Do not use if url is specified
# #port = 2878
#
# ## prefix for metrics keys
# #prefix = "my.specific.prefix."
#
# ## whether to use "value" for name of simple fields. default is false
# #simple_fields = false
#
# ## character to use between metric and field name. default is . (dot)
# #metric_separator = "."
#
# ## Convert metric name paths to use metricSeparator character
# ## When true will convert all _ (underscore) characters in final metric name. default is true
# #convert_paths = true
#
# ## Use Strict rules to sanitize metric and tag names from invalid characters
# ## When enabled forward slash (/) and comma (,) will be accepted
# #use_strict = false
#
# ## Use Regex to sanitize metric and tag names from invalid characters
# ## Regex is more thorough, but significantly slower. default is false
# #use_regex = false
#
# ## point tags to use as the source name for Wavefront (if none found, host will be used)
# #source_override = ["hostname", "address", "agent_host", "node_host"]
#
# ## whether to convert boolean values to numeric values, with false -> 0.0 and true -> 1.0. default is true
# #convert_bool = true
#
# ## Truncate metric tags to a total of 254 characters for the tag name value. Wavefront will reject any
# ## data point exceeding this limit if not truncated. Defaults to 'false' to provide backwards compatibility.
# #truncate_tags = false
#
# ## Flush the internal buffers after each batch. This effectively bypasses the background sending of metrics
# ## normally done by the Wavefront SDK. This can be used if you are experiencing buffer overruns. The sending
# ## of metrics will block for a longer time, but this will be handled gracefully by the internal buffering in
# ## Telegraf.
# #immediate_flush = true
#
# ## Define a mapping, namespaced by metric prefix, from string values to numeric values
# ## deprecated in 1.9; use the enum processor plugin
# #[[outputs.wavefront.string_to_number.elasticsearch]]
# # green = 1.0
# # yellow = 0.5
# # red = 0.0
# # Generic WebSocket output writer.
# [[outputs.websocket]]
# ### URL is the address to send metrics to. Make sure ws or wss scheme is used.
# url = "ws://127.0.0.1:8080/telegraf"
#
# ### Timeouts (make sure read_timeout is larger than server ping interval or set to zero).
# # connect_timeout = "30s"
# # write_timeout = "30s"
# # read_timeout = "30s"
#
# ### Optionally turn on using text data frames (binary by default).
# # use_text_frames = false
#
# ### Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ### Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ### Data format to output.
# ### Each data format has its own unique set of configuration options, read
# ### more about them here:
# ### https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# # data_format = "influx"
#
# ### Additional HTTP Upgrade headers
# # [[outputs.websocket.headers]]
# # Authorization = "Bearer <TOKEN>"
#
# # Send aggregated metrics to Yandex.Cloud Monitoring
# [[outputs.yandex_cloud_monitoring]]
# ### Timeout for HTTP writes.
# # timeout = "20s"
#
# ### Yandex.Cloud monitoring API endpoint. Normally should not be changed
# # endpoint_url = "https://monitoring.api.cloud.yandex.net/monitoring/v2/data/write"
#
# ### All user metrics should be sent with "custom" service specified. Normally should not be changed
# # service = "custom"

##################################################################################################################################
# PROCESOR PLUGINS
# ##################################################################################################################################
## Attach AWS EC2 metadata to metrics

```
# [[[processors.aws_ec2]]]
# ### Instance identity document tags to attach to metrics.
# ### For more information see:
# ### Available tags:
# ### * accountId
# ### * architecture
# ### * availabilityZone
# ### * billingProducts
# ### * imageId
# ### * instanceId
# ### * instanceType
# ### * kernelId
# ### * pendingTime
# ### * privateIp
# ### * ramdiskId
# ### * region
# ### * version
# imds_tags = []
```

```
# ### EC2 instance tags retrieved with DescribeTags action.
# ### In case tag is empty upon retrieval it's omitted when tagging metrics.
# ### Note that in order for this to work, role attached to EC2 instance or AWS
# ### credentials available from the environment must have a policy attached, that
# ### allows ec2:DescribeTags.
# ###
# ### For more information see:
# ### https://docs.aws.amazon.com/AWSEC2/latest/APIReference/API_DescribeTags.html
# ec2_tags = []
```

```
# ### Timeout for http requests made by against aws ec2 metadata endpoint.
# timeout = "10s"
```

```
# ### ordered controls whether or not the metrics need to stay in the same order
# ### this plugin received them in. If false, this plugin will change the order
# ### with requests hitting cached results moving through immediately and not
# ### waiting on slower lookups. This may cause issues for you if you are
# ### depending on the order of metrics staying the same. If so, set this to true.
# ### Keeping the metrics ordered may be slightly slower.
# ordered = false
```

```
# ### max_parallel_calls is the maximum number of AWS API calls to be in flight
# ### at the same time.
# ### It's probably best to keep this number fairly low.
```

```
max_parallel_calls = 10

# # Clone metrics and apply modifications.
# [[[processors.clone]]]
# ### All modifications on inputs and aggregators can be overridden:
# # name_override = "new_name"
# # name_prefix = "new_name_prefix"
# # name_suffix = "new_name_suffix"
#
# ### Tags to be added (all values must be strings)
# # [processors.clone.tags]
# # additional_tag = "tag_value"

# # Convert values to another metric value type
# [[[processors.converter]]]
# ### Tags to convert
# ###
# ### The table key determines the target type, and the array of key-values
# ### select the keys to convert. The array may contain globs.
# ### <target-type> = [<tag-key>...]
# # [processors.converter.tags]
# # measurement = []
# # string = []
# # integer = []
# # unsigned = []
# # boolean = []
# # float = []
#
# ### Fields to convert
# ###
# ### The table key determines the target type, and the array of key-values
# ### select the keys to convert. The array may contain globs.
# ### <target-type> = [<field-key>...]
# # [processors.converter.fields]
# # measurement = []
# # tag = []
# # string = []
# # integer = []
# # unsigned = []
# # boolean = []
# # float = []

# # Dates measurements, tags, and fields that pass through this filter.
# [[processors.date]]
# ### New tag to create
# tag_key = "month"
#
### New field to create (cannot set both field_key and tag_key)
## field_key = "month"
#
### Date format string, must be a representation of the Go "reference time"
## which is "Mon Jan 2 15:04:05 -0700 MST 2006".
# date_format = "Jan"
#
### If destination is a field, date format can also be one of
### "unix", "unix_ms", "unix_us", or "unix_ns", which will insert an integer field.
## date_format = "unix"
#
### Offset duration added to the date string when writing the new tag.
## date_offset = "0s"
#
### Timezone to use when creating the tag or field using a reference time
## string. This can be set to one of "UTC", "Local", or to a location name
## in the IANA Time Zone database.
## example: timezone = "America/Los_Angeles"
## timezone = "UTC"

## Filter metrics with repeating field values
[[processors.dedup]]
#
## Maximum time to suppress output
# dedup_interval = "600s"

## Defaults sets default value(s) for specified fields that are not set on incoming metrics.
[[processors.defaults]]
## Ensures a set of fields always exists on your metric(s) with their
## respective default value.
## For any given field pair (key = default), if it's not set, a field
## is set on the metric with the specified default.
##
## A field is considered not set if it is nil on the incoming metric;
## or it is not nil but its value is an empty string or is a string
## of one or more spaces.
## <target-field> = <value>
## [processors.defaults.fields]
## field_1 = "bar"
## time_idle = 0
## is_error = true

## Map enum values according to given table.
[[processors.enum]]
# [[processors.enum.mapping]]
# ## Name of the field to map. Globs accepted.
# field = "status"
#
# ## Name of the tag to map. Globs accepted.
# # tag = "status"
#
# ## Destination tag or field to be used for the mapped value. By default the
# ## source tag or field is used, overwriting the original value.
# dest = "status_code"
#
# ## Default value to be used for all values not contained in the mapping
# ## table. When unset, the unmodified value for the field will be used if no
# ## match is found.
# # default = 0
#
# ## Table of mappings
# [processors.enum.mapping.value_mappings]
# green = 1
# amber = 2
# red = 3

## Run executable as long-running processor plugin
# [[processors.execd]]
# ## Program to run as daemon
# ## eg: command = ["/path/to/your_program", "arg1", "arg2"]
# command = ["cat"]
#
# ## Delay before the process is restarted after an unexpected termination
# restart_delay = "10s"

## Performs file path manipulations on tags and fields
# [[processors.filepath]]
# ## Treat the tag value as a path and convert it to its last element, storing the result in a new tag
# # [[processors.filepath.basename]]
# #   tag = "path"
# #   dest = "basepath"
#
# ## Treat the field value as a path and keep all but the last element of path, typically the path's directory
# # [[processors.filepath.dirname]]
# #   field = "path"
#
# ## Treat the tag value as a path, converting it to its the last element without its suffix
# # [[processors.filepath.stem]]
# #   tag = "path"
# Treat the tag value as a path, converting it to the shortest path name equivalent
# to path by purely lexical processing
# # [[processors/filepath.clean]]
# # tag = "path"
#
# Treat the tag value as a path, converting it to a relative path that is lexically
# equivalent to the source path when joined to 'base_path'
# # [[processors/filepath.rel]]
# # tag = "path"
# # base_path = "/var/log"
#
# Treat the tag value as a path, replacing each separator character in path with a '/' character. Has only
# # effect on Windows
# # [[processors/filepath.toslash]]
# # tag = "path"

# Add a tag of the network interface name looked up over SNMP by interface number
# [[processors/ifname]]
# ## Name of tag holding the interface number
# # tag = "ifIndex"
#
# ## Name of output tag where service name will be added
# # dest = "ifName"
#
# ## Name of tag of the SNMP agent to request the interface name from
# # agent = "agent"
#
# ## Timeout for each request.
# # timeout = "5s"
#
# ## SNMP version; can be 1, 2, or 3.
# # version = 2
#
# ## SNMP community string.
# # community = "public"
#
# ## Number of retries to attempt.
# # retries = 3
#
# ## The GETBULK max-repetitions parameter.
# # max_repetitions = 10
#
# ## SNMPv3 authentication and encryption options.
# ##
# ## Security Name.
# # sec_name = "myuser"
# ## Authentication protocol; one of "MD5", "SHA", or "."
# # auth_protocol = "MD5"
# # Authenication password.
# # auth_password = "pass"
# # Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".
# # sec_level = "authNoPriv"
# # Context Name.
# # context_name = ""
# # Privacy protocol used for encrypted messages; one of "DES", "AES" or "".
# # priv_protocol = ""
# # Privacy password used for encrypted messages.
# # priv_password = ""
#
# # max_parallel_lookups is the maximum number of SNMP requests to
# # make at the same time.
# # max_parallel_lookups = 100
#
# # ordered controls whether or not the metrics need to stay in the
# # same order this plugin received them in. If false, this plugin
# # may change the order when data is cached. If you need metrics to
# # stay in order set this to true. keeping the metrics ordered may
# # be slightly slower
# # ordered = false
#
# # cache_ttl is the amount of time interface names are cached for a
# # given agent. After this period elapses if names are needed they
# # will be retrieved again.
# # cache_ttl = "8h"

# # Apply metric modifications using override semantics.
# [[processors.override]]
# # All modifications on inputs and aggregators can be overridden:
# # name_override = "new_name"
# # name_prefix = "new_name_prefix"
# # name_suffix = "new_name_suffix"
# # Tags to be added (all values must be strings)
# # [processors.override.tags]
# # additional_tag = "tag_value"

# # Parse a value in a specified field/tag(s) and add the result in a new metric
# [[processors.parser]]
# # The name of the fields whose value will be parsed.
# parse_fields = []
# # If true, incoming metrics are not emitted.
# drop_original = false
# # If set to override, emitted metrics will be merged by overriding the
# original metric using the newly parsed metrics.
# merge = "override"
#
# The dataformat to be read from files
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# Rotate a single valued metric into a multi field metric
# [[[processors.pivot]]]
# Tag to use for naming the new field.
# tag_key = "name"
# Field to use as the value of the new field.
# value_key = "value"
#
# Given a tag/field of a TCP or UDP port number, add a tag/field of the service name looked up in the system services file
# [[[processors.port_name]]]
# Name of tag holding the port number
# tag = "port"
# Or name of the field holding the port number
# field = "port"
#
# Name of output tag or field (depending on the source) where service name will be added
# dest = "service"
#
# Default tcp or udp
# default_protocol = "tcp"
#
# Tag containing the protocol (tcp or udp, case-insensitive)
# protocol_tag = "proto"
#
# Field containing the protocol (tcp or udp, case-insensitive)
# protocol_field = "proto"
#
# Print all metrics that pass through this filter.
# [[[processors.printer]]]
#
# Transforms tag and field values as well as measurement, tag and field names with regex pattern
# [[[processors.regex]]]
# Tag and field conversions defined in a separate sub-tables
# [[[processors.regex.tags]]]
# ## Tag to change
#  key = "resp_code"
#  # Regular expression to match on a tag value
#  pattern = "[^(\d)d\d]d"$"n"n
#  # Matches of the pattern will be replaced with this string. Use $\{1\}$
#  # notation to use the text of the first submatch.
#  # replacement = "$\{1\}\{x\}"
#
# [[[processors.regex.fields]]]
# ## Field to change
#  key = "request"
#  # All the power of the Go regular expressions available here
#  # For example, named subgroups
#  pattern = "^/\{\w+/\}\{\w+/\}\{\w+/\}^"n"
#  # replacement = "$\{method\}"n"
#  # If result_key is present, a new field will be created
#  # instead of changing existing field
#  # result_key = "method"
#  #
#  ## Multiple conversions may be applied for one field sequentially
#  # Let's extract one more value
# [[[processors.regex.fields]]]
#  key = "request"
#  pattern = ".*category=(\w+).*"n"
#  replacement = "$\{1\}"n"
#  result_key = "search_category"
#
# ## Rename metric fields
# [[[processors.regex.field_rename]]]
#  # Regular expression to match on a field name
#  pattern = "^search_(\w+)\d$"
#  # Matches of the pattern will be replaced with this string. Use $\{1\}$
#  # notation to use the text of the first submatch.
#  # replacement = "$\{1\}\d"$"
#  # If the new field name already exists, you can either "overwrite" the
#  # existing one with the value of the renamed field OR you can "keep"
#  # both the existing and source field.
#  # result_key = "keep"
#
# ## Rename metric tags
# [[[processors.regex.tag_rename]]]
#  # Regular expression to match on a tag name
#  pattern = "^search_(\w+)\d$"
#  # Matches of the pattern will be replaced with this string. Use $\{1\}$
#  # notation to use the text of the first submatch.
#  # replacement = "$\{1\}\d$"
## Rename metrics

### Regular expression to match on a metric name

<table>
<thead>
<tr>
<th><code>pattern</code></th>
<th><code>replacement</code></th>
</tr>
</thead>
<tbody>
<tr>
<td><code>^search_(\w+)d$</code></td>
<td><code>${1}</code></td>
</tr>
</tbody>
</table>

## Rename measurements, tags, and fields that pass through this filter.

### ReverseDNS does a reverse lookup on IP addresses to retrieve the DNS name

### For optimal performance, you may want to limit which metrics are passed to this processor. eg:

### `namepass = ["my_metric_*"]`

### `cache_ttl` is how long the DNS entries should stay cached for.

### `lookup_timeout` is how long should you wait for a single DNS request to respond.

### `max_parallel_lookups` is the maximum number of DNS requests to be in flight at the same time. Requesting hitting cached values do not count against this total, and neither do multiple requests for the same IP.

### `ordered` controls whether or not the metrics need to stay in the same order this plugin received them in. If false, this plugin will change the order with requests hitting cached results moving through immediately and not waiting on slower lookups. This may cause issues for you if you are depending on the order of metrics staying the same. If so, set this to true.
# keeping the metrics ordered may be slightly slower.
# ordered = false
#
# [[processors.reverse_dns.lookup]]
# get the ip from the field "source_ip", and put the result in the field "source_name"
# field = "source_ip"
# dest = "source_name"
#
# [[processors.reverse_dns.lookup]]
# get the ip from the tag "destination_ip", and put the result in the tag
# "destination_name".
# tag = "destination_ip"
# dest = "destination_name"
#
# If you would prefer destination_name to be a field instead, you can use a
# processors.converter after this one, specifying the order attribute.

## Add the S2 Cell ID as a tag based on latitude and longitude fields
# [[processors.s2geo]]
# The name of the lat and lon fields containing WGS-84 latitude and
# longitude in decimal degrees.
# lat_field = "lat"
# lon_field = "lon"
#
# New tag to create
# tag_key = "s2_cell_id"
#
# Cell level (see https://s2geometry.io/resources/s2cell_statistics.html)
# cell_level = 9

## Process metrics using a Starlark script
# [[processors.starlark]]
# The Starlark source can be set as a string in this configuration file, or
# by referencing a file containing the script. Only one source or script
# should be set at once.
#
# Source of the Starlark script.
# source = ""{source = 
# def apply(metric):
# return metric
# 
# File containing a Starlark script.
# script = "/usr/local/bin/myscript.star"
# 
# The constants of the Starlark script.
## processors.starlark.constants

```
# max_size = 10
# threshold = 0.75
# default_name = "Julia"
# debug_mode = true
```

## processors.strings

```
## Convert a tag value to uppercase

```
```
```
```
```
# measurement = "*"
# old = ":"  
# new = ":_"

# ## Trims strings based on width
# # [processors.strings.left]
# # field = "message"
# # width = 10
#
# # ## Decode a base64 encoded utf-8 string
# # [processors.strings.base64decode]
# # field = "message"
#
# # ## Sanitize a string to ensure it is a valid utf-8 string
# # Each run of invalid UTF-8 byte sequences is replaced by the replacement string, which may be empty
# # [processors.strings.valid_utf8]
# # field = "message"
# # replacement = ""

# ## Restricts the number of tags that can pass through this filter and chooses which tags to preserve when over the limit.
# # [processors.tag_limit]
# # Maximum number of tags to preserve
# # limit = 10
#
# # List of tags to preferentially preserve
# keep = ["foo", "bar", "baz"]

# ## Uses a Go template to create a new tag
# # [processors.template]
# # Tag to set with the output of the template.
# # tag = "topic"
#
# # Go template used to create the tag value. In order to ease TOML
# # escaping requirements, you may wish to use single quotes around the
# # template string.
# template = "{{ .Tag "hostname" }}.{{ .Tag "level" }}"

# ## Print all metrics that pass through this filter.
# # [processors.topk]
# # How many seconds between aggregations
# # period = 10
#
# # How many top metrics to return
# # k = 10
# Over which tags should the aggregation be done. Globs can be specified, in
# which case any tag matching the glob will aggregated over. If set to an
# empty list is no aggregation over tags is done
# group_by = ['*']
#
# Over which fields are the top k are calculated
# fields = ['value']
#
# What aggregation to use. Options: sum, mean, min, max
# aggregation = "mean"
#
# Instead of the top k largest metrics, return the bottom k lowest metrics
# bottomk = false
#
# The plugin assigns each metric a GroupBy tag generated from its name and
tags. If this setting is different than "" the plugin will add a
# tag (which name will be the value of this setting) to each metric with
# the value of the calculated GroupBy tag. Useful for debugging
# add_groupby_tag = ""
#
# These settings provide a way to know the position of each metric in
# the top k. The 'add_rank_field' setting allows to specify for which
# fields the position is required. If the list is non empty, then a field
# will be added to each and every metric for each string present in this
# setting. This field will contain the ranking of the group that
# the metric belonged to when aggregated over that field.
# The name of the field will be set to the name of the aggregation field,
suffixed with the string '_topk_rank'
# add_rank_fields = []
#
# These settings provide a way to know what values the plugin is generating
# when aggregating metrics. The 'add_aggregate_field' setting allows to
# specify for which fields the final aggregation value is required. If the
# list is non empty, then a field will be added to each every metric for
# each field present in this setting. This field will contain
# the computed aggregation for the group that the metric belonged to when
# aggregated over that field.
# The name of the field will be set to the name of the aggregation field,
suffixed with the string '_topk_aggregate'
# add_aggregate_fields = []

# Rotate multi field metric into several single field metrics
# [[processors.unpivot]]
# Tag to use for the name.
# tag_key = "name"
# Field to use for the name of the value.
# value_key = "value"

###############################################################################
# AGGREGATOR PLUGINS
# ###############################################################################

## Keep the aggregate basicstats of each metric passing through.
# [[][aggregators.basicstats]]
# ## The period on which to flush & clear the aggregator.
# # period = "30s"
# #
# ## If true, the original metric will be dropped by the
# ## aggregator and will not get sent to the output plugins.
# # drop_original = false
# #
# ## Configures which basic stats to push as fields
# # stats = ["count", "min", "max", "mean", "stdev", "s2", "sum"]

## Calculates a derivative for every field.
# [[][aggregators.derivative]]
# ### The period in which to flush the aggregator.
# # period = "30s"
# ###
# ### If true, the original metric will be dropped by the
# ### aggregator and will not get sent to the output plugins.
# # drop_original = false
# ###
# ### This aggregator will estimate a derivative for each field, which is
# ### contained in both the first and last metric of the aggregation interval.
# ### Without further configuration the derivative will be calculated with
# ### respect to the time difference between these two measurements in seconds.
# ### The formula applied is for every field:
# ###
# ### value_last - value_first
# ### derivative = --------------------------
# ### time_difference_in_seconds
# ###
# ### The resulting derivative will be named *fieldname_rate*. The suffix
# ### "_rate" can be configured by the *suffix* parameter. When using a
# ### derivation variable you can include its name for more clarity.
# # suffix = "_rate"
# ###
# ### As an abstraction the derivative can be calculated not only by the time
# ### difference but by the difference of a field, which is contained in the
# ### measurement. This field is assumed to be monotonously increasing. This
# ## feature is used by specifying a *variable*.
# ## Make sure the specified variable is not filtered and exists in the metrics
# ## passed to this aggregator!
# ## variable = ""
# ##
# ## When using a field as the derivation parameter the name of that field will
# ## be used for the resulting derivative, e.g. *fieldname_by_parameter*.
# ##
# ## Note, that the calculation is based on the actual timestamp of the
# ## measurements. When there is only one measurement during that period, the
# ## measurement will be rolled over to the next period. The maximum number of
# ## such roll-overs can be configured with a default of 10.
# ## max_roll_over = 10
# ##

# ## Report the final metric of a series
# [[aggregators.final]]
# ## The period on which to flush & clear the aggregator.
# period = "30s"
# ## If true, the original metric will be dropped by the
# ## aggregator and will not get sent to the output plugins.
# drop_original = false
#
# ## The time that a series is not updated until considering it final.
# series_timeout = "5m"

# # Create aggregate histograms.
# [[aggregators.histogram]]
# ## The period in which to flush the aggregator.
# period = "30s"
#
# ## If true, the original metric will be dropped by the
# ## aggregator and will not get sent to the output plugins.
# drop_original = false
#
# ## If true, the histogram will be reset on flush instead
# ## of accumulating the results.
# reset = false
#
# ## Whether bucket values should be accumulated. If set to false, "gt" tag will be added.
# ## Defaults to true.
# cumulative = true
#
# ## Example config that aggregates all fields of the metric.
# # [[aggregators.histogram.config]]
# # ## Right borders of buckets (with +Inf implicitly added).
# # buckets = [0.0, 15.6, 34.5, 49.1, 71.5, 80.5, 94.5, 100.0]
# # ## The name of metric.
# # measurement_name = "cpu"
#
# # Example config that aggregates only specific fields of the metric.
# # [[aggregators.histogram.config]]
# # ## Right borders of buckets (with +Inf implicitly added).
# # buckets = [0.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0]
# # ## The name of metric.
# # measurement_name = "diskio"
# # ## The concrete fields of metric
# # fields = ["io_time", "read_time", "write_time"]

## Merge metrics into multifield metrics by series key
# [[aggregators.merge]]
# ## If true, the original metric will be dropped by the
# ## aggregator and will not get sent to the output plugins.
# drop_original = true

## Keep the aggregate min/max of each metric passing through.
# [[aggregators.minmax]]
# ## General Aggregator Arguments:
# ## The period on which to flush & clear the aggregator.
# period = "30s"
# ## If true, the original metric will be dropped by the
# ## aggregator and will not get sent to the output plugins.
# drop_original = false

## Keep the aggregate quantiles of each metric passing through.
# [[aggregators.quantile]]
# ## General Aggregator Arguments:
# ## The period on which to flush & clear the aggregator.
# period = "30s"
#
# ## If true, the original metric will be dropped by the
# ## aggregator and will not get sent to the output plugins.
# drop_original = false
#
# ## Quantiles to output in the range [0,1]
# quantiles = [0.25, 0.5, 0.75]
#
# ## Type of aggregation algorithm
# ## Supported are:
# ## "t-digest" -- approximation using centroids, can cope with large number of samples
# ## "exact R7" -- exact computation also used by Excel or NumPy (Hyndman & Fan 1996 R7)
# "exact R8" -- exact computation (Hyndman & Fan 1996 R8)
# NOTE: Do not use "exact" algorithms with large number of samples
to not impair performance or memory consumption!
# algorithm = "t-digest"
#
# Compression for approximation (t-digest). The value needs to be
greater or equal to 1.0. Smaller values will result in more
performance but less accuracy.
comression = 100.0
#

# Aggregate metrics using a Starlark script
[[aggregators.starlark]]
## The Starlark source can be set as a string in this configuration file, or
## by referencing a file containing the script. Only one source or script
## should be set at once.
#
## Source of the Starlark script.
source = ""
state = []
#
def add(metric):
  state["last"] = metric
#
def push():
  return state.get("last")
#
def reset():
  state.clear()
  
## File containing a Starlark script.
# script = "/usr/local/bin/myscript.star"
#
## The constants of the Starlark script.
# [aggregators.starlark.constants]
# max_size = 10
# threshold = 0.75
# default_name = "Julia"
# debug_mode = true
#
## Count the occurrence of values in fields.
[[aggregators.valuecounter]]
## General Aggregator Arguments:
## The period on which to flush & clear the aggregator.
# period = "30s"
## If true, the original metric will be dropped by the
# ## aggregator and will not get sent to the output plugins.
# drop_original = false
# ## The fields for which the values will be counted
# fields = []

#                           INPUT PLUGINS                           #
#******************************************************************************

# Read metrics about cpu usage
[[inputs.cpu]]
## Whether to report per-cpu stats or not
percpu = true
## Whether to report total system cpu stats or not
totalcpu = true
## If true, collect raw CPU time metrics
collect_cpu_time = false
## If true, compute and report the sum of all non-idle CPU states
report_active = false

# Read metrics about disk usage by mount point
[[inputs.disk]]
## By default stats will be gathered for all mount points.
## Set mount_points will restrict the stats to only the specified mount points.
# mount_points = ["/"]
## Ignore mount points by filesystem type.
ignore_fs = ["tmpfs", "devtmpfs", "devfs", "iso9660", "overlay", "aufs", "squashfs"]

# Read metrics about disk IO by device
[[inputs.diskio]]
## By default, telegraf will gather stats for all devices including
## disk partitions.
## Setting devices will restrict the stats to the specified devices.
# devices = ["sda", "sdb", "vd*"]
## Uncomment the following line if you need disk serial numbers.
# skip_serial_number = false
#
## On systems which support it, device metadata can be added in the form of
## tags.
## Currently only Linux is supported via udev properties. You can view
## available properties for a device by running:
## `udevdadm info -q property -n /dev/sda`
## Note: Most, but not all, udev properties can be accessed this way. Properties
## that are currently inaccessible include DEVTYPE, DEVNAME, and DEVPATH.

```
# device_tags = ['ID_FS_TYPE', 'ID_FS_USAGE']
```

## Using the same metadata source as device_tags, you can also customize the
## name of the device via templates.
## The 'name_templates' parameter is a list of templates to try and apply to
## the device. The template may contain variables in the form of '$PROPERTY' or
## '${PROPERTY}'. The first template which does not contain any variables not
## present for the device is used as the device name tag.
## The typical use case is for LVM volumes, to get the VG/LV name instead of
## the near-meaningless DM-0 name.
# name_templates = ['$ID_FS_LABEL','$DM_VG_NAME/$DM_LV_NAME']

```
# Get kernel statistics from /proc/stat
[[inputs.kernel]]
# no configuration

# Read metrics about memory usage
[[inputs.mem]]
# no configuration

# Get the number of processes and group them by status
[[inputs.processes]]
# no configuration

# Read metrics about swap memory usage
[[inputs.swap]]
# no configuration

# Read metrics about system load & uptime
[[inputs.system]]
## Uncomment to remove deprecated metrics.
# fielddrop = ['uptime_format']

## Gather ActiveMQ metrics
# [[inputs.activemq]]
## ActiveMQ WebConsole URL
# url = "http://127.0.0.1:8161"
## Required ActiveMQ Endpoint
## deprecated in 1.11; use the url option
# server = "127.0.0.1"
# port = 8161
#
# ## Credentials for basic HTTP authentication
# # username = "admin"
# # password = "admin"
#
# ## Required ActiveMQ webadmin root path
# # webadmin = "admin"
#
# ## Maximum time to receive response.
# # response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# Read stats from aerospike server(s)
# [inputs.aerospike]
# ## Aerospike servers to connect to (with port)
# ## This plugin will query all namespaces the aerospike
# ## server has configured and get stats for them.
# # servers = ["localhost:3000"]
#
# # username = "telegraf"
# # password = "pa$$word"
#
# ## Optional TLS Config
# # enable_tls = false
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## If false, skip chain & host verification
# # insecure_skip_verify = true
#
# ## Feature Options
# # Add namespace variable to limit the namespaces executed on
# # Leave blank to do all
# # disable_query_namespaces = true # default false
# # namespaces = ["namespace1", "namespace2"]
#
# # Enable set level telemetry
# # query_sets = true # default: false
# # Add namespace set combinations to limit sets executed on
# # Leave blank to do all sets
# sets = ["namespace1/set1", "namespace1/set2", "namespace3"]

# Histograms
# enable_ttl_histogram = true # default: false
# enable_object_size_linear_histogram = true # default: false

# by default, aerospike produces a 100 bucket histogram
# this is not great for most graphing tools, this will allow
# the ability to squash this to a smaller number of buckets
# To have a balanced histogram, the number of buckets chosen
# should divide evenly into 100.
# num_histogram_buckets = 100 # default: 10

## Query statistics from AMD Graphics cards using rocm-smi binary
[[inputs.amd_rocm_smi]]
### Optional: path to rocm-smi binary, defaults to $PATH via exec.LookPath
# bin_path = "/opt/rocm/bin/rocm-smi"

### Optional: timeout for GPU polling
# timeout = "5s"

## Read Apache status information (mod_status)
[[inputs.apache]]
### An array of URLs to gather from, must be directed at the machine
### Default is "http://localhost/server-status?auto".
# urls = ["http://localhost/server-status?auto"]

### Credentials for basic HTTP authentication.
# username = "myuser"
# password = "mypassword"

### Maximum time to receive response.
# response_timeout = "5s"

### Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
### Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Monitor APC UPSes connected to apcupsd
[[inputs.apcupsd]]
### A list of running apcupsd server to connect to.
## Gather metrics from Apache Aurora schedulers

```
# [[inputs.aurora]]
# ## Schedulers are the base addresses of your Aurora Schedulers
# schedulers = ["http://127.0.0.1:8081"]
#
# ## Set of role types to collect metrics from.
# ## The scheduler roles are checked each interval by contacting the
# ## scheduler nodes; zookeeper is not contacted.
# ## Timeout is the max time for total network operations.
# # timeout = "5s"
#
# ## Username and password are sent using HTTP Basic Auth.
# # username = "username"
# # password = "pa$$word"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
```

## Gather Azure Storage Queue metrics

```
# [[inputs.azure_storage_queue]]
# ## Required Azure Storage Account name
# account_name = "mystorageaccount"
#
# ## Required Azure Storage Account access key
# account_key = "storageaccountaccesskey"
#
# ## Set to false to disable peeking age of oldest message (executes faster)
# # peek_oldest_message_age = true
```

## Read metrics of bcache from stats_total and dirty_data

```
# [[inputs.bcache]]
# ## Bcache sets path
```
# ## If not specified, then default is:
#   bcachePath = "/sys/fs/bcache"
#
# ## By default, Telegraf gather stats for all bcache devices
# ## Setting devices will restrict the stats to the specified
# ## bcache devices.
#   bcacheDevs = ["bcache0"]

# ## Collects Beanstalkd server and tubes stats
#   [[inputs.beanstalkd]]
#   ## Server to collect data from
#   server = "localhost:11300"
#
#   ## List of tubes to gather stats about.
#   ## If no tubes specified then data gathered for each tube on server reported by list-tubes command
#   tubes = ["notifications"]

# ## Read metrics exposed by Beat
#   [[inputs.beat]]
#   ## An URL from which to read Beat-formatted JSON
#   ## Default is "http://127.0.0.1:5066".
#   url = "http://127.0.0.1:5066"
#
#   ## Enable collection of the listed stats
#   ## An empty list means collect all. Available options are currently
#   ## "beat", "libbeat", "system" and "filebeat".
#   include = ["beat", "libbeat", "filebeat"]
#
#   ## HTTP method
#   method = "GET"
#
#   ## Optional HTTP headers
#   headers = ["X-Special-Header" = "Special-Value"]
#
#   ## Override HTTP "Host" header
#   host_header = "logstash.example.com"
#
#   ## Timeout for HTTP requests
#   timeout = "5s"
#
#   ## Optional HTTP Basic Auth credentials
#   username = "username"
#   password = "pa$$word"
#
#   ## Optional TLS Config
#   tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

### Read BIND nameserver XML statistics

```yaml
[[inputs.bind]]
## An array of BIND XML statistics URI to gather stats.
# Default is "http://localhost:8053/xml/v3".
# urls = ["http://localhost:8053/xml/v3"]
# gather_memory_contexts = false
# gather_views = false
#
# Timeout for http requests made by bind nameserver
# timeout = "4s"
```

### Collect bond interface status, slaves statuses and failures count

```yaml
[[inputs.bond]]
## Sets 'proc' directory path
## If not specified, then default is /proc
# host_proc = "/proc"
#
# By default, telegraf gather stats for all bond interfaces
# Setting interfaces will restrict the stats to the specified
# bond interfaces.
# bond_interfaces = ["bond0"]
```

### Collect Kafka topics and consumers status from Burrow HTTP API.

```yaml
[[inputs.burrow]]
## Burrow API endpoints in format "schema://host:port".
## Default is "http://localhost:8000".
# servers = ["http://localhost:8000"]
#
# Override Burrow API prefix.
# Useful when Burrow is behind reverse-proxy.
# api_prefix = "/v3/kafka"
#
# Maximum time to receive response.
# response_timeout = "5s"
#
# Limit per-server concurrent connections.
# Useful in case of large number of topics or consumer groups.
# concurrent_connections = 20
#
# Filter clusters, default is no filtering.
```
# ## Values can be specified as glob patterns.
# # clusters_include = []
# # clusters_exclude = []
#
# ## Filter consumer groups, default is no filtering.
# ## Values can be specified as glob patterns.
# # groups_include = []
# # groups_exclude = []
#
# ## Filter topics, default is no filtering.
# ## Values can be specified as glob patterns.
# # topics_include = []
# # topics_exclude = []
#
# ## Credentials for basic HTTP authentication.
# # username = ""
# # password = ""
#
# ## Optional SSL config
# # ssl_ca = "/etc/telegraf/ca.pem"
# # ssl_cert = "/etc/telegraf/cert.pem"
# # ssl_key = "/etc/telegraf/key.pem"
# # insecure_skip_verify = false

# # Collects performance metrics from the MON, OSD, MDS and RGW nodes in a Ceph storage cluster.
# [[inputs.ceph]]
# ## This is the recommended interval to poll. Too frequent and you will lose
# ## data points due to timeouts during rebalancing and recovery
# # interval = '1m'
# #
# ## All configuration values are optional, defaults are shown below
#
# ## location of ceph binary
# # ceph_binary = "/usr/bin/ceph"
# #
# ## directory in which to look for socket files
# # socket_dir = "/var/run/ceph"
# #
# ## prefix of MON and OSD socket files, used to determine socket type
# # mon_prefix = "ceph-mon"
# # osd_prefix = "ceph-osd"
# # mds_prefix = "ceph-mds"
# # rgw_prefix = "ceph-client"
# #
# ## suffix used to identify socket files
# # socket_suffix = "asok"
# Ceph user to authenticate as, ceph will search for the corresponding keyring
# e.g. client.admin.keyring in /etc/ceph, or the explicit path defined in the
# client section of ceph.conf for example:
#
# [client.telegraf]
# keyring = /etc/ceph/client.telegraf.keyring
#
# Consult the ceph documentation for more detail on keyring generation.
# ceph_user = "client.admin"
#
# Ceph configuration to use to locate the cluster
# ceph_config = "/etc/ceph/ceph.conf"
#
# Whether to gather statistics via the admin socket
# gather_admin_socket_stats = true
#
# Whether to gather statistics via ceph commands, requires ceph_user and ceph_config
to be specified
# gather_cluster_stats = false

# Read specific statistics per cgroup
# [[inputs.cgroup]]
# Directories in which to look for files, globs are supported.
# Consider restricting paths to the set of cgroups you really want to monitor if you have a large number of cgroups, to avoid any cardinality issues.
# paths = [
#   "/sys/fs/cgroup/memory",
#   "/sys/fs/cgroup/memory/child1",
#   "/sys/fs/cgroup/memory/child2/*",
# ]
# cgroup stat fields, as file names, globs are supported.
# these file names are appended to each path from above.
# files = ["memory.*usage*", "memory.limit_in_bytes"]

# Get standard chrony metrics, requires chronyc executable.
# [[inputs.chrony]]
# If true, chronyc tries to perform a DNS lookup for the time server.
# dns_lookup = false

# Pull Metric Statistics from Amazon CloudWatch
# [[inputs.cloudwatch]]
# Amazon Region
# region = "us-east-1"
# ## Amazon Credentials
# ## Credentials are loaded in the following order
# ## 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# ## 2) Assumed credentials via STS if role_arn is specified
# ## 3) explicit credentials from 'access_key' and 'secret_key'
# ## 4) shared profile from 'profile'
# ## 5) environment variables
# ## 6) shared credentials file
# ## 7) EC2 Instance Profile
# # access_key = ""
# # secret_key = ""
# # token = ""
# # role_arn = ""
# # web_identity_token_file = ""
# # role_session_name = ""
# # profile = ""
# # shared_credential_file = ""
# # 
# ## Endpoint to make request against, the correct endpoint is automatically
# ## determined and this option should only be set if you wish to override the
# ## default.
# ## ex: endpoint_url = "http://localhost:8000"
# # endpoint_url = ""
# # 
# ## Set http_proxy (telegraf uses the system wide proxy settings if it's is not set)
# # http_proxy_url = "http://localhost:8888"
# 
# # The minimum period for Cloudwatch metrics is 1 minute (60s). However not all
# # metrics are made available to the 1 minute period. Some are collected at
# # 3 minute, 5 minute, or larger intervals. See https://aws.amazon.com/cloudwatch/faqs/#monitoring.
# # Note that if a period is configured that is smaller than the minimum for a
# # particular metric, that metric will not be returned by the Cloudwatch API
# # and will not be collected by Telegraf.
# 
# ## Requested CloudWatch aggregation Period (required - must be a multiple of 60s)
# # period = "5m"
# 
# ## Collection Delay (required - must account for metrics availability via CloudWatch API)
# # delay = "5m"
# 
# ## Recommended: use metric 'interval' that is a multiple of 'period' to avoid
# ## gaps or overlap in pulled data
# # interval = "5m"
# 
# ## Recommended if "delay" and "period" are both within 3 hours of request time. Invalid values will be ignored.
# ## Recently Active feature will only poll for CloudWatch ListMetrics values that occurred within the last 3
# ## Hours.
# ## If enabled, it will reduce total API usage of the CloudWatch ListMetrics API and require less memory to
Do not enable if "period" or "delay" is longer than 3 hours, as it will not return data more than 3 hours old.

See https://docs.aws.amazon.com/AmazonCloudWatch/latest/APIReference/API_ListMetrics.html

recently_active = "PT3H"

Configure the TTL for the internal cache of metrics.

cache_ttl = "1h"

Metric Statistic Namespaces (required)

namespaces = ["AWS/ELB"]

A single metric statistic namespace that will be appended to namespaces on startup

namespace = "AWS/ELB"

Maximum requests per second. Note that the global default AWS rate limit is 50 reqs/sec, so if you define multiple namespaces, these should add up to a maximum of 50.

See http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/cloudwatch_limits.html

ratelimit = 25

Timeout for http requests made by the cloudwatch client.

timeout = "5s"

Namespace-wide statistic filters. These allow fewer queries to be made to cloudwatch.

statistic_include = ["average", "sum", "minimum", "maximum", sample_count"

statistic_exclude = []

Metrics to Pull

Defaults to all Metrics in Namespace if nothing is provided

Refreshes Namespace available metrics every 1h

names = ["Latency", "RequestCount"]

Statistic filters for Metric. These allow for retrieving specific statistics for an individual metric.

statistic_include = ["average", "sum", "minimum", "maximum", sample_count"

statistic_exclude = []

Dimension filters for Metric. All dimensions defined for the metric names must be specified in order to retrieve the metric statistics.

'value' has wildcard / 'glob' matching support such as 'p-*'.

name = "LoadBalancerName"

value = "p-example"

Collects conntrack stats from the configured directories and files.

[[inputs.conntrack]]
## The following defaults would work with multiple versions of conntrack.
## Note the nf_ and ip_ filename prefixes are mutually exclusive across
## kernel versions, as are the directory locations.

## Superset of filenames to look for within the conntrack dirs.
## Missing files will be ignored.
files = ["ip_conntrack_count","ip_conntrack_max",
        "nf_conntrack_count","nf_conntrack_max"]

## Directories to search within for the conntrack files above.
## Missing directories will be ignored.
dirs = ["/proc/sys/net/ipv4/netfilter","/proc/sys/net/netfilter"]

## Gather health check statuses from services registered in Consul
inputs.consul =
  ## Consul server address
  address = "localhost:8500"
  
  ## URI scheme for the Consul server, one of "http", "https"
  scheme = "http"
  
  ## Metric version controls the mapping from Consul metrics into
  ## Telegraf metrics.
  metric_version = 1
  
  ## ACL token used in every request
  token = ""
  
  ## HTTP Basic Authentication username and password.
  username = ""
  password = ""
  
  ## Data center to query the health checks from
  datacenter = ""
  
  ## Optional TLS Config
  tls_ca = "/etc/telegraf/ca.pem"
  tls_cert = "/etc/telegraf/cert.pem"
  tls_key = "/etc/telegraf/key.pem"
  ## Use TLS but skip chain & host verification
  insecure_skip_verify = true
  
  ## Consul checks' tag splitting
  # When tags are formatted like "key:value" with ":" as a delimiter then
# they will be splitted and reported as proper key:value in Telegraf
# tag_delimiter = ":"

## Read per-node and per-bucket metrics from Couchbase
## specify servers via a url matching:
## [protocol://][password]@address[:port]
## e.g.
## http://couchbase-0.example.com/
## http://admin:secret@couchbase-0.example.com:8091/
##
## If no servers are specified, then localhost is used as the host.
## If no protocol is specified, HTTP is used.
## If no port is specified, 8091 is used.
## servers = ["http://localhost:8091"]
#
## Filter bucket fields to include only here.
## bucket_stats_included = ["quota_percent_used", "ops_per_sec", "disk_fetches", "item_count", "disk_used", "data_used", "mem_used"]
#
## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification (defaults to false)
## insecure_skip_verify = false

## Read CouchDB Stats from one or more servers
## Multiple Hosts from which to read CouchDB stats:
## hosts = ["http://localhost:8086/_stats"]
#
## Use HTTP Basic Authentication.
## basic_username = "telegraf"
## basic_password = "p@ssw0rd"

## Fetch metrics from a CSGO SRCDS
## Specify servers using the following format:
## servers = [
## ["ip1:port1", "rcon_password1"],
## ["ip2:port2", "rcon_password2"],
## ]
# If no servers are specified, no data will be collected
# servers = []

# Input plugin for DC/OS metrics
# [[inputs.dcos]]
# The DC/OS cluster URL.
# cluster_url = "https://dcos-ee-master-1"
#
# The ID of the service account.
# service_account_id = "telegraf"
# The private key file for the service account.
# service_account_private_key = "/etc/telegraf/telegraf-sa-key.pem"
#
# Path containing login token. If set, will read on every gather.
# token_file = "/home/dcos/.dcos/token"
#
# In all filter options if both include and exclude are empty all items
# will be collected. Arrays may contain glob patterns.
#
# Node IDs to collect metrics from. If a node is excluded, no metrics will
# be collected for its containers or apps.
# node_include = []
# node_exclude = []
# Container IDs to collect container metrics from.
# container_include = []
# container_exclude = []
# Container IDs to collect app metrics from.
# app_include = []
# app_exclude = []
#
# Maximum concurrent connections to the cluster.
# max_connections = 10
# Maximum time to receive a response from cluster.
# response_timeout = "20s"
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# If false, skip chain & host verification
# insecure_skip_verify = true
#
# Recommended filtering to reduce series cardinality.
# [inputs.dcos.tagdrop]
# path = ["/var/lib/mesos/slave/slaves/*"]
## Read metrics from one or many disque servers

```
[[inputs.disque]]
```

### An array of URI to gather stats about. Specify an ip or hostname
### with optional port and password.
### ie disque://localhost, disque://10.10.3.33:18832, 10.0.0.1:10000, etc.
### If no servers are specified, then localhost is used as the host.
```
servers = ["localhost"]
```

## Provide a native collection for dmsetup based statistics for dm-cache

```
[[inputs.dmcache]]
```

### Whether to report per-device stats or not
```
per_device = true
```

## Query given DNS server and gives statistics

```
[[inputs.dns_query]]
```

### servers to query
```
servers = ["8.8.8.8"]
```

### Network is the network protocol name.
```
# network = "udp"
```

### Domains or subdomains to query.
```
# domains = ["."]
```

### Query record type.
### Possible values: A, AAAA, CNAME, MX, NS, PTR, TXT, SOA, SPF, SRV.
```
# record_type = "A"
```

### Dns server port.
```
# port = 53
```

### Query timeout in seconds.
```
# timeout = 2
```

## Read metrics about docker containers

```
[[inputs.docker]]
```

### Docker Endpoint
### To use TCP, set endpoint = "tcp://[ip]:[port]"
### To use environment variables (ie, docker-machine), set endpoint = "ENV"
```
# endpoint = "unix:///var/run/docker.sock"
```

### Set to true to collect Swarm metrics(desired_replicas, running_replicas)
```
# gather_services = false
```
## Only collect metrics for these containers, collect all if empty

```
container_names = []
```

## Set the source tag for the metrics to the container ID hostname, eg first 12 chars

```
source_tag = false
```

## Containers to include and exclude. Globs accepted.

```
container_name_include = []
container_name_exclude = []
```

## Container states to include and exclude. Globs accepted.

```
container_state_include = ["created", "restarting", "running", "removing", "paused", "exited", "dead"]
container_state_exclude = ["created", "restarting", "running", "removing", "paused", "exited", "dead"]
```

## Timeout for docker list, info, and stats commands

```
timeout = "5s"
```

## Whether to report for each container per-device blkio (8:0, 8:1...),

```
network (eth0, eth1, ...) and cpu (cpu0, cpu1, ...) stats or not.
```

## Usage of this setting is discouraged since it will be deprecated in favor of 'perdevice_include'.

```
default value is 'true' for backwards compatibility, please set it to 'false' so that 'perdevice_include' setting
## is honored.
perdevice = true
```

## Specifies for which classes a per-device metric should be issued

```
# Possible values are 'cpu' (cpu0, cpu1, ...), 'blkio' (8:0, 8:1, ...) and 'network' (eth0, eth1, ...)
# Please note that this setting has no effect if 'perdevice' is set to 'true'
perdevice_include = ["cpu"]
```

## Whether to report for each container total blkio and network stats or not.

```
# Usage of this setting is discouraged since it will be deprecated in favor of 'total_include'.
# Default value is 'false' for backwards compatibility, please set it to 'true' so that 'total_include' setting
# is honored.
total = false
```

## Specifies for which classes a total metric should be issued. Total is an aggregated of the 'perdevice' values.

```
# Possible values are 'cpu', 'blkio' and 'network'
# Total 'cpu' is reported directly by Docker daemon, and 'network' and 'blkio' totals are aggregated by this plugin.
# Please note that this setting has no effect if 'total' is set to 'false'
total_include = ["cpu", "blkio", "network"]
```
## Which environment variables should we use as a tag

```yaml
###tag_env = ["JAVA_HOME", "HEAP_SIZE"]
```

## docker labels to include and exclude as tags. Globs accepted.

```yaml
### Note that an empty array for both will include all labels as tags

docker_label_include = []
docker_label_exclude = []
```

## Optional TLS Config

```yaml
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
```

## Use TLS but skip chain & host verification

```yaml
insecure_skip_verify = false
```

## Read statistics from one or many dovecot servers

```yaml
[[inputs.dovecot]]
### specify dovecot servers via an address:port list
### e.g.
### localhost:24242
###
### If no servers are specified, then localhost is used as the host.
servers = ["localhost:24242"]
###
### Type is one of "user", "domain", "ip", or "global"
type = "global"
###
### Wildcard matches like ".com". An empty string "" is same as "."
### If type = "ip" filters should be <IP/network>
filters = [""
```

## Reads metrics from DPDK applications using v2 telemetry interface.

```yaml
[[inputs.dpdk]]
### Path to DPDK telemetry socket. This shall point to v2 version of DPDK telemetry interface.
socket_path = "/var/run/dpdk/rte/dpdk_telemetry.v2"
###
### Duration that defines how long the connected socket client will wait for a response before terminating connection.
### This includes both writing to and reading from socket. Since it's local socket access
### to a fast packet processing application, the timeout should be sufficient for most users.
### Setting the value to 0 disables the timeout (not recommended)
socket_access_timeout = "200ms"
###
### Enables telemetry data collection for selected device types.
### Adding "ethdev" enables collection of telemetry from DPDK NICs (stats, xstats, link_status).
### Adding "rawdev" enables collection of telemetry from DPDK Raw Devices (xstats).
```
# # device_types = ["ethdev"]
# #
# # ## List of custom, application-specific telemetry commands to query
# # ## The list of available commands depend on the application deployed. Applications can register their own commands
# # ## via telemetry library API http://doc.dpdk.org/guides/prog_guide/telemetry_lib.html#registering-commands
# # ## For e.g. L3 Forwarding with Power Management Sample Application this could be:
# # ## additional_commands = ["/l3fwd-power/stats"]
# # # additional_commands = []
# #
# # # Allows turning off collecting data for individual "ethdev" commands.
# # Remove "/ethdev/link_status" from list to start getting link status metrics.
# [inputs.dpdk.ethdev]
# exclude_commands = ["/ethdev/link_status"]
#
# # When running multiple instances of the plugin it's recommended to add a unique tag to each instance to identify
# # metrics exposed by an instance of DPDK application. This is useful when multiple DPDK apps run on a single host.
# # [inputs.dpdk.tags]
# dpdk_instance = "my-fwd-app"
#
# # Read metrics about docker containers from Fargate/ECS v2, v3 meta endpoints.
# [[inputs.ecs]]
# # ECS metadata url.
# # Metadata v2 API is used if set explicitly. Otherwise,
# # v3 metadata endpoint API is used if available.
# endpoint_url = ""
#
# # Containers to include and exclude. Globs accepted.
# # Note that an empty array for both will include all containers
# container_name_include = []
# container_name_exclude = []
#
# # Container states to include and exclude. Globs accepted.
# # When empty only containers in the "RUNNING" state will be captured.
# # Possible values are "NONE", "PULLED", "CREATED", "RUNNING",
# # "RESOURCES_PROVISIONED", "STOPPED".
# container_status_include = []
# container_status_exclude = []
#
# # ecs labels to include and exclude as tags. Globs accepted.
# # Note that an empty array for both will include all labels as tags
# ecs_label_include = [ "com.amazonaws.ecs.*" ]
# ecs_label_exclude = []
#
# # Timeout for queries.
## # timeout = "5s"

### # Read stats from one or more Elasticsearch servers or clusters
### ![inputs.elasticsearch]
#### # specify a list of one or more Elasticsearch servers
#### # you can add username and password to your url to use basic authentication:
#### # servers = ["http://user:pass@localhost:9200"]
#### # servers = ["http://localhost:9200"]
#### # # Timeout for HTTP requests to the elastic search server(s)
#### # http_timeout = "5s"
#### # # When local is true (the default), the node will read only its own stats.
#### # # Set local to false when you want to read the node stats from all nodes
#### # # of the cluster.
#### # local = true
#### # # # Set cluster_health to true when you want to also obtain cluster health stats
#### # cluster_health = false
#### # # # Adjust cluster_health_level when you want to also obtain detailed health stats
#### # # The options are
#### # # - indices (default)
#### # # - cluster
#### # # cluster_health_level = "indices"
#### # # # Set cluster_stats to true when you want to also obtain cluster stats.
#### # cluster_stats = false
#### # # # Only gather cluster_stats from the master node. To work this require local = true
#### # cluster_stats_only_from_master = true
#### # # # Indices to collect; can be one or more indices names or _all
#### # # # Use of wildcards is allowed. Use a wildcard at the end to retrieve index names that end with a changing value, like a date.
#### # indices_include = ["_all"]
#### # # # One of "shards", "cluster", "indices"
#### # indices_level = "shards"
#### # # # node_stats is a list of sub-stats that you want to have gathered. Valid options
#### # # are "indices", "os", "process", "jvm", "thread_pool", "fs", "transport", "http",
#### # # "breaker". Per default, all stats are gathered.
#### # # node_stats = ["jvm", "http"]
#### # # # HTTP Basic Authentication username and password.
#### # # username = ""
# password = ""
#
## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
## Sets the number of most recent indices to return for indices that are configured with a date-stamped suffix.
## Each 'indices_include' entry ending with a wildcard (*) or glob matching pattern will group together all
## indices that match it, and sort them
## by the date or number after the wildcard. Metrics then are gathered for only the 'num_most_recent_indices'
## amount of most recent indices.
# num_most_recent_indices = 0
#
## Derive metrics from aggregating Elasticsearch query results
[[inputs.elasticsearch_query]]
## The full HTTP endpoint URL for your Elasticsearch instance
## Multiple urls can be specified as part of the same cluster,
## this means that only ONE of the urls will be written to each interval.
## urls = [ "http://node1.es.example.com:9200" ] # required.
#
## Elasticsearch client timeout, defaults to "5s".
## timeout = "5s"
#
## Set to true to ask Elasticsearch a list of all cluster nodes,
## thus it is not necessary to list all nodes in the urls config option
## enable_sniffer = false
#
## Set the interval to check if the Elasticsearch nodes are available
## This option is only used if enable_sniffer is also set (0s to disable it)
## health_check_interval = "10s"
#
## HTTP basic authentication details (eg. when using x-pack)
## username = "telegraf"
## password = "mypassword"
#
## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
## insecure_skip_verify = false
#
## measurement name for the results of the aggregation query
# measurement_name = "measurement"
#
# ## Elasticsearch indexes to query (accept wildcards).
# index = "index-*"
#
# ## The date/time field in the Elasticsearch index (mandatory).
# date_field = "@timestamp"
#
# ## If the field used for the date/time field in Elasticsearch is also using
# ## a custom date/time format it may be required to provide the format to
# ## correctly parse the field.
#
# ## If using one of the built in elasticsearch formats this is not required.
# # date_field_custom_format = ""
#
# ## Time window to query (eg. "1m" to query documents from last minute).
# ## Normally should be set to same as collection interval
# query_period = "1m"
#
# ## Lucene query to filter results
# # filter_query = "*"
#
# ## Fields to aggregate values (must be numeric fields)
# # metric_fields = ["metric"]
#
# ## Aggregation function to use on the metric fields
# ## Must be set if 'metric_fields' is set
# ## Valid values are: avg, sum, min, max, sum
# # metric_function = "avg"
#
# ## Fields to be used as tags
# ## Must be text, non-analyzed fields. Metric aggregations are performed per tag
# # tags = ["field.keyword", "field2.keyword"]
#
# ## Set to true to not ignore documents when the tag(s) above are missing
# # include_missing_tag = false
#
# ## String value of the tag when the tag does not exist
# ## Used when include_missing_tag is true
# # missing_tag_value = "null"

## Returns ethtool statistics for given interfaces
# [[inputs.ethtool]]
# ## List of interfaces to pull metrics for
# # interface_include = ["eth0"]
#
# ## List of interfaces to ignore when pulling metrics.
# # interface_exclude = ["eth1"]
#
# ## Some drivers declare statistics with extra whitespace, different spacing,
# ## and mix cases. This list, when enabled, can be used to clean the keys.
# ## Here are the current possible normalizations:
# ## * snakecase: converts fooBarBaz to foo_bar_baz
# ## * trim: removes leading and trailing whitespace
# ## * lower: changes all capitalized letters to lowercase
# ## * underscore: replaces spaces with underscores
# # normalize_keys = ["snakecase", "trim", "lower", "underscore"]
#
# # Read metrics from one or more commands that can output to stdout
# [[][inputs.exec]]
# ## Commands array
# commands = [  
#   "/tmp/test.sh",  
#   "/usr/bin/mycollector --foo=bar",  
#   "/tmp/collect_* .sh"  
# ]
#
# ## Timeout for each command to complete.
# timeout = "5s"
#
# ## measurement name suffix (for separating different commands)
# name_suffix = "_mycollector"
#
# ## Data format to consume.
# Each data format has its own unique set of configuration options, read
# more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# # Read metrics from fail2ban.
# [[][inputs.fail2ban]]
# ## Use sudo to run fail2ban-client
# use_sudo = false

# # Read devices value(s) from a Fibaro controller
# [[][inputs.fibaro]]
# ## Required Fibaro controller address/hostname.
# ## Note: at the time of writing this plugin, Fibaro only implemented http - no https available
# url = "http://<controller>:80"
#
# ## Required credentials to access the API (http://<controller/api/<component>)
# username = "<username>"
## Parse a complete file each interval
# [[inputs.file]]
# Files to parse each interval. Accept standard unix glob matching rules,
# as well as ** to match recursive files and directories.
# files = ["/tmp/metrics.out"]
#
#
# Name a tag containing the name of the file the data was parsed from. Leave empty
# to disable. Cautious when file name variation is high, this can increase the cardinality
# significantly. Read more about cardinality here:
# https://docs.influxdata.com/influxdb/cloud/reference/glossary/#series-cardinality
# file_tag = ""
#
#
# Character encoding to use when interpreting the file contents. Invalid
# characters are replaced using the unicode replacement character. When set
# to the empty string the data is not decoded to text.
# ex: character_encoding = "utf-8"
#     character_encoding = "utf-16le"
#     character_encoding = "utf-16be"
#     character_encoding = ""
# character_encoding = ""
#
# The dataformat to be read from files
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

## Count files in a directory
# [[inputs.filecount]]
# Directory to gather stats about.
# deprecated in 1.9; use the directories option
# directory = "/var/cache/apt/archives"
#
# Directories to gather stats about.
# This accept standard unix glob matching rules, but with the addition of
# ** as a "super asterisk". ie:
# /var/log/** -> recursively find all directories in /var/log and count files in each directories
# /var/log/*/ -> find all directories with a parent dir in /var/log and count files in each directories
# /var/log -> count all files in /var/log and all of its subdirectories
directories = ["/var/cache/apt/archives"]
#
## Only count files that match the name pattern. Defaults to ".*".
## name = "*.deb"
#
## Count files in subdirectories. Defaults to true.
recursive = false
#
## Only count regular files. Defaults to true.
## regular_only = true
#
## Follow all symlinks while walking the directory tree. Defaults to false.
## follow_symlinks = false
#
## Only count files that are at least this size. If size is
## a negative number, only count files that are smaller than the
## absolute value of size. Acceptable units are B, KiB, MiB, KB, ...
## Without quotes and units, interpreted as size in bytes.
## size = "0B"
#
## Only count files that have not been touched for at least this
duration. If mtime is negative, only count files that have been
## touched in this duration. Defaults to "0s".
## mtime = "0s"

files = ["/var/log/**.log"]
#
## If true, read the entire file and calculate an md5 checksum.
## md5 = false

## Read real time temps from fireboard.io servers
## auth_token = "invalidAuthToken"
## You can override the fireboard server URL if necessary
# URL = https://fireboard.io/api/v1/devices.json
# You can set a different http_timeout if you need to
# You should set a string using an number and time indicator
# for example "12s" for 12 seconds.
# http_timeout = "4s"

## Read metrics exposed by fluentd in_monitor plugin
[[inputs.fluentd]]
## This plugin reads information exposed by fluentd (using /api/plugins.json endpoint).
##
## Endpoint:
## - only one URI is allowed
## - https is not supported
# endpoint = "http://localhost:24220/api/plugins.json"

## Define which plugins have to be excluded (based on "type" field - e.g. monitor_agent)
# exclude = [
#  "monitor_agent",
#  "dummy",
# ]

## Gather repository information from GitHub hosted repositories.
[[inputs.github]]
## List of repositories to monitor.
# repositories = [
#  "influxdata/telegraf",
#  "influxdata/influxdb"
# ]

## Github API access token. Unauthenticated requests are limited to 60 per hour.
# access_token = ""

## Github API enterprise url. Github Enterprise accounts must specify their base url.
# enterprise_base_url = ""

## Timeout for HTTP requests.
# http_timeout = "5s"

## List of additional fields to query.
## NOTE: Getting those fields might involve issuing additional API-calls, so please
## make sure you do not exceed the rate-limit of GitHub.
##
## Available fields are:
##  - pull-requests-- number of open and closed pull requests (2 API-calls per repository)
## # additional_fields = []
## Read flattened metrics from one or more GrayLog HTTP endpoints

```
# [inputs.graylog]
# ## API endpoint, currently supported API:
# ##
# ##   - multiple (e.g. http://<host>:9000/api/system/metrics/multiple)
# ##   - namespace (e.g. http://<host>:9000/api/system/metrics/namespace/{namespace})
# ##
# ## For namespace endpoint, the metrics array will be ignored for that call.
# ## Endpoint can contain namespace and multiple type calls.
# ##
# ## Please check http://[graylog-server-ip]:9000/api/api-browser for full list
# ## of endpoints
# servers = [
#   "http://[graylog-server-ip]:9000/api/system/metrics/multiple",
# ]
#
# ## Metrics list
# ## List of metrics can be found on Graylog webservice documentation.
# ## Or by hitting the web service api at:
# ## http://[graylog-host]:9000/api/system/metrics
# metrics = [
#   "jvm.cl.loaded",
#   "jvm.memory.pools.Metaspace.committed"
# ]
#
# ## Username and password
# username = ""
# password = ""
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
```

## Read metrics of haproxy, via socket or csv stats page

```
# [inputs.haproxy]
# ## An array of address to gather stats about. Specify an ip on hostname
# ## with optional port. ie localhost, 10.10.3.33:1936, etc.
# ## Make sure you specify the complete path to the stats endpoint
# ## including the protocol, ie http://10.10.3.33:1936/haproxy?stats
# servers = ["http://myhaproxy.com:1936/haproxy?stats"]
```
# Credentials for basic HTTP authentication
# username = "admin"
# password = "admin"
#
# You can also use local socket with standard wildcard globbing.
# Server address not starting with 'http' will be treated as a possible
# socket, so both examples below are valid.
# servers = ["socket:/run/haproxy/admin.sock", "/run/haproxy/*.sock"]
#
# By default, some of the fields are renamed from what haproxy calls them.
# Setting this option to true results in the plugin keeping the original
# field names.
# keep_field_names = false
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# Monitor disks' temperatures using hddtemp
# [inputs.hddtemp]
# By default, telegraf gathers temps data from all disks detected by the
# hddtemp.
#
# Only collect temps from the selected disks.
#
# A * as the device name will return the temperature values of all disks.
#
# address = "127.0.0.1:7634"
# devices = ["sda", "*"]
#
# Read formatted metrics from one or more HTTP endpoints
# [inputs.http]
# One or more URLs from which to read formatted metrics
# urls = [
#   "http://localhost/metrics"
# ]
#
# HTTP method
# method = "GET"
#
# Optional HTTP headers
# headers = {"X-Special-Header" = "Special-Value"}
# Optional file with Bearer token
# file content is added as an Authorization header
# bearer_token = "/path/to/file"

# Optional HTTP Basic Auth Credentials
# username = "username"
# password = "pa$$word"

# HTTP entity-body to send with POST/PUT requests.
# body = ""

# HTTP Content-Encoding for write request body, can be set to "gzip" to
# compress body or "identity" to apply no encoding.
# content_encoding = "identity"

# HTTP Proxy support
# http_proxy_url = ""

# OAuth2 Client Credentials Grant
# client_id = "clientid"
# client_secret = "secret"
# token_url = "https://indentityprovider/oauth2/v1/token"
# scopes = ["urn:opc:idm:__myscopes__"]

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Optional Cookie authentication
# cookie_auth_url = "https://localhost/authMe"
# cookie_auth_method = "POST"
# cookie_auth_username = "username"
# cookie_auth_password = "pa$$word"
# cookie_auth_body = '\{"username": "user", "password": "pa$$word", "authenticate": "me"\}'
# cookie_auth_renewal not set or set to "0" will auth once and never renew the cookie
# cookie_auth_renewal = "5m"

# Amount of time allowed to complete the HTTP request
# timeout = "5s"

# List of success status codes
# success_status_codes = [200]

# Data format to consume.
# Each data format has its own unique set of configuration options, read
# HTTP/HTTPS request given an address a method and a timeout

```yaml
[[inputs.http_response]]
# Deprecated in 1.12, use 'urls'
# Server address (default http://localhost)
# address = "http://localhost"
#
# List of urls to query.
# urls = ["http://localhost"]
#
# Set http_proxy (telegraf uses the system wide proxy settings if it's is not set)
# http_proxy = "http://localhost:8888"
#
# Set response_timeout (default 5 seconds)
# response_timeout = "5s"
#
# HTTP Request Method
# method = "GET"
#
# Whether to follow redirects from the server (defaults to false)
# follow_redirects = false
#
# Optional file with Bearer token
# file content is added as an Authorization header
# bearer_token = "/path/to/file"
#
# Optional HTTP Basic Auth Credentials
# username = "username"
# password = "pa$$word"
#
# Optional HTTP Request Body
# body = ""
# {'fake': 'data'}
# ""
#
# Optional name of the field that will contain the body of the response.
# By default it is set to an empty String indicating that the body's content won't be added
# response_body_field = 
#
# Maximum allowed HTTP response body size in bytes.
# 0 means to use the default of 32MiB.
# If the response body size exceeds this limit a "body_read_error" will be raised
# response_body_max_size = "32MiB"
```

# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
# Optional substring or regex match in body of the response (case sensitive)
# response_string_match = "\"service_status\": \"up\""
# response_string_match = "ok"
# response_string_match = "\".*_status\": \?\"up\""
#
# Expected response status code.
# The status code of the response is compared to this value. If they match, the field
# "response_status_code_match" will be 1, otherwise it will be 0. If the
# expected status code is 0, the check is disabled and the field won't be added.
# response_status_code = 0
#
# TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# HTTP Request Headers (all values must be strings)
# [inputs.http_response.headers]
# Host = "github.com"
#
# Optional setting to map response http headers into tags
# If the http header is not present on the request, no corresponding tag will be added
# If multiple instances of the http header are present, only the first value will be used
# http_header_tags = {"HTTP_HEADER" = "TAG_NAME"}
#
# Interface to use when dialing an address
# interface = "eth0"

# Read flattened metrics from one or more JSON HTTP endpoints
# [inputs.httpjson]
# DEPRECATED: The 'httpjson' plugin is deprecated in version 1.6.0, use 'inputs.http' instead.
# NOTE This plugin only reads numerical measurements, strings and booleans
# will be ignored.
#
# Name for the service being polled. Will be appended to the name of the
# measurement e.g. httpjson_webserver_stats
#
# Deprecated (1.3.0): Use name_override, name_suffix, name_prefix instead.
# name = "webserver_stats"
#
# URL of each server in the service's cluster
# servers = [
#   "http://localhost:9999/stats/",
#   "http://localhost:9998/stats/",
# ]
# ## Set response_timeout (default 5 seconds)
# response_timeout = "5s"
#
# ## HTTP method to use: GET or POST (case-sensitive)
# method = "GET"
#
# ## List of tag names to extract from top-level of JSON server response
# tag_keys = ["my_tag_1", "my_tag_2"]
#
# ## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# ## HTTP parameters (all values must be strings). For "GET" requests, data
# will be included in the query. For "POST" requests, data will be included
# in the request body as "x-www-form-urlencoded".
# [inputs.httpjson.parameters]
#   event_type = "cpu_spike"
#   threshold = "0.75"
#
# ## HTTP Headers (all values must be strings)
# [inputs.httpjson.headers]
#   X-Auth-Token = "my-xauth-token"
#   apiVersion = "v1"

# ## Gather Icinga2 status
# [inputs.icinga2]
# ## Required Icinga2 server address
# server = "https://localhost:5665"
#
# ## Required Icinga2 object type ("services" or "hosts")
# object_type = "services"
#
# ## Credentials for basic HTTP authentication
# username = "admin"
# password = "admin"
#
# ## Maximum time to receive response.
# response_timeout = "5s"
#
# ## Optional TLS Config
Open Source Used In BGP TE Controller Version 4.3.0

# # Get InfiniBand counters from all InFINiBand cards and ports installed
# # no configuration

# # Read InfluxDB-formatted JSON metrics from one or more HTTP endpoints
# # Works with InfluxDB debug endpoints out of the box,
# # but other services can use this format too.
# # See the influxdb plugin's README for more details.
# # Multiple URLs from which to read InfluxDB-formatted JSON
# # Default is "http://localhost:8086/debug/vars".
# urls = [
#   "http://localhost:8086/debug/vars"
# ]
# # Username and password to send using HTTP Basic Authentication.
# # username = ""
# # password = ""
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
# # http request & header timeout
# timeout = "5s"

# # Intel PowerStat plugin enables monitoring of platform metrics (power, TDP) and Core metrics like temperature,
# power and utilization.
# # All global metrics are always collected by Intel PowerStat plugin.
# # User can choose which per-CPU metrics are monitored by the plugin in cpu_metrics array.
# # Empty array means no per-CPU specific metrics will be collected by the plugin - in this case only platform
# # telemetry will be exposed by Intel PowerStat plugin.
# # Supported options:
```

# "cpu_frequency", "cpu_busy_frequency", "cpu_temperature", "cpu_c1_state_residency",
# "cpu_c6_state_residency", "cpu_busy_cycles"
# cpu_metrics = []

## Collect statistics about itself
# [inputs.internal]
# If true, collect telegraf memory stats.
# collect_memstats = true

## Monitors internet speed using speedtest.net service
# [inputs.internet_speed]
# Sets if runs file download test
# Default: false
# enable_file_download = false

# This plugin gathers interrupts data from /proc/interrupts and /proc/softirqs.
# [inputs.interrupts]
# When set to true, cpu metrics are tagged with the cpu. Otherwise cpu is
# stored as a field.
# 
# The default is false for backwards compatibility, and will be changed to
# true in a future version. It is recommended to set to true on new
# deployments.
# cpu_as_tag = false
#
# To filter which IRQs to collect, make use of tagpass / tagdrop, i.e.
# [inputs.interrupts.tagdrop]
# irq = [ "NET_RX", "TASKLET" ]

## Read metrics from the bare metal servers via IPMI
# [inputs.ipmi_sensor]
# Optionally specify the path to the ipmitool executable
# path = "/usr/bin/ipmitool"
# Setting 'use_sudo' to true will make use of sudo to run ipmitool.
# Sudo must be configured to allow the telegraf user to run ipmitool
# without a password.
# use_sudo = false
#
# Optionally force session privilege level. Can be CALLBACK, USER, OPERATOR, ADMINISTRATOR
# privilege = "ADMINISTRATOR"
#
# Optionally specify one or more servers via a url matching
# username[:password]@[protocol][address]]
```
# # e.g.
# ## root:passwd@lan(127.0.0.1)
# ##
# ## if no servers are specified, local machine sensor stats will be queried
# ##
# # servers = ["USERID:PASSW0RD@lan(192.168.1.1)"
# #
# # Recommended: use metric 'interval' that is a multiple of 'timeout' to avoid
# # gaps or overlap in pulled data
# # interval = "30s"
# #
# # Timeout for the ipmitool command to complete
# # timeout = "20s"
# #
# # Schema Version: (Optional, defaults to version 1)
# # metric_version = 2
# #
# # Optionally provide the hex key for the IMPI connection.
# # hex_key = ""
# #
# # If ipmitool should use a cache
# # for me ipmitool runs about 2 to 10 times faster with cache enabled on HP G10 servers (when using
# # ubuntu20.04)
# # the cache file may not work well for you if some sensors come up late
# # use_cache = false
# #
# # Path to the ipmitools cache file (defaults to OS temp dir)
# # The provided path must exist and must be writable
# # cache_path = ""
# #
# # Gather packets and bytes counters from Linux ipsets
# [[inputs.ipset]]
# # By default, we only show sets which have already matched at least 1 packet.
# # set include_unmatched_sets = true to gather them all.
# # include_unmatched_sets = false
# # Adjust your sudo settings appropriately if using this option ("sudo ipset save")
# # use_sudo = false
# # The default timeout of 1s for ipset execution can be overridden here:
# # timeout = "1s"
# #
# # Gather packets and bytes throughput from iptables
# [[inputs.iptables]]
# # iptables require root access on most systems.
# # Setting 'use_sudo' to true will make use of sudo to run iptables.
# # Users must configure sudo to allow telegraf user to run iptables with no password.
# # iptables can be restricted to only list command "iptables -nvL".
## Collect virtual and real server stats from Linux IPVS

```yaml
[[inputs.ipvs]]
# # no configuration
```

## Read jobs and cluster metrics from Jenkins instances

```yaml
[[inputs.jenkins]]
# # The Jenkins URL in the format "schema://host:port"
# url = "http://my-jenkins-instance:8080"
# # username = "admin"
# # password = "admin"
#
# # Response timeout
# response_timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use SSL but skip chain & host verification
# insecure_skip_verify = false
#
# # Optional Max Job Build Age filter
# # Default 1 hour, ignore builds older than max_build_age
# # max_build_age = "1h"
#
# # Optional Sub Job Depth filter
# # Jenkins can have unlimited layer of sub jobs
# # This config will limit the layers of pulling, default value 0 means
# # unlimited pulling until no more sub jobs
# # max_subjob_depth = 0
#
# # Optional Sub Job Per Layer
# # In workflow-multibranch-plugin, each branch will be created as a sub job.
```
# ## This config will limit to call only the lasted branches in each layer,
# empty will use default value 10
# # max_subjob_per_layer = 10
#
# # ## Jobs to include or exclude from gathering
# # When using both lists, job_exclude has priority.
# # Wildcards are supported: [ "jobA/*", "jobB/subjob1/*"]
# # job_include = [ "*" ]
# # job_exclude = [ ]
#
# # ## Nodes to include or exclude from gathering
# # When using both lists, node_exclude has priority.
# # node_include = [ "*" ]
# # node_exclude = [ ]
#
# # ## Worker pool for jenkins plugin only
# # Empty this field will use default value 5
# # max_connections = 5
#

## Read JMX metrics through Jolokia
# [[inputs.jolokia]]
# # DEPRECATED: The 'jolokia' plugin is deprecated in version 1.5.0, use 'inputs.jolokia2' instead.
# # DEPRECATED: the jolokia plugin has been deprecated in favor of the
# # jolokia2 plugin
# # see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/jolokia2
#
# # ## This is the context root used to compose the jolokia url
# # NOTE that Jolokia requires a trailing slash at the end of the context root
# # NOTE that your jolokia security policy must allow for POST requests.
# context = "/jolokia/"
#
# # This specifies the mode used
# # mode = "proxy"
# #
# # When in proxy mode this section is used to specify further
# # proxy address configurations.
# # Remember to change host address to fit your environment.
# # [[inputs.jolokia.proxy]]
# # host = "127.0.0.1"
# # port = "8080"
#
# # ## Optional http timeouts
# 
# # response_header_timeout, if non-zero, specifies the amount of time to wait
# # for a server's response headers after fully writing the request.
# # response_header_timeout = "3s"
# client_timeout specifies a time limit for requests made by this client.
# Includes connection time, any redirects, and reading the response body.
# client_timeout = "4s"
#
# Attribute delimiter
#
# When multiple attributes are returned for a single
# [inputs.jolokia.metrics], the field name is a concatenation of the metric
# name, and the attribute name, separated by the given delimiter.
# delimiter = "_"
#
# List of servers exposing jolokia read service
# [[inputs.jolokia.servers]]
# name = "as-server-01"
# host = "127.0.0.1"
# port = "8080"
# username = "myuser"
# password = "mypassword"
#
# List of metrics collected on above servers
# Each metric consists in a name, a jmx path and either
# a pass or drop slice attribute.
# This collect all heap memory usage metrics.
# [[inputs.jolokia.metrics]]
# name = "heap_memory_usage"
# mbean = "java.lang:type=Memory"
# attribute = "HeapMemoryUsage"
#
# This collect thread counts metrics.
# [[inputs.jolokia.metrics]]
# name = "thread_count"
# mbean = "java.lang:type=Threading"
# attribute = "TotalStartedThreadCount,ThreadCount,DaemonThreadCount,PeakThreadCount"
#
# This collect number of class loaded/unloaded counts metrics.
# [[inputs.jolokia.metrics]]
# name = "class_count"
# mbean = "java.lang:type=ClassLoading"
# attribute = "LoadedClassCount,UnloadedClassCount,TotalLoadedClassCount"
#
# Read JMX metrics from a Jolokia REST agent endpoint
# [[inputs.jolokia2_agent]]
# default_tag_prefix = ""
# default_field_prefix = ""
# default_field_separator = "."
#
# Add agents URLs to query
urls = ["http://localhost:8080/jolokia"]
# username = ""
# password = ""
# response_timeout = "5s"
#
## Optional TLS config
# tls_ca = "/var/private/ca.pem"
# tls_cert = "/var/private/client.pem"
# tls_key = "/var/private/client-key.pem"
# insecure_skip_verify = false
#
## Add metrics to read
# [inputs.jolokia2_agent.metric]
# name = "java_runtime"
# mbean = "java.lang:type=Runtime"
# paths = ["Uptime"]

## Read JMX metrics from a Jolokia REST proxy endpoint
[[inputs.jolokia2_proxy]]
# default_tag_prefix = ""
# default_field_prefix = ""
# default_field_separator = "-"
#
## Proxy agent
# url = "http://localhost:8080/jolokia"
# username = ""
# password = ""
# response_timeout = "5s"
#
## Optional TLS config
# tls_ca = "/var/private/ca.pem"
# tls_cert = "/var/private/client.pem"
# tls_key = "/var/private/client-key.pem"
# insecure_skip_verify = false
#
## Add proxy targets to query
# default_target_username = ""
# default_target_password = ""
[[inputs.jolokia2_proxy.target]]
# url = "service:jmx:rmi:///jndi/rmi://targethost:9999/jmxrmi"
# username = ""
# password = ""
#
## Add metrics to read
[[inputs.jolokia2_proxy.metric]]
# name = "java_runtime"
# mbean = "java.lang:type=Runtime"
paths = ["Uptime"]

# # Read Kapacitor-formatted JSON metrics from one or more HTTP endpoints
# [[inputs.kapacitor]]
# # Multiple URLs from which to read Kapacitor-formatted JSON
# # Default is "http://localhost:9092/kapacitor/v1/debug/vars".
# urls = [
#   "http://localhost:9092/kapacitor/v1/debug/vars"
# ]
#
# # Time limit for http requests
# timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#

# # Get kernel statistics from /proc/vmstat
# [[inputs.kernel_vmstat]]
# # # no configuration
#
# # Read status information from one or more Kibana servers
# [[inputs.kibana]]
# # Specify a list of one or more Kibana servers
# servers = ["http://localhost:5601"]
#
# # Timeout for HTTP requests
# timeout = "5s"
#
# # HTTP Basic Auth credentials
# # username = "username"
# # password = "pa$$word"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#

# # Read metrics from the Kubernetes api
# [[inputs.kube_inventory]]
# ### URL for the Kubernetes API
# url = "https://127.0.0.1"
#
# ### Namespace to use. Set to "" to use all namespaces.
# namespace = "default"
#
# ### Use bearer token for authorization. ('bearer_token' takes priority)
# If both of these are empty, we'll use the default serviceaccount:
# # bearer_token = "/path/to/bearer/token"
# # OR
# bearer_token_string = "abc_123"
#
# ### Set response_timeout (default 5 seconds)
# response_timeout = "5s"
#
# ### Optional Resources to exclude from gathering
# Leave them with blank with try to gather everything available.
# Values can be: "daemonsets", deployments", "endpoints", "ingress", "nodes",
# "persistentvolumes", "persistentvolumeclaims", "pods", "services", "statefulsets"
# resource_exclude = [ "deployments", "nodes", "statefulsets" ]
#
# ### Optional Resources to include when gathering
# Overrides resource_exclude if both set.
# resource_include = [ "deployments", "nodes", "statefulsets" ]
#
# ### selectors to include and exclude as tags. Globs accepted.
# Note that an empty array for both will include all selectors as tags
# selector_exclude overrides selector_include if both set.
# selector_include = []
# selector_exclude = ["*"]
#
# ### Optional TLS Config
# # tls_ca = "/path/to/cafile"
# # tls_cert = "/path/to/certfile"
# # tls_key = "/path/to/keyfile"
# # tls_server_name = "kubernetes.example.com"
# ### Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Read metrics from the kubernetes kubelet api
# [[inputs.kubernetes]]
# ### URL for the kubelet
# url = "http://127.0.0.1:10255"
#
# ### Use bearer token for authorization. ('bearer_token' takes priority)
# ## If both of these are empty, we'll use the default serviceaccount:
# ## at: /run/secrets/kubernetes.io/serviceaccount/token
# # bearer_token = "/path/to/bearer/token"
# ## OR
# # bearer_token_string = "abc_123"
# 
# # Pod labels to be added as tags. An empty array for both include and
# # exclude will include all labels.
# # label_include = []
# # label_exclude = ["*"]
# 
# # Set response_timeout (default 5 seconds)
# # response_timeout = "5s"
# 
# # Optional TLS Config
# # tls_ca = /path/to/cafile
# # tls_cert = /path/to/certfile
# # tls_key = /path/to/keyfile
# # # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # Read metrics from a LeoFS Server via SNMP
# [[inputs.leofs]]
# # An array of URLs of the form:
# # # host [ ":" port]
# # servers = ["127.0.0.1:4020"]

# # Provides Linux sysctl fs metrics
# [[inputs.linux_sysctl_fs]]
# # no configuration

# # Read metrics exposed by Logstash
# [[inputs.logstash]]
# # The URL of the exposed Logstash API endpoint.
# url = "http://127.0.0.1:9600"
# # Use Logstash 5 single pipeline API, set to true when monitoring
# # Logstash 5.
# # single_pipeline = false
# # # Enable optional collection components. Can contain
# # # "pipelines", "process", and "jvm".
# # collect = ["pipelines", "process", "jvm"]
# 
# # # Timeout for HTTP requests.
# # timeout = "5s"
#
# ## Optional HTTP Basic Auth credentials.
# # username = "username"
# # password = "pa$$word"
#
# ## Optional TLS Config.
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# ## Use TLS but skip chain & host verification.
# # insecure_skip_verify = false
#
# ## Optional HTTP headers.
# # [inputs.logstash.headers]
# # "X-Special-Header" = "Special-Value"
#
# ### Read metrics from local Lustre service on OST, MDS
# [[inputs.lustre2]]
# ### An array of /proc globs to search for Lustre stats
# ### If not specified, the default will work on Lustre 2.5.x
# ###
# # #
# # # ost_procfiles = [
# # #   "/proc/fs/lustre/obdfilter/*/stats",
# # #   "/proc/fs/lustre/osd-ldiskfs/*/stats",
# # #   "/proc/fs/lustre/obdfilter/*/job_stats",
# # #]
# # # mds_procfiles = [
# # #   "/proc/fs/lustre/mdt/*/md_stats",
# # #   "/proc/fs/lustre/mdt/*/job_stats",
# # #]
#
# ### Read metrics about LVM physical volumes, volume groups, logical volumes.
# [[inputs.lvm]]
# ### Use sudo to run LVM commands
# use_sudo = false
#
# ### Gathers metrics from the /3.0/reports MailChimp API
# [[inputs.mailchimp]]
# ### MailChimp API key
# ### get from https://admin.mailchimp.com/account/api/
# api_key = "" # required
# ### Reports for campaigns sent more than days_old ago will not be collected.
# ### 0 means collect all.
# days_old = 0
# ## Campaign ID to get, if empty gets all campaigns, this option overrides days_old
# # campaign_id = ""

## Retrieves information on a specific host in a MarkLogic Cluster
# [[inputs.marklogic]]
# ## Base URL of the MarkLogic HTTP Server.
# # url = "http://localhost:8002"
#
# ## List of specific hostnames to retrieve information. At least (1) required.
# # hosts = ["hostname1", "hostname2"]
#
# ## Using HTTP Basic Authentication. Management API requires 'manage-user' role privileges
# # username = "myuser"
# # password = "mypassword"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Read metrics from one or many mcrouter servers
# [[inputs.mcrouter]]
# ## An array of address to gather stats about. Specify an ip or hostname
# ## with port. ie tcp://localhost:11211, tcp://10.0.0.1:11211, etc.
# # servers = ["tcp://localhost:11211", "unix:///var/run/mcrouter.sock"]
#
# ## Timeout for metric collections from all servers. Minimum timeout is "1s".
# # timeout = "5s"

## Get md array statistics from /proc/mdstat
# [[inputs.mdstat]]
# ## Sets file path
# ## If not specified, then default is /proc/mdstat
# # file_name = "/proc/mdstat"

## Read metrics from one or many memcached servers
# [[inputs.memcached]]
# ## An array of address to gather stats about. Specify an ip on hostname
# ## with optional port. ie localhost, 10.0.0.1:11211, etc.
# # servers = ["localhost:11211"]
# # unix_sockets = ["/var/run/memcached.sock"]
# # Telegraf plugin for gathering metrics from N Mesos masters
# # [inputs.mesos]
# # ## Timeout, in ms.
# # timeout = 100
#
# # ## A list of Mesos masters.
# # masters = ["http://localhost:5050"]
#
# # ## Master metrics groups to be collected, by default, all enabled.
# # master_collections = [
# #   "resources",
# #   "master",
# #   "system",
# #   "agents",
# #   "frameworks",
# #   "framework_offers",
# #   "tasks",
# #   "messages",
# #   "evqueue",
# #   "registrar",
# #   "allocator",
# # ]
#
# # ## A list of Mesos slaves, default is []
# # slaves = []
#
# # ## Slave metrics groups to be collected, by default, all enabled.
# # slave_collections = [
# #   "resources",
# #   "agent",
# #   "system",
# #   "executors",
# #   "tasks",
# #   "messages",
# # ]
#
# # ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # insecure_skip_verify = false
#
# # Collects scores from a Minecraft server's scoreboard using the RCON protocol
# # [inputs.minecraft]
## Address of the Minecraft server.
# server = "localhost"
#
## Server RCON Port.
# port = "25575"
#
## Server RCON Password.
# password = ""
#
## Uncomment to remove deprecated metric components.
# tagdrop = ["server"]

### Retrieve data from MODBUS slave devices
[[inputs.modbus]]
### Connection Configuration
###
### The plugin supports connections to PLCs via MODBUS/TCP, RTU over TCP, ASCII over TCP or
### via serial line communication in binary (RTU) or readable (ASCII) encoding
###
### Device name
# name = "Device"
#
### Slave ID - addresses a MODBUS device on the bus
### Range: 0 - 255 [0 = broadcast; 248 - 255 = reserved]
# slave_id = 1
#
### Timeout for each request
# timeout = "1s"
#
### Maximum number of retries and the time to wait between retries
### when a slave-device is busy.
# busy_retries = 0
# busy_retries_wait = "100ms"
#
### TCP - connect via Modbus/TCP
# controller = "tcp://localhost:502"
#
### Serial (RS485; RS232)
# controller = "file:///dev/ttyUSB0"
# baud_rate = 9600
# data_bits = 8
# parity = "N"
# stop_bits = 1
# transmission_mode = "RTU"
#
### Trace the connection to the modbus device as debug messages
### Note: You have to enable telegraf's debug mode to see those messages!
# # debug_connection = false
#
# # ## For Modbus over TCP you can choose between "TCP", "RTUoverTCP" and "ASCIIoverTCP"
# # ## default behaviour is "TCP" if the controller is TCP
# # ## For Serial you can choose between "RTU" and "ASCII"
# # transmission_mode = "RTU"
#
# # ## Measurements
#
# # ## Digital Variables, Discrete Inputs and Coils
# # measurement - the (optional) measurement name, defaults to "modbus"
# # name        - the variable name
# # address     - variable address
#
# discrete_inputs = [
#   { name = "start", address = [0] },
#   { name = "stop", address = [1] },
#   { name = "reset", address = [2] },
#   { name = "emergency_stop", address = [3] },
# ]
# coils = [
#   { name = "motor1_run", address = [0] },
#   { name = "motor1_jog", address = [1] },
#   { name = "motor1_stop", address = [2] },
# ]
#
# # ## Analog Variables, Input Registers and Holding Registers
# # measurement - the (optional) measurement name, defaults to "modbus"
# # name        - the variable name
# # byte_order  - the ordering of bytes
# #   |---AB, ABCD  - Big Endian
# #   |---BA, DCBA  - Little Endian
# #   |---BADC      - Mid-Big Endian
# #   |---CDAB      - Mid-Little Endian
# # data_type  - INT16, UINT16, INT32, UINT32, INT64, UINT64,
# #   FLOAT32-IEEE, FLOAT64-IEEE (the IEEE 754 binary representation)
# #   FLOAT32, FIXED, UFIXED (fixed-point representation on input)
# # scale      - the final numeric variable representation
# # address    - variable address
#
# holding_registers = [
#   { name = "power_factor", byte_order = "AB", data_type = "FIXED", scale=0.01, address = [8] },
#   { name = "voltage", byte_order = "AB", data_type = "FIXED", scale=0.1, address = [0] },
#   { name = "energy", byte_order = "ABCD", data_type = "FIXED", scale=0.001, address = [5,6] },
#   { name = "current", byte_order = "ABCD", data_type = "FIXED", scale=0.001, address = [1,2] },
#   { name = "frequency", byte_order = "AB", data_type = "UFIXED", scale=0.1, address = [7] },
#   { name = "power", byte_order = "ABCD", data_type = "UFIXED", scale=0.1, address = [3,4] },
#]
# input_registers = [
#   { name = "tank_level", byte_order = "AB", data_type = "INT16", scale=1.0, address = [0]},
#   { name = "tank_ph", byte_order = "AB", data_type = "INT16", scale=1.0, address = [1]},
#   { name = "pump1_speed", byte_order = "ABCD", data_type = "INT32", scale=1.0, address = [3,4]},
# ]
#
# ## Enable workarounds required by some devices to work correctly
# [inputs.modbus.workarounds]
# ## Pause between read requests sent to the device. This might be necessary for (slow) serial devices.
# # pause_between_requests = "0ms"
# # Close the connection after every gather cycle. Usually the plugin closes the connection after a certain
# # idle-timeout, however, if you query a device with limited simultaneous connectivity (e.g. serial devices)
# # from multiple instances you might want to only stay connected during gather and disconnect afterwards.
# # close_connection_after_gather = false
#
# # Read metrics from one or many MongoDB servers
# [inputs.mongodb]
# ## An array of URLs of the form:
# ##   "mongodb://" [user ":" pass "]@" host [ ":" port]
# ## For example:
# ##   mongodb://user:auth_key@10.10.3.30:27017,
# ##   mongodb://10.10.3.33:18832,
# servers = ["mongodb://127.0.0.1:27017?connect=direct"]
#
# ## When true, collect cluster status
# ## Note that the query that counts jumbo chunks triggers a COLLSCAN, which
# ## may have an impact on performance.
# # gather_cluster_status = true
# #
# ## When true, collect per database stats
# # gather_perdb_stats = false
# #
# ## When true, collect per collection stats
# # gather_col_stats = false
# #
# ## When true, collect usage statistics for each collection
# ## (insert, update, queries, remove, getmore, commands etc...).
# # gather_top_stat = false
# #
# ## List of db where collections stats are collected
# ## If empty, all db are concerned
# # col_stats_dbs = ["local"]
# #
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Read metrics and status information about processes managed by Monit
[[inputs.monit]]
# Monit HTTPD address
# address = "http://127.0.0.1:2812"
#
# Username and Password for Monit
# username = ""
# password = ""
#
# Amount of time allowed to complete the HTTP request
# timeout = "5s"
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Aggregates the contents of multiple files into a single point
[[inputs.multifile]]
# Base directory where telegraf will look for files.
# Omit this option to use absolute paths.
# base_dir = "/sys/bus/i2c/devices/1-0076/iio:device0"
#
# If true, Telegraf discard all data when a single file can't be read.
# Else, Telegraf omits the field generated from this file.
# fail_early = true
#
# Files to parse each interval.
[[inputs.multifile.file]]
# file = "in_pressure_input"
# dest = "pressure"
# conversion = "float"
[[inputs.multifile.file]]
# file = "in_temp_input"
# dest = "temperature"
# conversion = "float(3)"
[[inputs.multifile.file]]
# file = "in_humidityrelative_input"
# dest = "humidityrelative"
# conversion = "float(3)"
## # Read metrics from one or many mysql servers
## ![inputs.mysql]]
## ### specify servers via a url matching:
## ### ![username[:password]@[protocol][address]][/?tls=[true|false|skip-verify|custom]]
## ### see https://github.com/go-sql-driver/mysql#dsn-data-source-name
## ### e.g.
## ### servers = ["user:passwd@tcp(127.0.0.1:3306)/?tls=false"]
## ### servers = ["user@tcp(127.0.0.1:3306)/?tls=false"]
## # # If no servers are specified, then localhost is used as the host.
## # servers = ["tcp(127.0.0.1:3306)/"]
## # # Selects the metric output format.
## # # # This option exists to maintain backwards compatibility, if you have
## # # existing metrics do not set or change this value until you are ready to
## # # migrate to the new format.
## # # # # If you do not have existing metrics from this plugin set to the latest
## # # version.
## # # # # Telegraf >=1.6: metric_version = 2
## # # # <1.6: metric_version = 1 (or unset)
## # metric_version = 2
## # # # if the list is empty, then metrics are gathered from all database tables
## # # table_schema_databases = []
## # # gather metrics from INFORMATION_SCHEMA.TABLES for databases provided above list
## # # gather_table_schema = false
## # # gather thread state counts from INFORMATION_SCHEMA.PROCESSLIST
## # # gather_process_list = false
## # # gather user statistics from INFORMATION_SCHEMA.USER_STATISTICS
## # # gather_user_statistics = false
## # # gather auto_increment columns and max values from information schema
## # # gather_info_schema_auto_inc = false
## # # gather metrics from INFORMATION_SCHEMA.INNODB_METRICS
## # # gather_innodb_metrics = false
## # # gather metrics from SHOW SLAVE STATUS command output
## # # gather_slave_status = false
# gather metrics from all channels from SHOW SLAVE STATUS command output
# gather_all_slave_channels = false
#
# use MariaDB dialect for all channels SHOW SLAVE STATUS
# mariadb_dialect = false
#
# gather metrics from SHOW BINARY LOGS command output
# gather_binary_logs = false
#
# gather metrics from PERFORMANCE_SCHEMA.GLOBAL_VARIABLES
# gather_global_variables = true
#
# gather metrics from PERFORMANCE_SCHEMA.TABLE_IO_WAITS_SUMMARY_BY_TABLE
# gather_table_io_waits = false
#
# gather metrics from PERFORMANCE_SCHEMA.TABLE_LOCK_WAITS
# gather_table_lock_waits = false
#
# gather metrics from PERFORMANCE_SCHEMA.TABLE_IO_WAITS_SUMMARY_BY_INDEX_USAGE
# gather_index_io_waits = false
#
# gather metrics from PERFORMANCE_SCHEMA.EVENT_WAITS
# gather_event_waits = false
#
# gather metrics from PERFORMANCE_SCHEMA.FILE_SUMMARY_BY_EVENT_NAME
# gather_file_events_stats = false
#
# gather metrics from PERFORMANCE_SCHEMA.EVENTS_STATEMENTS_SUMMARY_BY_DIGEST
# gather_perf_events_statements = false
#
# the limits for metrics form perf_events_statements
# perf_events_statements_digest_text_limit = 120
# perf_events_statements_limit = 250
# perf_events_statements_time_limit = 86400
#
# gather metrics from
# PERFORMANCE_SCHEMA.EVENTS_STATEMENTS_SUMMARY_BY_ACCOUNT_BY_EVENT_NAME
# gather_perf_sum_per_acc_per_event = false
#
# list of events to be gathered for gather_perf_sum_per_acc_per_event
# in case of empty list all events will be gathered
# perf_summary_events = []
#
# Some queries we may want to run less often (such as SHOW GLOBAL VARIABLES)
# example: interval_slow = "30m"
# interval_slow = ""
#
# Optional TLS Config (will be used if tls=custom parameter specified in server uri)
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Provides metrics about the state of a NATS server
[[inputs.nats]]
## The address of the monitoring endpoint of the NATS server
server = "http://localhost:8222"
## Maximum time to receive response
response_timeout = "5s"

## Neptune Apex data collector
[[inputs.neptune_apex]]
## The Neptune Apex plugin reads the publicly available status.xml data from a local Apex.
## Measurements will be logged under "apex".
## The base URL of the local Apex(es). If you specify more than one server, they will
## be differentiated by the "source" tag.
servers = [
  "http://apex.local",
]
## The response_timeout specifies how long to wait for a reply from the Apex.
response_timeout = "5s"

## Read metrics about network interface usage
[[inputs.net]]
## By default, telegraf gathers stats from any up interface (excluding loopback)
## Setting interfaces will tell it to gather these explicit interfaces,
## regardless of status.
##
## interfaces = ["eth0"]
##
## On linux systems telegraf also collects protocol stats.
## Setting ignore_protocol_stats to true will skip reporting of protocol metrics.
##
## ignore_protocol_stats = false
##
## Collect response time of a TCP or UDP connection
[[inputs.net_response]]
# Protocol, must be "tcp" or "udp"
# NOTE: because the "udp" protocol does not respond to requests, it requires
# a send/expect string pair (see below).
# protocol = "tcp"
# Server address (default localhost)
# address = "localhost:80"
#
# Set timeout
# timeout = "1s"
#
# Set read timeout (only used if expecting a response)
# read_timeout = "1s"
#
# The following options are required for UDP checks. For TCP, they are
# optional. The plugin will send the given string to the server and then
# expect to receive the given 'expect' string back.
# string sent to the server
# send = "ssh"
# expected string in answer
# expect = "ssh"
#
# Uncomment to remove deprecated fields
# fielddrop = ["result_type", "string_found"]

# Read TCP metrics such as established, time wait and sockets counts.
# [[inputs.netstat]]
# no configuration

# Read per-mount NFS client metrics from /proc/self/mountstats
# [[inputs.nfsclient]]
# Read more low-level metrics (optional, defaults to false)
# fullstat = false
#
# List of mounts to explicitly include or exclude (optional)
# The pattern (Go regexp) is matched against the mount point (not the
# device being mounted). If include_mounts is set, all mounts are ignored
# unless present in the list. If a mount is listed in both include_mounts
# and exclude_mounts, it is excluded. Go regexp patterns can be used.
# include_mounts = []
# exclude_mounts = []
#
# List of operations to include or exclude from collecting. This applies
# only when fullstat=true. Symantics are similar to {include,exclude}_-mounts:
# the default is to collect everything; when include_operations is set, only
# those OPs are collected; when exclude_operations is set, all are collected
# except those listed. If include and exclude are set, the OP is excluded.
See /proc/self/mountstats for a list of valid operations; note that
NFSv3 and NFSv4 have different lists. While it is not possible to
have different include/exclude lists for NFSv3/4, unused elements
in the list should be okay. It is possible to have different lists
for different mountpoints: use multiple [[input.nfsclient]] stanzas,
with their own lists. See "include_mounts" above, and be careful of
duplicate metrics.

```
# include_operations = []
# exclude_operations = []
```

Read Nginx's basic status information (ngx_http_stub_status_module)
```
[[inputs.nginx]]
# An array of Nginx stub_status URI to gather stats.
urls = ["http://localhost/server_status"]
```

Optional TLS Config
```
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.cer"
tls_key = "/etc/telegraf/key.key"
```
Use TLS but skip chain & host verification
```
insecure_skip_verify = false
```

HTTP response timeout (default: 5s)
```
response_timeout = "5s"
```

Read Nginx Plus' full status information (ngx_http_status_module)
```
[[inputs.nginx_plus]]
# An array of ngx_http_status_module or status URI to gather stats.
urls = ["http://localhost/status"]
```

HTTP response timeout (default: 5s)
```
response_timeout = "5s"
```

Optional TLS Config
```
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
```
Use TLS but skip chain & host verification
```
insecure_skip_verify = false
```

Read Nginx Plus API documentation
```
[[inputs.nginx_plus_api]]
# An array of API URI to gather stats.
urls = ["http://localhost/api"]
```

# # Nginx API version, default: 3
# # api_version = 3
#
# # HTTP response timeout (default: 5s)
# response_timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false

# # Read Nginx virtual host traffic status module information (nginx-module-sts)
# [[inputs.nginx_sts]]
# # An array of ngx_http_status_module or status URI to gather stats.
# urls = ["http://localhost/status"]
#
# # HTTP response timeout (default: 5s)
# response_timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false

# # Read nginx_upstream_check module status information
(https://github.com/yaoweibin/nginx_upstream_check_module)
# [[inputs.nginx_upstream_check]]
# # An URL where Nginx Upstream check module is enabled
# # It should be set to return a JSON formatted response
# url = "http://127.0.0.1/status?format=json"
#
# # HTTP method
# # method = "GET"
#
# # Optional HTTP headers
# # headers = { "X-Special-Header" = "Special-Value" }
#
# # Override HTTP "Host" header
# # host_header = "check.example.com"
#
# # Timeout for HTTP requests
# timeout = "5s"
# Optional HTTP Basic Auth credentials
# username = "username"
# password = "pa$$word"
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

### Read Nginx virtual host traffic status module information (nginx-module-vts)
[inputs.nginx_vts]
## An array of ngx_http_status_module or status URI to gather stats.
urls = ["http://localhost/status"]
#
## HTTP response timeout (default: 5s)
response_timeout = "5s"
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

### A plugin to collect stats from the NSD authoritative DNS name server
[inputs.nsd]
## Address of server to connect to, optionally ':port'. Defaults to the
## address in the nsd config file.
server = "127.0.0.1:8953"
#
## If running as a restricted user you can prepend sudo for additional access:
# use_sudo = false
#
## The default location of the nsd-control binary can be overridden with:
# binary = "/usr/sbin/nsd-control"
#
## The default location of the nsd config file can be overridden with:
# config_file = "/etc/nsd/nsd.conf"
#
## The default timeout of 1s can be overridden with:
# timeout = "1s"
## Read NSQ topic and channel statistics.
```
# [[inputs.nsq]]
# ## An array of NSQD HTTP API endpoints
# endpoints = ["http://localhost:4151"]
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
```

## Collect kernel snmp counters and network interface statistics
```
# [[inputs.nstat]]
# ## file paths for proc files. If empty default paths will be used:
# # /proc/net/netstat, /proc/net/snmp, /proc/net/snmp6
# # These can also be overridden with env variables, see README.
# proc_net_netstat = "/proc/net/netstat"
# proc_net_snmp = "/proc/net/snmp"
# proc_net_snmp6 = "/proc/net/snmp6"
# ## dump metrics with 0 values too
# dump_zeros = true
```

## Get standard NTP query metrics, requires ntpq executable.
```
# [[inputs.ntpq]]
# ## If false, set the -n ntpq flag. Can reduce metric gather time.
# dns_lookup = true
```

## Pulls statistics from nvidia GPUs attached to the host
```
# [[inputs.nvidia_smi]]
# ## Optional: path to nvidia-smi binary, defaults "/usr/bin/nvidia-smi"
# ## We will first try to locate the nvidia-smi binary with the explicitly specified value (or default value),
# ## if it is not found, we will try to locate it on PATH(exec.LookPath), if it is still not found, an error will be returned
# # bin_path = "/usr/bin/nvidia-smi"
# # Optional: timeout for GPU polling
# # timeout = "5s"
```

## Retrieve data from OPCUA devices
```
# [[inputs.opcua]]
# ## Metric name
# # name = "opcua"
# #
## OPC UA Endpoint URL

```sh
echo "opc.tcp://localhost:4840"
```

## Maximum time allowed to establish a connect to the endpoint.

```sh
connect_timeout = "10s"
```

## Maximum time allowed for a request over the established connection.

```sh
request_timeout = "5s"
```

## Security policy, one of "None", "Basic128Rsa15", "Basic256", "Basic256Sha256", or "auto"

```sh
security_policy = "auto"
```

## Security mode, one of "None", "Sign", "SignAndEncrypt", or "auto"

```sh
security_mode = "auto"
```

## Path to cert.pem. Required when security mode or policy isn't "None".

```sh
certificate = "/etc/telegraf/cert.pem"
```

## Path to private key.pem. Required when security mode or policy isn't "None".

```sh
private_key = "/etc/telegraf/key.pem"
```

## Authentication Method, one of "Certificate", "UserName", or "Anonymous". To authenticate using a specific ID, select 'Certificate' or 'UserName'

```sh
auth_method = "Anonymous"
```

## Username. Required for auth_method = "UserName"

```sh
username = ""
```

## Password. Required for auth_method = "UserName"

```sh
password = ""
```

## Option to select the metric timestamp to use. Valid options are:

```sh
gather -- uses the time of receiving the data in telegraf
server -- uses the timestamp provided by the server
source -- uses the timestamp provided by the source
timestamp = "gather"
```

## Node ID configuration

```sh
name              - field name to use in the output
namespace         - OPC UA namespace of the node (integer value 0 thru 3)
identifier_type   - OPC UA ID type (s=string, i=numeric, g=guid, b=opaque)
identifier        - OPC UA ID (tag as shown in opcua browser)
```

Example:

```sh
{ name="ProductUri", namespace="0", identifier_type="i", identifier="2262" }
```

```sh
nodes = [
```
# Node Group

## Sets defaults for OPC UA namespace and ID type so they aren't required in every node. A group can also have a metric name that overrides the main plugin metric name.

## Multiple node groups are allowed

```
# Group Metric name. Overrides the top level name. If unset, the top level name is used.
# name =
#
# Group default namespace. If a node in the group doesn't set its namespace, this is used.
# namespace =
#
# Group default identifier type. If a node in the group doesn't set its namespace, this is used.
# identifier_type =
#
## Node ID Configuration. Array of nodes with the same settings as above.
# nodes = [ ]
```

---

## OpenLDAP cn=Monitor plugin

```
# host = "localhost"
# port = 389
#
# # ldaps, starttls, or no encryption. default is an empty string, disabling all encryption.
# # note that port will likely need to be changed to 636 for ldaps
# # valid options: "" | "starttls" | "ldaps"
# tls = ""
#
# # skip peer certificate verification. Default is false.
# insecure_skip_verify = false
#
# # Path to PEM-encoded Root certificate to use to verify server certificate
# tls_ca = "/etc/ssl/certs.pem"
#
# # dn/password to bind with. If bind_dn is empty, an anonymous bind is performed.
# bind_dn = ""
```
# bind_password = ""
#
# Reverse metric names so they sort more naturally. Recommended.
# This defaults to false if unset, but is set to true when generating a new config
# reverse_metric_names = true

## Get standard NTP query metrics from OpenNTPD.
# [[[inputs.openntpd]]]
# Run ntpctl binary with sudo.
# use_sudo = false
#
# Location of the ntpctl binary.
# binary = "/usr/sbin/ntpctl"
#
# Maximum time the ntpctl binary is allowed to run.
# timeout = "5ms"

## A plugin to collect stats from Opensmtpd - a validating, recursive, and caching DNS resolver
# [[[inputs.opensmtpd]]]
# If running as a restricted user you can prepend sudo for additional access:
# use_sudo = false
#
# The default location of the smtpctl binary can be overridden with:
# binary = "/usr/sbin/smtpctl"
#
# The default timeout of 1000ms can be overridden with (in milliseconds):
# timeout = 1000

## Collects performance metrics from OpenStack services
# [[[inputs.openstack]]]
# The recommended interval to poll is '30m'
#
# The identity endpoint to authenticate against and get the service catalog from.
# authentication_endpoint = "https://my.openstack.cloud:5000"
#
# The domain to authenticate against when using a V3 identity endpoint.
# domain = "default"
#
# The project to authenticate as.
# project = "admin"
#
# User authentication credentials. Must have admin rights.
# username = "admin"
# password = "password"
# Available services are:
# "agents", "aggregates", "flavors", "hypervisors", "networks", "nova_services",
# "ports", "projects", "servers", "services", "stacks", "storage_pools", "subnets", "volumes"
# enabled_services = ["services", "projects", "hypervisors", "flavors", "networks", "volumes"]
#
# Collect Server Diagnostics
# server_diagnostics = false
#
# output secrets (such as adminPass(for server) and UserID(for volume)).
# output_secrets = false
#
# Amount of time allowed to complete the HTTP(s) request.
# timeout = "5s"
#
# HTTP Proxy support
# http_proxy_url = ""
#
# Optional TLS Config
# tls_ca = /path/to/cafile
# tls_cert = /path/to/certfile
# tls_key = /path/to/keyfile
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# Options for tags received from Openstack
# tag_prefix = "openstack_tag_"
# tag_value = "true"
#
# Timestamp format for timestamp data received from Openstack.
# If false format is unix nanoseconds.
# human_readable_timestamps = false
#
# Measure Openstack call duration
# measure_openstack_requests = false

# Read current weather and forecasts data from openweathermap.org
#[inputs.openweathermap]
# OpenWeatherMap API key.
# app_id = "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"
#
# City ID's to collect weather data from.
# city_id = ["5391959"]
#
# Language of the description field. Can be one of "ar", "bg",
# "ca", "cz", "de", "el", "en", "fa", "fi", "fr", "gl", "hr", "hu",
# "it", "ja", "kr", "la", "lt", "mk", "nl", "pl", "pt", "ro", "ru",
# "se", "sk", "sl", "es", "tr", "ua", "vi", "zh_en", "zh_tw"
# lang = "en"
#
# ## APIs to fetch; can contain "weather" or "forecast".
# fetch = ["weather", "forecast"]
#
# ## OpenWeatherMap base URL
# base_url = "https://api.openweathermap.org/"
#
# ## Timeout for HTTP response.
# response_timeout = "5s"
#
# ## Preferred unit system for temperature and wind speed. Can be one of
# "metric", "imperial", or "standard".
# units = "metric"
#
# ## Query interval; OpenWeatherMap updates their weather data every 10
# minutes.
# interval = "10m"

## Read metrics of passenger using passenger-status
## Path of passenger-status.
## Plugin gather metric via parsing XML output of passenger-status
## More information about the tool:
## If no path is specified, then the plugin simply execute passenger-status
## hopefully it can be found in your PATH
# command = "passenger-status -v --show=xml"

## Gather counters from PF
## PF require root access on most systems.
## Setting 'use_sudo' to true will make use of sudo to run pfctl.
## Users must configure sudo to allow telegraf user to run pfctl with no password.
## pfctl can be restricted to only list command "pfctl -s info".
# use_sudo = false

## Read metrics of-phpfpm, via HTTP status page or socket
## An array of addresses to gather stats about. Specify an ip or hostname
## with optional port and path
## Plugin can be configured in three modes (either can be used):
# ## - http: the URL must start with http:// or https://, ie:
# ##   "http://localhost/status"
# ##   "http://192.168.130.1/status?full"
# ##
# ## - unixsocket: path to fpm socket, ie:
# ##   "/var/run/php5-fpm.sock"
# ##   or using a custom fpm status path:
# ##   "/var/run/php5-fpm.sock:fpm-custom-status-path"
# ##
# ## - fcgi: the URL must start with fcgi:// or cgi://, and port must be present, ie:
# ##   "fcgi://10.0.0.12:9000/status"
# ##   "cgi://10.0.10.12:9001/status"
# ##
# ## Example of multiple gathering from local socket and remote host
# ## urls = ["http://192.168.1.20/status", "/tmp/fpm.sock"]
# ## urls = ["http://localhost/status"]
# #
# # ## Duration allowed to complete HTTP requests.
# # timeout = "5s"
# #
# # ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# ## Ping given url(s) and return statistics
# [[inputs.ping]]
# ## Hosts to send ping packets to.
# urls = ["example.org"]
# #
# ## Method used for sending pings, can be either "exec" or "native". When set
# ## to "exec" the systems ping command will be executed. When set to "native"
# ## the plugin will send pings directly.
# ##
# ## While the default is "exec" for backwards compatibility, new deployments
# ## are encouraged to use the "native" method for improved compatibility and
# ## performance.
# # method = "exec"
# #
# ## Number of ping packets to send per interval. Corresponds to the "-c"
# ## option of the ping command.
# # count = 1
# #
# ## Time to wait between sending ping packets in seconds. Operates like the
# ## "-i" option of the ping command.
# ping_interval = 1.0
#
# If set, the time to wait for a ping response in seconds. Operates like
# the "-W" option of the ping command.
# timeout = 1.0
#
# If set, the total ping deadline, in seconds. Operates like the -w option
# of the ping command.
# deadline = 10
#
# Interface or source address to send ping from. Operates like the -I or -S
# option of the ping command.
# interface = ""
#
# Percentiles to calculate. This only works with the native method.
# percentiles = [50, 95, 99]
#
# Specify the ping executable binary.
# binary = "ping"
#
# Arguments for ping command. When arguments is not empty, the command from
# the binary option will be used and other options (ping_interval, timeout,
# etc) will be ignored.
# arguments = ["-c", "3"]
#
# Use only IPv6 addresses when resolving a hostname.
# ipv6 = false
#
# Number of data bytes to be sent. Corresponds to the ".s"
# option of the ping command. This only works with the native method.
# size = 56

# Measure postfix queue statistics
[[inputs.postfix]]
# Postfix queue directory. If not provided, telegraf will try to use
# 'postconf -h queue_directory' to determine it.
# queue_directory = "/var/spool/postfix"

# Read metrics from one or many PowerDNS servers
[[inputs.powerdns]]
# An array of sockets to gather stats about.
# Specify a path to unix socket.
# unix_sockets = ["/var/run/pdns.controlsocket"]

# Read metrics from one or many PowerDNS Recursor servers
# [inputs.powerdns_recursor]
#   ## Path to the Recursor control socket.
#   unix_sockets = ["/var/run/pdns_recursor.controlsocket"]
#
#   ## Directory to create receive socket. This default is likely not writable,
#   ## please reference the full plugin documentation for a recommended setup.
#   # socket_dir = "/var/run/"
#   ## Socket permissions for the receive socket.
#   # socket_mode = "0666"

# # Monitor process cpu and memory usage
# [inputs.procstat]
#   ## PID file to monitor process
#   pid_file = "/var/run/nginx.pid"
#   ## executable name (ie, pgrep <exe>)
#   # exe = "nginx"
#   ## pattern as argument for pgrep (ie, pgrep -f <pattern>)
#   # pattern = "nginx"
#   ## user as argument for pgrep (ie, pgrep -u <user>)
#   # user = "nginx"
#   ## Systemd unit name, supports globs when include_systemd_children is set to true
#   # systemd_unit = "nginx.service"
#   # include_systemd_children = false
#   ## CGroup name or path, supports globs
#   # cgroup = "systemd/system.slice/nginx.service"
#   # w"in_service name
#   # win_service = ""
#   # override for process_name
#   # This is optional; default is sourced from /proc/<pid>/status
#   # process_name = "bar"
#   # Field name prefix
#   # prefix = ""
#   # When true add the full cmdline as a tag.
#   # cmdline_tag = false
#   # Mode to use when calculating CPU usage. Can be one of 'solaris' or 'irix'.
#   # mode = "irix"
#   # Add the PID as a tag instead of as a field. When collecting multiple
#   # processes with otherwise matching tags this setting should be enabled to
#   # ensure each process has a unique identity.
#   #
#   # Enabling this option may result in a large number of series, especially
## When processes have a short lifetime.

** pid_tag = false

## Method to use when finding process IDs. Can be one of 'pgrep', or 'native'. The pgrep finder calls the pgrep executable in the PATH while the native finder performs the search directly in a manner dependent on the platform. Default is 'pgrep'

** pid_finder = "pgrep"

## Provides metrics from Proxmox nodes (Proxmox Virtual Environment > 6.2).

### API connection configuration. The API token was introduced in Proxmox v6.2. Required permissions for user and token: PVEAuditor role on /

** base_url = "https://localhost:8006/api2/json"
** api_token = "USER@REALM!TOKENID=UUID"

### Node name, defaults to OS hostname

** node_name = ""

### Optional TLS Config

** tls_ca = "/etc/telegraf/ca.pem"
** tls_cert = "/etc/telegraf/cert.pem"
** tls_key = "/etc/telegraf/key.pem"

### Use TLS but skip chain & host verification

** insecure_skip_verify = false

### HTTP response timeout (default: 5s)

** response_timeout = "5s"

## Reads last_run_summary.yaml file and converts to measurements

### Location of puppet last run summary file

** location = "/var/lib/puppet/state/last_run_summary.yaml"

## Reads metrics from RabbitMQ servers via the Management Plugin

### Management Plugin url. (default: http://localhost:15672)

** url = "http://localhost:15672"

### Tag added to rabbitmq_overview series; deprecated: use tags

** name = "rmq-server-1"

### Credentials

** username = "guest"
** password = "guest"

### Optional TLS Config

** tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
## Optional request timeouts
##
## ResponseHeaderTimeout, if non-zero, specifies the amount of time to wait
## for a server's response headers after fully writing the request.
# header_timeout = "3s"
##
## client_timeout specifies a time limit for requests made by this client.
## Includes connection time, any redirects, and reading the response body.
# client_timeout = "4s"
#
## A list of nodes to gather as the rabbitmq_node measurement. If not
## specified, metrics for all nodes are gathered.
# nodes = ["rabbit@node1", "rabbit@node2"]
#
## A list of queues to gather as the rabbitmq_queue measurement. If not
## specified, metrics for all queues are gathered.
# queues = ["telegraf"]
#
## A list of exchanges to gather as the rabbitmq_exchange measurement. If not
## specified, metrics for all exchanges are gathered.
# exchanges = ["telegraf"]
#
## Metrics to include and exclude. Globs accepted.
## Note that an empty array for both will include all metrics
## Currently the following metrics are supported: "exchange", "federation", "node", "overview", "queue"
# metric_include = []
# metric_exclude = []
#
## Queues to include and exclude. Globs accepted.
## Note that an empty array for both will include all queues
# queue_name_include = []
# queue_name_exclude = []
#
## Federation upstreams include and exclude when gathering the rabbitmq_federation measurement.
## If neither are specified, metrics for all federation upstreams are gathered.
## Federation link metrics will only be gathered for queues and exchanges
## whose non-federation metrics will be collected (e.g a queue excluded
## by the 'queue_name_exclude' option will also be excluded from federation).
## Glob accepted.
# federation_upstream_include = ["dataCentre-4"]
# federation_upstream_exclude = []
```# # Read raindrops stats (raindrops - real-time stats for preforking Rack servers)
# # [[inputs.raindrops]]
# # An array of raindrops middleware URI to gather stats.
# # urls = ['http://localhost:8080/_raindrops']
#
## Reads metrics from RavenDB servers via the Monitoring Endpoints
# [[inputs.ravendb]]
# # Node URL and port that RavenDB is listening on
# # url = "https://localhost:8080"
#
## RavenDB X509 client certificate setup
# # tls_cert = "/etc/telegraf/raven.crt"
# # tls_key = "/etc/telegraf/raven.key"
#
## Optional request timeout
# ##
# # Timeout, specifies the amount of time to wait
# # for a server\'s response headers after fully writing the request and
# # time limit for requests made by this client
# # timeout = "5s"
#
## List of statistics which are collected
## At least one is required
# # Allowed values: server, databases, indexes, collections
# #
# # stats_include = ["server", "databases", "indexes", "collections"]
#
## List of db where database stats are collected
## If empty, all db are concerned
# # db_stats_dbs = []
#
## List of db where index status are collected
## If empty, all indexes from all db are concerned
# # index_stats_dbs = []
#
## List of db where collection status are collected
## If empty, all collections from all db are concerned
# # collection_stats_dbs = []

## Read CPU, Fans, Powersupply and Voltage metrics of hardware server through redfish APIs
# [[inputs.redfish]]
# # Server url
# # address = "https://127.0.0.1:5000"
#
## Username, Password for hardware server
## username = "root"
```
# password = "password123456"
#
# ## ComputerSystemId
# computer_system_id="2M220100SL"
#
# ## Amount of time allowed to complete the HTTP request
# # timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Read metrics from one or many redis servers
[[inputs.redis]]
## specify servers via a url matching:
## 
##  [protocol://][:password]@address[:port]
##  
## e.g.
##  tcp://localhost:6379
##  tcp://password@192.168.99.100
##  unix://var/run/redis.sock
##
## If no servers are specified, then localhost is used as the host.
## If no port is specified, 6379 is used
## servers = ["tcp://localhost:6379"]
#
## Optional. Specify redis commands to retrieve values
## [[inputs.redis.commands]]
## The command to run where each argument is a separate element
## command = ["get", "sample-key"]
## # The field to store the result in
## field = "sample-key-value"
## # The type of the result
## # Can be "string", "integer", or "float"
## type = "string"
#
## specify server password
## # password = "#cre@t%"
#
## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
## insecure_skip_verify = true
## Read metrics from one or many RethinkDB servers

```
[[inputs.rethinkdb]]
```

### An array of URI to gather stats about. Specify an ip or hostname

### with optional port add password. ie,

```
rethinkdb://user:auth_key@10.10.3.30:28105,
rethinkdb://10.10.3.33:18832,
10.0.0.1:10000, etc.
```

```
servers = ["127.0.0.1:28015"]
```

### If you use actual rethinkdb of > 2.3.0 with username/password authorization,

```
servers = ["rethinkdb2://username:password@127.0.0.1:28015"]
```

### If you use older versions of rethinkdb (<2.2) with auth_key, protocol

```
servers = ["rethinkdb://username:auth_key@127.0.0.1:28015"]
```

## Read metrics one or many Riak servers

```
[[inputs.riak]]
```

### Specify a list of one or more riak http servers

```
servers = ["http://localhost:8098"]
```

## Read API usage and limits for a Salesforce organisation

```
[[inputs.salesforce]]
```

### specify your credentials

```
username = "your_username"
password = "your_password"
```

### (optional) security token

```
security_token = "your_security_token"
```

### (optional) environment type (sandbox or production)

```
environment = "sandbox"
```

### (optional) API version (default: "39.0")

```
version = "39.0"
```

## Monitor sensors, requires lm-sensors package

```
[[inputs.sensors]]
```
## Remove numbers from field names.
## If true, a field name like 'temp1_input' will be changed to 'temp_input'.
## remove_numbers = true
#
## Timeout is the maximum amount of time that the sensors command can run.
## timeout = "5s"

## Read metrics from storage devices supporting S.M.A.R.T.
[[inputs.smart]]
## Optionally specify the path to the smartctl executable
## path_smartctl = "/usr/bin/smartctl"
#
## Optionally specify the path to the nvme-cli executable
## path_nvme = "/usr/bin/nvme"
#
## Optionally specify if vendor specific attributes should be propagated for NVMe disk case
## ["auto-on"] - automatically find and enable additional vendor specific disk info
## ["vendor1", "vendor2", ...] - e.g. "Intel" enable additional Intel specific disk info
## enable_extensions = ["auto-on"]
#
## On most platforms used cli utilities requires root access.
## Setting 'use_sudo' to true will make use of sudo to run smartctl or nvme-cli.
## Sudo must be configured to allow the telegraf user to run smartctl or nvme-cli
## without a password.
## use_sudo = false
#
## Skip checking disks in this power mode. Defaults to
## "standby" to not wake up disks that have stopped rotating.
## See --nocheck in the man pages for smartctl.
## smartctl version 5.41 and 5.42 have faulty detection of
## power mode and might require changing this value to
## "never" depending on your disks.
## nocheck = "standby"
#
## Gather all returned S.M.A.R.T. attribute metrics and the detailed
## information from each drive into the 'smart_attribute' measurement.
## attributes = false
#
## Optionally specify devices to exclude from reporting if disks auto-discovery is performed.
## excludes = [ "/dev/pass6" ]
#
## Optionally specify devices and device type, if unset
## a scan (smartctl --scan and smartctl --scan -d nvme) for S.M.A.R.T. devices will be done
## and all found will be included except for the excluded in excludes.
## devices = [ "/dev/ada0 -d atacam", "/dev/nvme0"]
#
## Timeout for the cli command to complete.
# timeout = "30s"

# Optionally call smartctl and nvme-cli with a specific concurrency policy.
# By default, smartctl and nvme-cli are called in separate threads (goroutines) to gather disk attributes.
# Some devices (e.g. disks in RAID arrays) may have access limitations that require sequential reading of
# SMART data - one individual array drive at the time. In such case please set this configuration option
# to "sequential" to get readings for all drives.
# valid options: concurrent, sequential
# read_method = "concurrent"

## Retrieves SNMP values from remote agents

[[inputs.snmp]]
# Agent addresses to retrieve values from.
# format: agents = ["scheme://<hostname>:<port>"]
# default is udp
# port: optional
# example: agents = ["udp://127.0.0.1:161"]
# agents = ["tcp://127.0.0.1:161"]
# agents = ["udp4://v4only-snmp-agent"]
agents = ["udp://127.0.0.1:161"]

# Timeout for each request.
# timeout = "5s"

# SNMP version; can be 1, 2, or 3.
# version = 2

# Path to mib files
# path = ["/usr/share/snmp/mibs"]

# Agent host tag; the tag used to reference the source host
# agent_host_tag = "agent_host"

# SNMP community string.
# community = "public"

# Number of retries to attempt.
# retries = 3

# The GETBULK max-repetitions parameter.
# max_repetitions = 10

# SNMPv3 authentication and encryption options.

# Security Name.
# sec_name = "myuser"
# Authentication protocol; one of "MD5", "SHA", "SHA224", "SHA256", "SHA384", "SHA512" or "".
# auth_protocol = "MD5"
# Authentication password.
# auth_password = "pass"
# Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".
# sec_level = "authNoPriv"
# Context Name.
# context_name = ""
# Privacy protocol used for encrypted messages; one of "DES", "AES" or "".
# priv_protocol = ""
# Privacy password used for encrypted messages.
# priv_password = ""

# Add fields and tables defining the variables you wish to collect. This example collects the system uptime and interface variables. Reference the full plugin documentation for configuration details.

# DEPRECATED! PLEASE USE inputs.snmp INSTEAD.
[[inputs.snmp_legacy]]
# DEPRECATED: The 'snmp_legacy' plugin is deprecated in version 1.0.0, use 'inputs.snmp' instead.
# Use 'oids.txt' file to translate oids to names
# To generate 'oids.txt' you need to run:
# snmptranslate -m all -Tz -On | sed -e 's/"//g' > /tmp/oids.txt
# Or if you have an other MIB folder with custom MIBs
# snmptranslate -M /mycustommibfolder -Tz -On -m all | sed -e 's/"//g' > oids.txt
# snmptranslate_file = "/tmp/oids.txt"
[[inputs.snmp.host]]
# address = "192.168.2.2:161"
# SNMP community
# community = "public" # default public
# SNMP version (1, 2 or 3)
# Version 3 not supported yet
# version = 2 # default 2
# SNMP response timeout
# timeout = 2.0 # default 2.0
# SNMP request retries
# retries = 2 # default 2
# Which get/bulk do you want to collect for this host
# collect = ["mybulk", "sysServices", "sysDescr"]
# Simple list of OIDs to get, in addition to "collect"
# get_oids = []
[[inputs.snmp.host]]
# address = "192.168.2.3:161"
# community = "public"
# version = 2
# timeout = 2.0
# retries = 2
# collect = ["mybulk"]
# get_oids = [
#    "ifNumber",
#    ".1.3.6.1.2.1.1.3.0",
#]
#
# # [inputs.snmp.get]
# name = "ifnumber"
# oid = "ifNumber"
#
# # [inputs.snmp.get]
# name = "interface_speed"
# oid = "ifSpeed"
# instance = "0"
#
# # [inputs.snmp.get]
# name = "sysuptime"
# oid = ".1.3.6.1.2.1.1.3.0"
# unit = "second"
#
# # [inputs.snmp.bulk]
# name = "mybulk"
# max_repetition = 127
# oid = ".1.3.6.1.2.1.1.3.0"
#
# # [inputs.snmp.bulk]
# name = "ifoutoctets"
# max_repetition = 127
# oid = "ifOutOctets"
#
# # [inputs.snmp.host]
# address = "192.168.2.13:161"
# #address = "127.0.0.1:161"
# community = "public"
# version = 2
# timeout = 2.0
# retries = 2
# #collect = ["mybulk", "sysservices", "sysdescr", "systype"]
# collect = ["sysuptime"]
# # [inputs.snmp.host.table]
# name = "iftable3"
# include_instances = ["enp5s0", "eth1"]
#
# # SNMP TABLEs
# # table without mapping neither subtables
# # [inputs.snmp.table]
# name = "iftable1"
## Open Source Used In BGP TE Controller Version 4.3.0

```python
# # table without mapping but with subtables
# [[inputs.snmp.table]]
# name = "iftable2"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# sub_tables = [".1.3.6.1.2.1.2.2.1.13"]
#
# # table with mapping but without subtables
# [[inputs.snmp.table]]
# name = "iftable3"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# # if empty. get all instances
# mapping_table = ".1.3.6.1.2.1.31.1.1.1.1"
# # if empty. get all subtables
#
# # table with both mapping and subtables
# [[inputs.snmp.table]]
# name = "iftable4"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# # if empty get all instances
# mapping_table = ".1.3.6.1.2.1.31.1.1.1.1"
# # if empty get all subtables
# # sub_tables could be not "real subtables"
# sub_tables=[".1.3.6.1.2.1.2.2.1.13", "bytes_recv", "bytes_send"]

## Read stats from one or more Solr servers or cores
# [[inputs.solr]]
# ### specify a list of one or more Solr servers
# servers = ["http://localhost:8983"]
#
# ### specify a list of one or more Solr cores (default - all)
# cores = ["main"]
#
# ### Optional HTTP Basic Auth Credentials
# ### username = "username"
# # password = "pa$$word"

## Gather timeseries from Google Cloud Platform v3 monitoring API
# [[inputs.stackdriver]]
# ### GCP Project
# project = "crudite-bloom-151019"
#
# ### Include timeseries that start with the given metric type.
# metric_type_prefix_include = ["compute.googleapis.com/"
```
# Exclude timeseries that start with the given metric type.
# metric_type_prefix_exclude = []
#
# Many metrics are updated once per minute; it is recommended to override
# the agent level interval with a value of 1m or greater.
# interval = "1m"
#
# Maximum number of API calls to make per second. The quota for accounts
# varies, it can be viewed on the API dashboard:
# https://cloud.google.com/monitoring/quotas#quotas_and_limits
# rate_limit = 14
#
# The delay and window options control the number of points selected on
# each gather. When set, metrics are gathered between:
# start: now() - delay - window
# end: now() - delay
# delay = "5m"
#
# If unset, the window will start at 1m and be updated dynamically to span
# the time between calls (approximately the length of the plugin interval).
# window = "1m"
#
# TTL for cached list of metric types. This is the maximum amount of time
# it may take to discover new metrics.
# cache_ttl = "1h"
#
# If true, raw bucket counts are collected for distribution value types.
# For a more lightweight collection, you may wish to disable and use
# distribution_aggregation_aligners instead.
# gather_raw_distribution_buckets = true
#
# Aggregate functions to be used for metrics whose value type is
# distribution. These aggregate values are recorded in in addition to raw
# bucket counts; if they are enabled.
# distribution_aggregation_aligners = [
#   "ALIGN_PERCENTILE_99",
#   "ALIGN_PERCENTILE_95",
#   "ALIGN_PERCENTILE_50",
# ]
#
# Filters can be added to reduce the number of time series matched. All
functions are supported: starts_with, ends_with, has_substring, and
one_of. Only the '=' operator is supported.

The logical operators when combining filters are defined statically using
the following values:

filter ::= <resource_labels> {AND <metric_labels>}
resource_labels ::= <resource_labels> {OR <resource_label>}
metric_labels ::= <metric_labels> {OR <metric_label>}

For more details, see https://cloud.google.com/monitoring/api/v3/filters

Resource labels refine the time series selection with the following expression:
resource.labels.<key> = <value>

Metric labels refine the time series selection with the following expression:
metric.labels.<key> = <value>

Get synproxy counter statistics from procfs

Sysstat metrics collector

Common Defaults:
Debian/Ubuntu: /usr/lib/sysstat/sadc
Arch: /usr/lib/sa/sadc
RHEL/CentOS: /usr/lib64/sa/sadc
sadc_path = "/usr/lib/sa/sadc" # required

Path to the sadf command, if it is not in PATH
sadf_path = "/usr/bin/sadf"

Activities is a list of activities, that are passed as argument to the
sadc collector utility (e.g: DISK, SNMP etc...)
The more activities that are added, the more data is collected.
activities = ["DISK"]

Group metrics to measurements.
# ##
# If group is false each metric will be prefixed with a description
# and represents itself a measurement.
# ##
# If Group is true, corresponding metrics are grouped to a single measurement.
# # group = true
#
# Options for the sadf command. The values on the left represent the sadf
# options and the values on the right their description (which are used for
# grouping and prefixing metrics).
# ##
# Run 'sar -h' or 'man sar' to find out the supported options for your
# sysstat version.
# [inputs.sysstat.options]
# -C = "cpu"
# -B = "paging"
# -b = "io"
# -d = "disk" # requires DISK activity
# ".n ALL" = "network"
# ".P ALL" = "per_cpu"
# -q = "queue"
# -R = "mem"
# -r = "mem_util"
# -S = "swap_util"
# -u = "cpu_util"
# -v = "inode"
# -W = "swap"
# -w = "task"
# ".H = "hugepages" # only available for newer linux distributions
# ".I ALL" = "interrupts" # requires INT activity
#
# Device tags can be used to add additional tags for devices.
# For example the configuration below adds a tag vg with value rootvg for
# all metrics with sda devices.
# [inputs.sysstat.device_tags.sda]
# vg = "rootvg"
#
# Gather systemd units state
# [[inputs.systemd_units]]
# Set timeout for systemctl execution
# timeout = "1s"
#
# Filter for a specific unit type, default is "service", other possible
# values are "socket", "target", "device", "mount", "automount", "swap",
# "timer", "path", "slice" and "scope ":
# unittype = "service"
#Read metrics from a Teamspeak 3 Server via ServerQuery
[[inputs.teamspeak]]
## Server address for Teamspeak 3 ServerQuery
# server = "127.0.0.1:10011"
## Username for ServerQuery
# username = "serverqueryuser"
## Password for ServerQuery
# password = "secret"
## Array of virtual servers
# virtual_servers = [1]

#Read metrics about temperature
[[inputs.temp]]
# # no configuration

#Read Tengine's basic status information (ngx_http_reqstat_module)
[[inputs.tengine]]
## An array of Tengine reqstat module URI to gather stats.
# urls = ["http://127.0.0.1/us"]
## HTTP response timeout (default: 5s)
# response_timeout = "5s"
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.cer"
# tls_key = "/etc/telegraf/key.key"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

#Gather metrics from the Tomcat server status page.
[[inputs.tomcat]]
## URL of the Tomcat server status
# url = "http://127.0.0.1:8080/manager/status/all?XML=true"
## HTTP Basic Auth Credentials
# username = "tomcat"
# # password = "s3cret"
#
# ## Request timeout
# # timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Inserts sine and cosine waves for demonstration purposes
[
  [inputs.trig]
  ## Set the amplitude
  amplitude = 10.0
]

## Read Twemproxy stats data
[
  [inputs.twemproxy]
  ## Twemproxy stats address and port (no scheme)
  addr = "localhost:22222"
  ## Monitor pool name
  pools = ["redis_pool", "mc_pool"]
]

## A plugin to collect stats from the Unbound DNS resolver
[
  [inputs.unbound]
  ## Address of server to connect to, read from unbound conf default, optionally ':port'
  ## Will lookup IP if given a hostname
  server = "127.0.0.1:8953"
  ## If running as a restricted user you can prepend sudo for additional access:
  # use_sudo = false
  ## The default location of the unbound-control binary can be overridden with:
  # binary = "/usr/sbin/unbound-control"
  ## The default location of the unbound config file can be overridden with:
  # config_file = "/etc/unbound/unbound.conf"
  ## The default timeout of 1s can be overridden with:
  # timeout = "1s"
  ## When set to true, thread metrics are tagged with the thread id.
  #
  ## The default is false for backwards compatibility, and will be changed to
### true in a future version. It is recommended to set to true on new deployments.

thread_as_tag = false

### Read uWSGI metrics.

[[inputs.uwsgi]]

### List with urls of uWSGI Stats servers. URL must match pattern:

scheme://address[:port]

### For example:


servers = ["tcp://127.0.0.1:1717"]

### General connection timeout

# timeout = "5s"

### A plugin to collect stats from Varnish HTTP Cache

[[inputs.varnish]]

### If running as a restricted user you can prepend sudo for additional access:

use_sudo = false

### The default location of the varnishstat binary can be overridden with:

binary = "/usr/bin/varnishstat"

### By default, telegraf gather stats for 3 metric points.

### Setting stats will override the defaults shown below.

### Glob matching can be used, ie, stats = ["MAIN.*"]

### stats may also be set to ["*"], which will collect all stats

### Optional name for the varnish instance (or working directory) to query

### Usually append after -n in varnish cli

instance_name = instanceName

### Timeout for varnishstat command

# timeout = "1s"

### Collect Wireguard server interface and peer statistics

[[inputs.wireguard]]

### Optional list of Wireguard device/interface names to query.

### If omitted, all Wireguard interfaces are queried.

devices = ["wg0"]

### Monitor wifi signal strength and quality

---
# [inputs.wireless]]
#   ## Sets 'proc' directory path
#   ## If not specified, then default is /proc
#   host_proc = "/proc"

#   ## Reads metrics from a SSL certificate
#   [inputs.x509_cert]
#     sources = ["tcp://example.org:443", "https://influxdata.com:443",
#                "udp://127.0.0.1:4433", "/etc/ssl/certs/ssl-cert-snakeoil.pem",
#                "/etc/mycerts/*.mydomain.org.pem", "file:///path/to/*.pem"
#   
# #   ## Timeout for SSL connection
#   timeout = "5s"

# #   ## Pass a different name into the TLS request (Server Name Indication)
#   server_name = ""

# #   ## Optional TLS Config
#   tls_ca = "/etc/telegraf/certs/ca.pem"
#   tls_cert = "/etc/telegraf/certs/cert.pem"
#   tls_key = "/etc/telegraf/certs/key.pem"

# #   ## ZFS kstat path. Ignored on FreeBSD
#   kstatPath = "/proc/spl/kstat/zfs"

# #   ## By default, telegraf gather all zfs stats
# #   If not specified, then default is:
#   kstatMetrics = ["arcstats", "zfetchstats", "vdev_cache_stats"]

# #   ## For Linux, the default is:
# #   kstatMetrics = ["abdstats", "arcstats", "dnodestats", "dbufcachestats",
# #                  "dmu_tx", "fm", "vdev_mirror_stats", "zfetchstats", "zil"]

# #   ## By default, don't gather zpool stats
#   poolMetrics = false

# #   ## By default, don't gather zdataset stats
#   datasetMetrics = false

# # # Reads 'mntr' stats from one or many zookeeper servers
# #   [inputs.zookeeper]]
# #     ## An array of address to gather stats about. Specify an ip or hostname
## Aliyun CMS

### Aliyun Credentials

Credentials are loaded in the following order:

1. Ram RoleArn credential
2. AccessKey STS token credential
3. AccessKey credential
4. Ecs Ram Role credential
5. RSA keypair credential
6. Environment variables credential
7. Instance metadata credential

### Aliyun CMS Configuration

```yaml
# access_key_id = ""
# access_key_secret = ""
# access_key_sts_token = ""
# role_arn = ""
# role_session_name = ""
# private_key = ""
# public_key_id = ""
# role_name = ""
```

### Specify the Ali Cloud region list to be queried for metrics and objects discovery

- If not set, all supported regions (see below) would be covered, it can provide a significant load on API, so the recommendation here is to limit the list as much as possible. Allowed values: https://www.alibabacloud.com/help/zh/doc-

---

**Open Source Used In BGP TE Controller Version 4.3.0 9389**
# Default supported regions are:
# 21 items: cn-qingdao,cn-beijing,cn-zhangjiakou,cn-huhehaote,cn-hangzhou,cn-shanghai,cn-shenzhen,
# cn-heyuan,cn-chengdu,cn-hongkong,ap-southeast-1,ap-southeast-2,ap-southeast-3,ap-southeast-5,
# ap-south-1,ap-northeast-1,us-west-1,us-east-1,eu-central-1,eu-west-1,me-east-1
#
## From discovery perspective it set the scope for object discovery, the discovered info can be used to enrich
## the metrics with objects attributes/tags. Discovery is supported not for all projects (if not supported, then
## it will be reported on the start - for example for 'acs_cdn' project:
## 'E! [inputs.aliyuncms] Discovery tool is not activated: no discovery support for project "acs_cdn"'
## Currently, discovery supported for the following projects:
## - acs_ecs_dashboard
## - acs_rds_dashboard
## - acs_slb_dashboard
## - acs_vpc_eip
## regions = ["cn-hongkong"]
#
# The minimum period for AliyunCMS metrics is 1 minute (60s). However not all
# metrics are made available to the 1 minute period. Some are collected at
# 3 minute, 5 minute, or larger intervals.
# See: https://help.aliyun.com/document_detail/51936.html?spm=a2c4g.11186623.2.18.2bc1750eeOw1Pv
# Note that if a period is configured that is smaller than the minimum for a
# particular metric, that metric will not be returned by the Aliyun OpenAPI
# and will not be collected by Telegraf.
#
## Requested AliyunCMS aggregation Period (required - must be a multiple of 60s)
## period = "5m"
#
## Collection Delay (required - must account for metrics availability via AliyunCMS API)
## delay = "1m"
#
## Recommended: use metric 'interval' that is a multiple of 'period' to avoid
## gaps or overlap in pulled data
## interval = "5m"
#
## Metric Statistic Project (required)
## project = "acs_slb_dashboard"
#
## Maximum requests per second, default value is 200
## ratelimit = 200
#
## How often the discovery API call executed (default 1m)
## discovery_interval = "1m"
#
## Metrics to Pull (Required)
## [[inputs.aliyuncms.metrics]]
## Metrics names to be requested,
## described here (per project):
# names = ["InstanceActiveConnection", "InstanceNewConnection"]
#
# ## Dimension filters for Metric (these are optional).
# ## This allows to get additional metric dimension. If dimension is not specified it can be returned or
# ## the data can be aggregated - it depends on particular metric, you can find details here:
https://help.aliyun.com/document_detail/28619.html?spm=a2c4g.11186623.6.690.1938ad41wg8QSq
#
# ## Note, that by default dimension filter includes the list of discovered objects in scope (if discovery is enabled)
# ## Values specified here would be added into the list of discovered objects.
# ## You can specify either single dimension:
# #dimensions = '{"instanceId": "p-example"}'
#
# ## Or you can specify several dimensions at once:
# #dimensions = ["instanceId": "p-example"],{"instanceId": "q-example"}]
#
# ## Enrichment tags, can be added from discovery (if supported)
# ## Notation is <measurement_tag_name>:<JMES query path (https://jmespath.org/tutorial.html)>
# ## To figure out which fields are available, consult the Describe<ObjectType> API per project.
# ## For example, for SLB: https://api.aliyun.com/#/?product=Slb&version=2014-05-15&api=DescribeLoadBalancers&params={}&tab=MOCK&lang=GO
# #tag_query_path = [
#   # "address:Address",
#   # "name:LoadBalancerName",
#   # "cluster_owner:Tags.Tag[?TagKey=='cs.cluster.name'].TagValue | [0]"
#   # ]
# ## The following tags added by default: regionId (if discovery enabled), userId, instanceId.
#
# ## Allow metrics without discovery data, if discovery is enabled. If set to true, then metric without discovery
# ## data would be emitted, otherwise dropped. This can be of help, in case debugging dimension filters, or partial
# ## coverage
# #allow_dps_without_discovery = false
#
# ## AMQP consumer plugin
# [[inputs.amqp_consumer]]
# ## Broker to consume from.
# ## deprecated in 1.7; use the brokers option
# # url = "amqp://localhost:5672/influxdb"
#
# ## Brokers to consume from. If multiple brokers are specified a random broker
# ## will be selected anytime a connection is established. This can be
# ## helpful for load balancing when not using a dedicated load balancer.
# #brokers = ["amqp://localhost:5672/influxdb"]
#
# ## Authentication credentials for the PLAIN auth_method.
# #username = ""
## Name of the exchange to declare. If unset, no exchange will be declared.
# exchange = "telegraf"
#
## Exchange type; common types are "direct", "fanout", "topic", "header", "x-consistent-hash".
# exchange_type = "topic"
#
## If true, exchange will be passively declared.
# exchange_passive = false
#
## Exchange durability can be either "transient" or "durable".
# exchange_durability = "durable"
#
## Additional exchange arguments.
# exchange_arguments = { }
# exchange_arguments = {"hash_property" = "timestamp"}
#
## AMQP queue name.
# queue = "telegraf"
#
## AMQP queue durability can be "transient" or "durable".
# queue_durability = "durable"
#
## If true, queue will be passively declared.
# queue_passive = false
#
## A binding between the exchange and queue using this binding key is created. If unset, no binding is created.
# binding_key = "#"
#
## Maximum number of messages server should give to the worker.
# prefetch_count = 50
#
## Maximum messages to read from the broker that have not been written by an output. For best throughput set based on the number of metrics within each message and the size of the output's metric_batch_size.
#
## For example, if each message from the queue contains 10 metrics and the output metric_batch_size is 1000, setting this to 100 will ensure that a full batch is collected and the write is triggered immediately without waiting until the next flush_interval.
# max_undelivered_messages = 1000
#
## Auth method. PLAIN and EXTERNAL are supported
# auth_method = "PLAIN"
## Optional TLS Config

### tls_ca = "/etc/telegraf/ca.pem"

### tls_cert = "/etc/telegraf/cert.pem"

### tls_key = "/etc/telegraf/key.pem"

## Use TLS but skip chain & host verification

### insecure_skip_verify = false

## Content encoding for message payloads, can be set to "gzip" to or

## "identity" to apply no encoding.

### content_encoding = "identity"

## Data format to consume.

### Each data format has its own unique set of configuration options, read

### more about them here:

### https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md

### data_format = "influx"

### Read Cassandra metrics through Jolokia

### [[inputs.cassandra]]

### DEPRECATED: The 'cassandra' plugin is deprecated in version 1.7.0, use 'inputs.jolokia2' with the

### 'cassandra.conf' example configuration instead.

### DEPRECATED: The cassandra plugin has been deprecated. Please use the

### jolokia2 plugin instead.

### see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/jolokia2

### context = "/jolokia/read"

### List of cassandra servers exposing jolokia read service

### servers = ["myuser:mypassword@10.10.10.1:8778","10.10.10.2:8778",":8778"]

### List of metrics collected on above servers

### Each metric consists of a jmx path.

### This will collect all heap memory usage metrics from the jvm and

### ReadLatency metrics for all keyspaces and tables.

### "type=Table" in the query works with Cassandra3.0. Older versions might

### need to use "type=ColumnFamily"

### metrics = ["/java.lang:type=Memory/HeapMemoryUsage",

### "/org.apache.cassandra.metrics:type=Table,keyspace=*,scope=*,name=ReadLatency"

### ]

### Cisco model-driven telemetry (MDT) input plugin for IOS XR, IOS XE and NX-OS platforms

### [[inputs.cisco_telemetry_mdt]]

### Telemetry transport can be "tcp" or "grpc". TLS is only supported when

### using the grpc transport.

### transport = "grpc"
# Address and port to host telemetry listener
# service_address = ":57000"
#
# Enable TLS; grpc transport only.
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# Enable TLS client authentication and define allowed CA certificates; grpc transport only.
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# Define (for certain nested telemetry measurements with embedded tags) which fields are tags
# embedded_tags = ["Cisco-IOS-XR-qos-ma-oper:qos/interface-table/interface/input/service-policy-names/service-policy-instance/statistics/class-stats/class-name"]
#
# Define aliases to map telemetry encoding paths to simple measurement names
# inputs.cisco_telemetry_mdt.aliases
# ifstats = "ietf-interfaces:interfaces-state/interface/statistics"
# inputs.cisco_telemetry_mdt.dmes
# ModTs = "ignore"
# CreateTs = "ignore"

## Read metrics from one or many ClickHouse servers
## inputs.clickhouse
## Username for authorization on ClickHouse server
## example: username = "default"
## username = "default"
#
## Password for authorization on ClickHouse server
## example: password = "super_secret"
#
## HTTP(s) timeout while getting metrics values
## The timeout includes connection time, any redirects, and reading the response body.
## example: timeout = 1s
## timeout = 5s
#
## List of servers for metrics scraping
## metrics scrape via HTTP(s) clickhouse interface
## https://clickhouse.tech/docs/en/interfaces/http/
## example: servers = ["http://127.0.0.1:8123","https://custom-server.mdb.yandexcloud.net"]
## servers = ["http://127.0.0.1:8123"]
#
## If "auto_discovery" is "true" plugin tries to connect to all servers available in the cluster
## with using same "user:password" described in "user" and "password" parameters
# and get this server hostname list from "system.clusters" table
# see
# - https://clickhouse.tech/docs/en/operations/system_tables/#system-clusters
# - https://clickhouse.tech/docs/en/operations/table_engines/distributed/
# example: auto_discovery = false
# auto_discovery = true
#
# Filter cluster names in "system.clusters" when "auto_discovery" is "true"
# when this filter present then "WHERE cluster IN (...)" filter will apply
# please use only full cluster names here, regexp and glob filters is not allowed
# for "/etc/clickhouse-server/config.d/remote.xml"
# <yandex>
# <remote_servers>
# <my-own-cluster>
# <shard>
# <replica><host>clickhouse-ru-1.local</host><port>9000</port></replica>
# <replica><host>clickhouse-ru-2.local</host><port>9000</port></replica>
# </shard>
# <shard>
# <replica><host>clickhouse-eu-1.local</host><port>9000</port></replica>
# <replica><host>clickhouse-eu-2.local</host><port>9000</port></replica>
# <shard>
# <my-own-cluster>
# <remote_servers>
# </yandex>
#
# example: cluster_include = ["my-own-cluster"]
# cluster_include = []
#
# Filter cluster names in "system.clusters" when "auto_discovery" is "true"
# when this filter present then "WHERE cluster NOT IN (...)" filter will apply
# example: cluster_exclude = ["my-internal-not-discovered-cluster"]
# cluster_exclude = []
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# Read metrics from Google PubSub
# [inputs.cloud_pubsub]
# Required. Name of Google Cloud Platform (GCP) Project that owns
## the given PubSub subscription.
# project = "my-project"
#
## Required. Name of PubSub subscription to ingest metrics from.
# subscription = "my-subscription"
#
## Required. Data format to consume.
## Each data format has its own unique set of configuration options.
## Read more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
## Optional. Filepath for GCP credentials JSON file to authorize calls to
## PubSub APIs. If not set explicitly, Telegraf will attempt to use
## Application Default Credentials, which is preferred.
# credentials_file = "path/to/my/creds.json"
#
## Optional. Number of seconds to wait before attempting to restart the
## PubSub subscription receiver after an unexpected error.
## If the streaming pull for a PubSub Subscription fails (receiver),
## the agent attempts to restart receiving messages after this many seconds.
# retry_delay_seconds = 5
#
## Optional. Maximum byte length of a message to consume.
## Larger messages are dropped with an error. If less than 0 or unspecified,
## treated as no limit.
# max_message_len = 1000000
#
## Optional. Maximum messages to read from PubSub that have not been written
to an output. Defaults to 1000.
## For best throughput set based on the number of metrics within
## each message and the size of the output's metric_batch_size.
## For example, if each message contains 10 metrics and the output
## metric_batch_size is 1000, setting this to 100 will ensure that a
## full batch is collected and the write is triggered immediately without
## waiting until the next flush_interval.
# max_undelivered_messages = 1000
#
## The following are optional Subscription ReceiveSettings in PubSub.
## Read more about these values:
# https://godoc.org/cloud.google.com/go/pubsub#ReceiveSettings
#
## Optional. Maximum number of seconds for which a PubSub subscription
## should auto-extend the PubSub ACK deadline for each message. If less than
## 0, auto-extension is disabled.
# max_extension = 0
# ## Optional. Maximum number of unprocessed messages in PubSub
# ## (unacknowledged but not yet expired in PubSub).
# ## A value of 0 is treated as the default PubSub value.
# ## Negative values will be treated as unlimited.
# # max_outstanding_messages = 0
#
# ## Optional. Maximum size in bytes of unprocessed messages in PubSub
# ## (unacknowledged but not yet expired in PubSub).
# ## A value of 0 is treated as the default PubSub value.
# ## Negative values will be treated as unlimited.
# # max_outstanding_bytes = 0
#
# ## Optional. Max number of goroutines a PubSub Subscription receiver can spawn
# ## to pull messages from PubSub concurrently. This limit applies to each
# ## subscription separately and is treated as the PubSub default if less than
# ## 1. Note this setting does not limit the number of messages that can be
# ## processed concurrently (use "max_outstanding_messages" instead).
# # max_receiver_go_routines = 0
#
# ## Optional. If true, Telegraf will attempt to base64 decode the
# ## PubSub message data before parsing
# # base64_data = false

# ## Google Cloud Pub/Sub Push HTTP listener
# [inputs.cloud_pubsub_push]
# ## Address and port to host HTTP listener on
# service_address = ":8080"
#
# ## Application secret to verify messages originate from Cloud Pub/Sub
# # token = ""
#
# ## Path to listen to.
# # path = "/
#
# ## Maximum duration before timing out read of the request
# # read_timeout = "10s"
# ## Maximum duration before timing out write of the response. This should be set to a value
# ## large enough that you can send at least 'metric_batch_size' number of messages within the
# ## duration.
# # write_timeout = "10s"
#
# ## Maximum allowed http request body size in bytes.
# ## 0 means to use the default of 524,288,00 bytes (500 mebibytes)
# # max_body_size = "500MB"
#
# ## Whether to add the pubsub metadata, such as message attributes and subscription as a tag.
# # add_meta = false
# ## Optional. Maximum messages to read from PubSub that have not been written
to an output. Defaults to 1000.
# ## For best throughput set based on the number of metrics within
each message and the size of the output's metric_batch_size.
# ##
# ## For example, if each message contains 10 metrics and the output
metric_batch_size is 1000, setting this to 100 will ensure that a
full batch is collected and the write is triggered immediately without
waiting until the next flush_interval.
# # max_undelivered_messages = 1000
#
# ## Set one or more allowed client CA certificate file names to
enable mutually authenticated TLS connections
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# ## Add service certificate and key
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"

# # Ingests files in a directory and then moves them to a target directory.
# [[inputs.directory_monitor]]
# ## The directory to monitor and read files from.
# directory = ""
# #
# ## The directory to move finished files to.
# finished_directory = ""
# #
# ## The directory to move files to upon file error.
# # If not provided, erroring files will stay in the monitored directory.
# # error_directory = ""
# #
# ## The amount of time a file is allowed to sit in the directory before it is picked up.
# # This time can generally be low but if you choose to have a very large file written to the directory and it's
potentially slow,
# # set this higher so that the plugin will wait until the file is fully copied to the directory.
# # directory_duration_threshold = "50ms"
# #
# ## A list of the only file names to monitor, if necessary. Supports regex. If left blank, all files are ingested.
# # files_to_monitor = ["^.*\.csv"]
# #
# # A list of files to ignore, if necessary. Supports regex.
# # files_to_ignore = [".DS_Store"]
#
# # Maximum lines of the file to process that have not yet be written by the
# # output. For best throughput set to the size of the output's metric_buffer_limit.
# # Warning: setting this number higher than the output's metric_buffer_limit can cause dropped metrics.
# # max_buffered_metrics = 10000
#
# # The maximum amount of file paths to queue up for processing at once, before waiting until files are processed
# # to find more files.
# # Lowering this value will result in *slightly* less memory use, with a potential sacrifice in speed efficiency, if
# # absolutely necessary.
# # file_queue_size = 100000
#
# # Name a tag containing the name of the file the data was parsed from. Leave empty
# # to disable. Cautious when file name variation is high, this can increase the cardinality
# # https://docs.influxdata.com/influxdb/cloud/reference/glossary/#series-cardinality
# # file_tag = ""
#
# # The dataformat to be read from the files.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"
#
# # Read logging output from the Docker engine
# [[[inputs.docker_log]]]
# # Docker Endpoint
# # To use TCP, set endpoint = "tcp://[ip]:[port]"
# # To use environment variables (ie, docker-machine), set endpoint = "ENV"
# # endpoint = "unix:///var/run/docker.sock"
#
# # When true, container logs are read from the beginning; otherwise
# # reading begins at the end of the log.
# # from_beginning = false
#
# # Timeout for Docker API calls.
# # timeout = "5s"
#
# # Containers to include and exclude. Globs accepted.
# # Note that an empty array for both will include all containers
# # container_name_include = []
# # container_name_exclude = []
# ## Container states to include and exclude. Globs accepted.
# ## When empty only containers in the "running" state will be captured.
# # container_state_include = []
# # container_state_exclude = []
#
# ## Container labels to include and exclude as tags. Globs accepted.
# ## Note that an empty array for both will include all labels as tags
# # docker_label_include = []
# # docker_label_exclude = []
#
# ## Set the source tag for the metrics to the container ID hostname, eg first 12 chars
# source_tag = false
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
## Azure Event Hubs service input plugin
# [inputs.eventhub_consumer]
# ## The default behavior is to create a new Event Hub client from environment variables.
# ## This requires one of the following sets of environment variables to be set:
# ##
# ## 1) Expected Environment Variables:
# ## - "EVENTHUB_CONNECTION_STRING"
# ##
# ## 2) Expected Environment Variables:
# ## - "EVENTHUB_NAMESPACE"
# ## - "EVENTHUB_NAME"
# ## - "EVENTHUB_KEY_NAME"
# ## - "EVENTHUB_KEY_VALUE"
#
# ## 3) Expected Environment Variables:
# ## - "EVENTHUB_NAMESPACE"
# ## - "EVENTHUB_NAME"
# ## - "AZURE_TENANT_ID"
# ## - "AZURE_CLIENT_ID"
# ## - "AZURE_CLIENT_SECRET"
#
# ## Uncommenting the option below will create an Event Hub client based solely on the connection string.
# ## This can either be the associated environment variable or hard coded directly.
# ## If this option is uncommented, environment variables will be ignored.
# # connection_string = ""
# #
# Set persistence directory to a valid folder to use a file persister instead of an in-memory persister
# persistence_dir = ""
#
# Change the default consumer group
# consumer_group = ""
#
# By default the event hub receives all messages present on the broker, alternative modes can be set below.
# The timestamp should be in https://github.com/toml-lang/toml#offset-date-time format (RFC 3339).
# The 3 options below only apply if no valid persister is read from memory or file (e.g. first run).
# from_timestamp =
# latest = true
#
# Set a custom prefetch count for the receiver(s)
# prefetch_count = 1000
#
# Add an epoch to the receiver(s)
# epoch = 0
#
# Change to set a custom user agent, "telegraf" is used by default
# user_agent = "telegraf"
#
# To consume from a specific partition, set the partition_ids option.
# An empty array will result in receiving from all partitions.
# partition_ids = ["0","1"]
#
# Max undelivered messages
# max_undelivered_messages = 1000
#
# Set either option below to true to use a system property as timestamp.
# You have the choice between EnqueuedTime and IoTHubEnqueuedTime.
# It is recommended to use this setting when the data itself has no timestamp.
# enqueued_time_as_ts = true
# iot_hub_enqueued_time_as_ts = true
#
# Tags or fields to create from keys present in the application property bag.
# These could for example be set by message enrichments in Azure IoT Hub.
# application_property_tags = []
# application_property_fields = []
#
# Tag or field name to use for metadata
# By default all metadata is disabled
# sequence_number_field = "SequenceNumber"
# enqueued_time_field = "EnqueuedTime"
# offset_field = "Offset"
# partition_id_tag = "PartitionID"
# partition_key_tag = "PartitionKey"
# iot_hub_device_connection_id_tag = "IoTHubDeviceConnectionID"
# iot_hub_auth_generation_id_tag = "IoTHubAuthGenerationID"
# iot_hub_connection_auth_method_tag = "IoTHubConnectionAuthMethod"
# iot_hub_connection_module_id_tag = "IoTHubConnectionModuleID"
# iot_hub_enqueued_time_field = "IoTHubEnqueuedTime"
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

## Run executable as long-running input plugin
[
inputs.execd]]
# Program to run as daemon
command = ["telegraf-smartctl", "-d", "/dev/sda"]
#
# Define how the process is signaled on each collection interval.
# Valid values are:
# "none" : Do not signal anything.
# The process must output metrics by itself.
# "STDIN" : Send a newline on STDIN.
# "SIGHUP" : Send a HUP signal. Not available on Windows.
# "SIGUSR1" : Send a USR1 signal. Not available on Windows.
# "SIGUSR2" : Send a USR2 signal. Not available on Windows.
# signal = "none"
#
# Delay before the process is restarted after an unexpected termination
# restart_delay = "10s"
#
# Data format to consume.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

## gNMI telemetry input plugin
[
inputs.gnmi]]
# Address and port of the gNMI GRPC server
addresses = ["10.49.234.114:57777"]
#
# define credentials
username = "cisco"
password = "cisco"
#
# gNMI encoding requested (one of: "proto", "json", "json_ietf", "bytes")
# encoding = "proto"
# # redial in case of failures after
# redial = "10s"
#
# # enable client-side TLS and define CA to authenticate the device
# enable_tls = true
# tls_ca = "/etc/telegraf/ca.pem"
# insecure_skip_verify = true
#
# define client-side TLS certificate & key to authenticate to the device
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# gNMI subscription prefix (optional, can usually be left empty)
# See: https://github.com/openconfig/reference/blob/master/rpc/gnmi/gnmi-specification.md#222-paths
# origin = ""
# prefix = ""
# target = ""
#
# Define additional aliases to map telemetry encoding paths to simple measurement names
#[inputs.gnmi.aliases]
# ifcounters = "openconfig:/interfaces/interface/state/counters"
#
[[inputs.gnmi.subscription]]
# Name of the measurement that will be emitted
# name = "ifcounters"
#
# Origin and path of the subscription
# See: https://github.com/openconfig/reference/blob/master/rpc/gnmi/gnmi-specification.md#222-paths
# origin usually refers to a (YANG) data model implemented by the device
# and path to a specific substructure inside it that should be subscribed to (similar to an XPath)
# YANG models can be found e.g. here: https://github.com/YangModels/yang/tree/master/vendor/cisco/xr
# origin = "openconfig-interfaces"
# path = "/interfaces/interface/state/counters"
#
# Subscription mode (one of: "target_defined", "sample", "on_change") and interval
# subscription_mode = "sample"
# sample_interval = "10s"
#
# Suppress redundant transmissions when measured values are unchanged
# suppress_redundant = false
#
# If suppression is enabled, send updates at least every X seconds anyway
# heartbeat_interval = "60s"

# Accept metrics over InfluxDB 1.x HTTP API
[[inputs.http_listener]]
# ## Address and port to host InfluxDB listener on
# service_address = ":8186"
#
# ## maximum duration before timing out read of the request
# read_timeout = "10s"
# ## maximum duration before timing out write of the response
# write_timeout = "10s"
#
# ## Maximum allowed HTTP request body size in bytes.
# ## 0 means to use the default of 32MiB.
# max_body_size = "32MiB"
#
# ## Optional tag name used to store the database.
# ## If the write has a database in the query string then it will be kept in this tag name.
# ## This tag can be used in downstream outputs.
# ## The default value of nothing means it will be off and the database will not be recorded.
# database_tag = ""
#
# ## If set the retention policy specified in the write query will be added as
# the value of this tag name.
# retention_policy_tag = ""
#
# ## Set one or more allowed client CA certificate file names to
# enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# ## Add service certificate and key
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# ## Optional username and password to accept for HTTP basic authentication.
# ## You probably want to make sure you have TLS configured above for this.
# basic_username = "foobar"
# basic_password = "barfoo"
#
# ## Generic HTTP write listener
# [inputs.http_listener_v2]
# ## Address and port to host HTTP listener on
# service_address = ":8080"
#
# ## Path to listen to.
# ## This option is deprecated and only available for backward-compatibility. Please use paths instead.
# path = ""
#
# ## Paths to listen to.
# paths = ["/telegraf"]
# Save path as http_listener_v2_path tag if set to true
# path_tag = false
#
# HTTP methods to accept.
# methods = ["POST", "PUT"]
#
# maximum duration before timing out read of the request
# read_timeout = "10s"
#
# maximum duration before timing out write of the response
# write_timeout = "10s"
#
# Maximum allowed http request body size in bytes.
# 0 means to use the default of 524,288,000 bytes (500 mebibytes)
# max_body_size = "500MB"
#
# Part of the request to consume. Available options are "body" and
# "query".
# data_source = "body"
#
# Set one or more allowed client CA certificate file names to
# enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# Add service certificate and key
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# Optional username and password to accept for HTTP basic authentication.
# You probably want to make sure you have TLS configured above for this.
# basic_username = "foobar"
# basic_password = "barfoo"
#
# Optional setting to map http headers into tags
# If the http header is not present on the request, no corresponding tag will be added
# If multiple instances of the http header are present, only the first value will be used
# http_header_tags = ["HTTP_HEADER" = "TAG_NAME"]
#
# Data format to consume.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# Accept metrics over InfluxDB 1.x HTTP API
# [[inputs.influxdb_listener]]
# Address and port to host InfluxDB listener on
# service_address = ":8186"
# maximum duration before timing out read of the request
read_timeout = "10s"
# maximum duration before timing out write of the response
write_timeout = "10s"

# Maximum allowed HTTP request body size in bytes.
max_body_size = "32MiB"

# Optional tag name used to store the database.
# If the write has a database in the query string then it will be kept in this tag name.
# This tag can be used in downstream outputs.
# The default value of nothing means it will be off and the database will not be recorded.
# database_tag = ""

# If set the retention policy specified in the write query will be added as
# the value of this tag name.
# retention_policy_tag = ""

# Set one or more allowed client CA certificate file names to
# enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]

# Add service certificate and key
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"

# Optional username and password to accept for HTTP basic authentication.
# You probably want to make sure you have TLS configured above for this.
# basic_username = "foobar"
# basic_password = "barfoo"

# Accept metrics over InfluxDB 2.x HTTP API
[[inputs.influxdb_v2_listener]]
# Address and port to host InfluxDB listener on
# (Double check the port. Could be 9999 if using OSS Beta)
# service_address = ":8086"

# Maximum allowed HTTP request body size in bytes.
# 0 means to use the default of 32MiB.
# max_body_size = "32MiB"

# Optional tag to determine the bucket.
# If the write has a bucket in the query string then it will be kept in this tag name.
# This tag can be used in downstream outputs.
# The default value of nothing means it will be off and the database will not be recorded.
# # bucket_tag = ""
#
# ## Set one or more allowed client CA certificate file names to enable mutually authenticated TLS connections
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# ## Add service certificate and key
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# ## Optional token to accept for HTTP authentication.
# ## You probably want to make sure you have TLS configured above for this.
# # token = "some-long-shared-secret-token"

# # Intel Performance Monitoring Unit plugin exposes Intel PMU metrics available through Linux Perf subsystem
# # inputs.intel_pmu]
# # List of filesystem locations of JSON files that contain PMU event definitions.
# event_definitions = ["/var/cache/pmu/GenuineIntel-6-55-4-core.json", "/var/cache/pmu/GenuineIntel-6-55-4-uncore.json"]
#
# ## List of core events measurement entities. There can be more than one core_events sections.
# [[inputs.intel_pmu.core_events]]
# ## List of events to be counted. Event names shall match names from event_definitions files.
# # Single entry can contain name of the event (case insensitive) augmented with config options and perf modifiers.
# ## If absent, all core events from provided event_definitions are counted skipping unresolvable ones.
# # events = ["INST_RETIRED.ANY", "CPU_CLK_UNHALTED.THREAD_ANY:config1=0x4043200000000k"]
#
# ## Limits the counting of events to core numbers specified.
# ## If absent, events are counted on all cores.
# ## Single "0", multiple "0,1,2" and range "0-2" notation is supported for each array element.
# ## example: cores = ["0,2", "4", "12-16"]
# # cores = ["0"]
#
# # Indicator that plugin shall attempt to run core_events.events as a single perf group.
# # If absent or set to false, each event is counted individually. Defaults to false.
# ## This limits the number of events that can be measured to a maximum of available hardware counters per core.
# # Could vary depending on type of event, use of fixed counters.
# # perf_group = false
#
# # Optionally set a custom tag value that will be added to every measurement within this events group.
# # Can be applied to any group of events, unrelated to perf_group setting.
# events_tag = ""
#
# ## List of uncore event measurement entities. There can be more than one uncore_events sections.
# [[inputs.intel_pmu.uncore_events]]
List of events to be counted. Event names shall match names from event_definitions files. 
Single entry can contain name of the event (case insensitive) augmented with config options and perf modifiers. 
If absent, all uncore events from provided event_definitions are counted skipping unresolvable ones. 

```
events = ["UNC_CHA_CLOCKTICKS", "UNC_CHA_TOR_OCCUPANCY.IA_MISS"]
```

Limits the counting of events to specified sockets. 
If absent, events are counted on all sockets. 
Single "0", multiple "0,1" and range "0-1" notation is supported for each array element. 
Example: 
```
sockets = ["0-2"]
sockets = ["0"]
```

Indicator that plugin shall provide an aggregated value for multiple units of same type distributed in an uncore. 
If absent or set to false, events for each unit are exposed as separate metric. Defaults to false. 
```
aggregate_uncore_units = false
```

Optionally set a custom tag value that will be added to every measurement within this events group. 
```
events_tag = ""
```

Intel Resource Director Technology plugin 
```
[sinputs.intel_rdt]
```
Optionally set sampling interval to Nx100ms. 
This value is propagated to pqos tool. Interval format is defined by pqos itself. 
If not provided or provided 0, will be set to 10 = 10x100ms = 1s. 
```
sampling_interval = "10"
```

Optionally specify the path to pqos executable. 
If not provided, auto discovery will be performed. 
```
pqos_path = "/usr/local/bin/pqos"
```

Optionally specify if IPC and LLC_Misses metrics shouldn't be propagated. 
If not provided, default value is false. 
```
shortened_metrics = false
```

Specify the list of groups of CPU core(s) to be provided as pqos input. 
Mandatory if processes aren't set and forbidden if processes are specified. 
e.g. ["0-3", "4,5,6"] or ["1-3,4"] 
```
cores = ["0-3"]
```

Specify the list of processes for which Metrics will be collected. 
Mandatory if cores aren't set and forbidden if cores are specified. 
e.g. ["qemu", "pmd"] 
```
processes = ["process"]
```

Specify if the pqos process should be called with sudo. 
Mandatory if the telegraf process does not run as root.
# use_sudo = false

# Read JTI OpenConfig Telemetry from listed sensors
# [[inputs.jti_openconfig_telemetry]]
# ## List of device addresses to collect telemetry from
# servers = ["localhost:1883"]
#
# ## Authentication details. Username and password are must if device expects
# ## authentication. Client ID must be unique when connecting from multiple instances
# ## of telegraf to the same device
# username = "user"
# password = "pass"
# client_id = "telegraf"
#
# ## Frequency to get data
# sample_frequency = "1000ms"
#
# ## Sensors to subscribe for
# ## A identifier for each sensor can be provided in path by separating with space
# ## Else sensor path will be used as identifier
# ## When identifier is used, we can provide a list of space separated sensors.
# ## A single subscription will be created with all these sensors and data will
# ## be saved to measurement with this identifier name
# sensors = [
#   "interfaces/",
#   "collection /components/ /lldp",
# ]
#
# ## We allow specifying sensor group level reporting rate. To do this, specify the
# ## reporting rate in Duration at the beginning of sensor paths / collection
# ## name. For entries without reporting rate, we use configured sample frequency
# sensors = [
#   "1000ms customReporting /interfaces /lldp",
#   "2000ms collection /components",
#   "interfaces",
# ]
#
# ## Optional TLS Config
# # enable_tls = true
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Delay between retry attempts of failed RPC calls or streams. Defaults to 1000ms.
# ## Failed streams/calls will not be retried if 0 is provided
#retry_delay = "1000ms"
#
# ## To treat all string values as tags, set this to true
# str_as_tags = false

## Read metrics from Kafka topics
[[inputs.kafka_consumer]]
  Kafka brokers.
  brokers = ["localhost:9092"]

## Topics to consume.
  topics = ["telegraf"]

## When set this tag will be added to all metrics with the topic as the value.
  topic_tag = ""

## Optional Client id
  client_id = "Telegraf"

## Set the minimal supported Kafka version. Setting this enables the use of new
## Kafka features and APIs. Must be 0.10.2.0 or greater.
  version = ""

## Optional TLS Config
  tls_ca = "/etc/telegraf/ca.pem"
  tls_cert = "/etc/telegraf/cert.pem"
  tls_key = "/etc/telegraf/key.pem"
  Use TLS but skip chain & host verification
  insecure_skip_verify = false

## SASL authentication credentials. These settings should typically be used
## with TLS encryption enabled
  sasl_username = "kafka"
  sasl_password = "secret"

## Optional SASL:
  one of: OAUTHBEARER, PLAIN, SCRAM-SHA-256, SCRAM-SHA-512, GSSAPI
  (defaults to PLAIN)
  sasl_mechanism = ""

## used if sasl_mechanism is GSSAPI (experimental)
  sasl_gssapi_service_name = ""
  One of: KRB5_USER_AUTH and KRB5_KEYTAB_AUTH
  sasl_gssapi_auth_type = "KRB5_USER_AUTH"
  sasl_gssapi_kerberos_config_path = "/
  sasl_gssapi.realm = "realm"
# # sasl_gssapi_key_tab_path = ""
# # sasl_gssapi_disable_pafxfast = false
#
# ## used if sasl_mechanism is OAUTHBEARER (experimental)
# # sasl_access_token = ""
#
# ## SASL protocol version. When connecting to Azure EventHub set to 0.
# # sasl_version = 1
#
# # Disable Kafka metadata full fetch
# # metadata_full = false
#
# ## Name of the consumer group.
# # consumer_group = "telegraf_metrics_consumers"
#
# ## Compression codec represents the various compression codecs recognized by
# # Kafka in messages.
# # 0 : None
# # 1 : Gzip
# # 2 : Snappy
# # 3 : LZ4
# # 4 : ZSTD
# # compression_codec = 0
#
# ## Initial offset position; one of "oldest" or "newest".
# # offset = "oldest"
#
# ## Consumer group partition assignment strategy; one of "range", "roundrobin" or "sticky".
# # balance_strategy = "range"
#
# ## Maximum length of a message to consume, in bytes (default 0/unlimited);
# ## larger messages are dropped
# # max_message_len = 1000000
#
# ## Maximum messages to read from the broker that have not been written by an
# ## output. For best throughput set based on the number of metrics within
# ## each message and the size of the output's metric_batch_size.
# ##
# ## For example, if each message from the queue contains 10 metrics and the
# ## output metric_batch_size is 1000, setting this to 100 will ensure that a
# ## full batch is collected and the write is triggered immediately without
# ## waiting until the next flush_interval.
# # max_undelivered_messages = 1000
#
# ## Maximum amount of time the consumer should take to process messages. If
# ## the debug log prints messages from sarama about 'abandoning subscription
# ## to [topic] because consuming was taking too long', increase this value to
# ## longer than the time taken by the output plugin(s).
# # Note that the effective timeout could be between 'max_processing_time' and
# # '2 * max_processing_time'.
# # max_processing_time = "100ms"
# # Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# # Read metrics from Kafka topic(s)
# [[inputs.kafka_consumer_legacy]]
# # DEPRECATED: The 'kafka_consumer_legacy' plugin is deprecated in version 1.4.0, use
# 'inputs.kafka_consumer' instead, NOTE: 'kafka_consumer' only supports Kafka v0.8+
# # topic(s) to consume
# topics = ["telegraf"]
# # an array of Zookeeper connection strings
# zookeeper_peers = ["localhost:2181"]
# # Zookeeper Chroot
# zookeeper_chroot = ""
# # the name of the consumer group
# consumer_group = "telegraf_metrics_consumers"
# # Offset (must be either "oldest" or "newest")
# offset = "oldest"
# # Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
# # Maximum length of a message to consume, in bytes (default 0/unlimited);
# # larger messages are dropped
# max_message_len = 65536

# # Configuration for the AWS Kinesis input.
# [[inputs.kinesis_consumer]]
# # Amazon REGION of kinesis endpoint.
# region = "ap-southeast-2"
# # Amazon Credentials
## Credentials are loaded in the following order
## 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
## 2) Assumed credentials via STS if role_arn is specified
## 3) explicit credentials from 'access_key' and 'secret_key'
## 4) shared profile from 'profile'
## 5) environment variables
## 6) shared credentials file
## 7) EC2 Instance Profile

# access_key = ""
# secret_key = ""
# token = ""
# role_arn = ""
# web_identity_token_file = ""
# role_session_name = ""
# profile = ""
# shared_credential_file = ""

## Endpoint to make request against, the correct endpoint is automatically determined and this option should only be set if you wish to override the default.
## ex: endpoint_url = "http://localhost:8000"

## Kinesis StreamName must exist prior to starting telegraf.
streamname = "StreamName"

## Shard iterator type (only 'TRIM_HORIZON' and 'LATEST' currently supported)
shard_iterator_type = "TRIM_HORIZON"

## Maximum messages to read from the broker that have not been written by an output. For best throughput set based on the number of metrics within each message and the size of the output's metric_batch_size.

## For example, if each message from the queue contains 10 metrics and the output metric_batch_size is 1000, setting this to 100 will ensure that a full batch is collected and the write is triggered immediately without waiting until the next flush_interval.
max_undelivered_messages = 1000

## Data format to consume.
## Each data format has its own unique set of configuration options, read more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
data_format = "influx"

## The content encoding of the data from kinesis
## If you are processing a cloudwatch logs kinesis stream then set this to "gzip"
# as AWS compresses cloudwatch log data before it is sent to kinesis (aws
# also base64 encodes the zip byte data before pushing to the stream. The base64 decoding
# is done automatically by the golang sdk, as data is read from kinesis)
# #
# # content_encoding = "identity"
# #
# # Optional
# # Configuration for a dynamodb checkpoint
# [inputs.kinesis_consumer.checkpoint_dynamodb]
# # unique name for this consumer
# app_name = "default"
# table_name = "default"

# Listener capable of handling KNX bus messages provided through a KNX-IP Interface.
# [inputs.knx_listener]
# # Type of KNX-IP interface.
# # Can be either "tunnel" or "router".
# # service_type = "tunnel"
#
# # Address of the KNX-IP interface.
# service_address = "localhost:3671"
#
# # Measurement definition(s)
# # [inputs.knx_listener.measurement]
# # # Name of the measurement
# # # name = "temperature"
# # # Datapoint-Type (DPT) of the KNX messages
# # # dpt = "9.001"
# # # List of Group-Addresses (GAs) assigned to the measurement
# # # addresses = ["5/5/1"]
#
# # # [inputs.knx_listener.measurement]
# # # name = "illumination"
# # # dpt = "9.004"
# # # addresses = ["5/5/3"]

# Read metrics off Arista LANZ, via socket
# [inputs.lanz]
# # URL to Arista LANZ endpoint
# servers = [ tcp://127.0.0.1:50001 ]

# Stream and parse log file(s).
# [inputs.logparser]
# DEPRECATED: The 'logparser' plugin is deprecated in version 1.15.0, use 'inputs.tail' with 'grok' data format instead.

# Log files to parse.
# These accept standard unix glob matching rules, but with the addition of
# ** as a "super asterisk". ie:
# /var/log/**.log -> recursively find all .log files in /var/log
# /var/log/*/*.log -> find all .log files with a parent dir in /var/log
# /var/log/apache.log -> only tail the apache log file
# files = ['"/var/log/apache/access.log"]
#
# Read files that currently exist from the beginning. Files that are created
# while telegraf is running (and that match the "files" globs) will always
# be read from the beginning.
# from_beginning = false
#
# Method used to watch for file updates. Can be either "inotify" or "poll".
# watch_method = "inotify"
#
# Parse logstash-style "grok" patterns:
# [inputs.logparser.grok]
# This is a list of patterns to check the given log file(s) for.
# Note that adding patterns here increases processing time. The most
# efficient configuration is to have one pattern per logparser.
# Other common built-in patterns are:
# %COMMON_LOG_FORMAT{} (plain apache & nginx access logs)
# %COMBINED_LOG_FORMAT{} (access logs + referrer & agent)
# patterns = ["%COMMON_LOG_FORMAT{}"]
#
# Name of the outputted measurement name.
# measurement = "apache_access_log"
#
# Full path(s) to custom pattern files.
# custom_pattern_files = []
#
# Custom patterns can also be defined here. Put one pattern per line.
# custom_patterns = 
# ""
# ""
# Timezone allows you to provide an override for timestamps that
# don't already include an offset
# e.g. 04/06/2016 12:41:45 data one two 5.43µs
# Default: "" which renders UTC
# Options are as follows:
# 1. Local -- interpret based on machine localtime
# 2. "Canada/Eastern" -- Unix TZ values like those found in
# 3. UTC -- or blank/unspecified, will return timestamp in UTC
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# timezone = "Canada/Eastern"
#
### When set to "disable", timestamp will not incremented if there is a
### duplicate.
# unique_timestamp = "auto"

# Read metrics from MQTT topic(s)
[[inputs.mqtt_consumer]]

# Broker URLs for the MQTT server or cluster. To connect to multiple
# clusters or standalone servers, use a separate plugin instance.
# example: servers = ["tcp://localhost:1883"]
## servers = ["ssl://localhost:1883"]
## servers = ["ws://localhost:1883"]
## servers = ["tcp://127.0.0.1:1883"]

## Topics that will be subscribed to.
# topics = [
#   "telegraf/host01/cpu",
#   "telegraf/*/mem",
#   "sensors/#",
# ]
# topic_fields = "/\/_\_\_/temperature"

## The message topic will be stored in a tag specified by this value. If set
to the empty string no topic tag will be created.
# topic_tag = "topic"

## QoS policy for messages
##   0 = at most once
##   1 = at least once
##   2 = exactly once
##
## When using a QoS of 1 or 2, you should enable persistent_session to allow
## resuming unacknowledged messages.
# qos = 0

## Connection timeout for initial connection in seconds
# connection_timeout = "30s"

## Maximum messages to read from the broker that have not been written by an
## output. For best throughput set based on the number of metrics within
## each message and the size of the output's metric_batch_size.
# max_undelivered_messages = 1000

## Persistent session disables clearing of the client session on connection.
## In order for this option to work you must also set client_id to identify
## the client. To receive messages that arrived while the client is offline,
## also set the qos option to 1 or 2 and don't forget to also set the QoS when
# # publishing.
# persistent_session = false
# If unset, a random client ID will be generated.
# client_id = ""
# Username and password to connect MQTT server.
# username = "telegraf"
# password = "metricsmetricsmetricsmetrics"
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
# Data format to consume.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
# Enable extracting tag values from MQTT topics
# _ denotes an ignored entry in the topic path
# [[inputs.mqtt_consumer.topic_parsing]]
# topic = ""
# measurement = ""
# tags = ""
# fields = ""
# [[inputs.mqtt_consumer.topic_parsing.types]]
#
# Read metrics from NATS subject(s)
# [[inputs.nats_consumer]]
# urls of NATS servers
# servers = ["nats://localhost:4222"]
# subject(s) to consume
# subjects = ["telegraf"]
# name a queue group
# queue_group = "telegraf_consumers"
# Optional credentials
# username = ""
# password = ""
# Optional NATS 2.0 and NATS NGS compatible user credentials
# credentials = "/etc/telegraf/nats.creds"
# # Use Transport Layer Security
# secure = false

### Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

### Sets the limits for pending msgs and bytes for each subscription
### These shouldn't need to be adjusted except in very high throughput scenarios
# pending_message_limit = 65536
# pending_bytes_limit = 67108864

### Maximum messages to read from the broker that have not been written by an
### output. For best throughput set based on the number of metrics within
### each message and the size of the output's metric_batch_size.
### For example, if each message from the queue contains 10 metrics and the
### output metric_batch_size is 1000, setting this to 100 will ensure that a
### full batch is collected and the write is triggered immediately without
### waiting until the next flush_interval.
# max_undelivered_messages = 1000

### Data format to consume.
### Each data format has its own unique set of configuration options, read
### more about them here:
### https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

### Read NSQ topic for metrics.
[[inputs.nsq_consumer]]
## Server option still works but is deprecated, we just prepend it to the nsqd array.
# server = "localhost:4150"

### An array representing the NSQD TCP HTTP Endpoints
# nsqd = ["localhost:4150"]

### An array representing the NSQLookupd HTTP Endpoints
# nsqlookupd = ["localhost:4161"]
# topic = "telegraf"
# channel = "consumer"
# max_in_flight = 100

### Maximum messages to read from the broker that have not been written by an
### output. For best throughput set based on the number of metrics within
### each message and the size of the output's metric_batch_size.
# #
# # For example, if each message from the queue contains 10 metrics and the
# # output metric_batch_size is 1000, setting this to 100 will ensure that a
# # full batch is collected and the write is triggered immediately without
# # waiting until the next flush_interval.
# # max_undelivered_messages = 1000
#
# # Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"

# # Receive OpenTelemetry traces, metrics, and logs over gRPC
# [[inputs.opentelemetry]]
# # Override the default (0.0.0.0:4317) destination OpenTelemetry gRPC service
# # address:port
# # service_address = "0.0.0.0:4317"
#
# # Override the default (5s) new connection timeout
# # timeout = "5s"
#
# # Override the default (prometheus-v1) metrics schema.
# # Supports: "prometheus-v1", "prometheus-v2"
# # For more information about the alternatives, read the Prometheus input
# # plugin notes.
# # metrics_schema = "prometheus-v1"
#
# # Optional TLS Config.
# # For advanced options: https://github.com/influxdata/telegraf/blob/v1.18.3/docs/TLS.md
# #
# # Set one or more allowed client CA certificate file names to
# # enable mutually authenticated TLS connections.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
# # Add service certificate and key.
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"

# # Read metrics from one or many pgbouncer servers
# [[inputs.pgbouncer]]
# # specify address via a url matching:
# # postgres://[pqgotest[:password]]@localhost[/dbname]?
# # ?sslmode=[disable|verify-ca|verify-full]
# # or a simple string:
# # host=localhost user=pqgotest password=... sslmode=... dbname=app_production
# #
address = "host=localhost user=pgbouncer sslmode=disable"

# Read metrics from one or many postgresql servers
# [[inputs.postgresql]]
# ## specify address via a url matching:
# ## postgres://[pggotest[:password]]@localhost[/dbname]\
# ## ?sslmode=[disable|verify-ca|verify-full]
# ## or a simple string:
# ## host=localhost user=pqgotest password=... sslmode=... dbname=app_production
# ## All connection parameters are optional.
# ## Without the dbname parameter, the driver will default to a database
# ## with the same name as the user. This dbname is just for instantiating a
# ## connection with the server and doesn't restrict the databases we are trying
# ## to grab metrics for.
# ##
# ## connection configuration.
# ## max_lifetime - specify the maximum lifetime of a connection.
# ## default is forever (0s)
# max_lifetime = "0s"
# ## A list of databases to explicitly ignore. If not specified, metrics for all
# ## databases are gathered. Do NOT use with the 'databases' option.
# ignored_databases = ["postgres", "template0", "template1"]
# ## A list of databases to pull metrics about. If not specified, metrics for all
# ## databases are gathered. Do NOT use with the 'ignored_databases' option.
# databases = ["app_production", "testing"]

## Read metrics from one or many postgresql servers
# [[inputs.postgresql_extensible]]
# ## specify address via a url matching:
# ## postgres://[pggotest[:password]]@localhost[/dbname]\
# ## ?sslmode=[disable|verify-ca|verify-full]
# ## or a simple string:
# ## host=localhost user=pqgotest password=... sslmode=... dbname=app_production
# ## All connection parameters are optional.
# All connection parameters are optional.
# Without the dbname parameter, the driver will default to a database
# with the same name as the user. This dbname is just for instantiating a
# connection with the server and doesn't restrict the databases we are trying
# to grab metrics for.
#
# address = "host=localhost user=postgres sslmode=disable"
#
# connection configuration.
# max_lifetime - specify the maximum lifetime of a connection.
# default is forever (0s)
# max_lifetime = "0s"
#
# A list of databases to pull metrics about. If not specified, metrics for all
# databases are gathered.
# databases = ['app_production', 'testing']
#
# A custom name for the database that will be used as the "server" tag in the
# measurement output. If not specified, a default one generated from
# the connection address is used.
# outputaddress = "db01"
#
# Define the toml config where the sql queries are stored
# New queries can be added, if the withdbname is set to true and there is no
# databases defined in the 'databases field', the sql query is ended by a
# 'is not null' in order to make the query succeed.
# Example :
# The sqlquery : "SELECT * FROM pg_stat_database where datname" become
# "SELECT * FROM pg_stat_database where datname IN ('postgres', 'pgbench')"
# because the databases variable was set to ["postgres", "pgbench"] and the
# withdbname was true. Be careful that if the withdbname is set to false you
# don't have to define the where clause (aka with the dbname) the tagvalue
# field is used to define custom tags (separated by commas)
# The optional "measurement" value can be used to override the default
# output measurement name ("postgresql").
# The script option can be used to specify the .sql file path.
# If script and sqlquery options specified at same time, sqlquery will be used
# the tagvalue field is used to define custom tags (separated by comas).
# the query is expected to return columns which match the names of the
# defined tags. The values in these columns must be of a string-type,
# a number-type or a blob-type.
# The timestamp field is used to override the data points timestamp value. By
# default, all rows inserted with current time. By setting a timestamp column,
# the row will be inserted with that column's value.
# ## Structure:
# ## [[inputs.postgresql_extensible.query]]
# ## sqlquery string
# ## version string
# ## withdbname boolean
# ## tagvalue string (comma separated)
# ## measurement string
# ## timestamp string
# ## [[inputs.postgresql_extensible.query]]
# sqlquery="SELECT * FROM pg_stat_database"
# version=901
# withdbname=false
# tagvalue=""
# measurement=""
# ## [[inputs.postgresql_extensible.query]]
# sqlquery="SELECT * FROM pg_stat_bgwriter"
# version=901
# withdbname=false
# tagvalue="postgresql.stats"

# ## Read metrics from one or many prometheus clients
# ## [[inputs.prometheus]]
# ## An array of urls to scrape metrics from.
# urls = ["http://localhost:9100/metrics"]
# # Metric version controls the mapping from Prometheus metrics into
# # Telegraf metrics. When using the prometheus_client output, use the same
# # value in both plugins to ensure metrics are round-tripped without
# # modification.
# #
# # example: metric_version = 1;
# # metric_version = 2; recommended version
# # metric_version = 1
# #
# # Url tag name (tag containing scrapped url. optional, default is "url")
# url_tag = "url"
# # Whether the timestamp of the scraped metrics will be ignored.
# # If set to true, the gather time will be used.
# ignore_timestamp = false
# # An array of Kubernetes services to scrape metrics from.
# # kubernetes_services = ["http://my-service-dns.my-namespace:9100/metrics"]
# # Kubernetes config file to create client from.
# kube_config = "/path/to/kubernetes.config"
# ## Scrape Kubernetes pods for the following prometheus annotations:
# ## - prometheus.io/scrape: Enable scraping for this pod
# ## - prometheus.io/scheme: If the metrics endpoint is secured then you will need to
# ##   set this to 'https' & most likely set the tls config.
# ## - prometheus.io/path: If the metrics path is not /metrics, define it with this annotation.
# ## - prometheus.io/port: If port is not 9102 use this annotation
# # monitor_kubernetes_pods = true
# ## Get the list of pods to scrape with either the scope of
# ## - cluster: the Kubernetes watch api (default, no need to specify)
# ## - node: the local cadvisor api; for scalability. Note that the config node_ip or the environment variable
# NODE_IP must be set to the host IP.
# # pod_scrape_scope = "cluster"
# ## Only for node scrape scope: node IP of the node that telegraf is running on.
# ## Either this config or the environment variable NODE_IP must be set.
# # node_ip = "10.180.1.1"
# ## Only for node scrape scope: interval in seconds for how often to get updated pod list for scraping.
# ## Default is 60 seconds.
# # pod_scrape_interval = 60
# ## Restricts Kubernetes monitoring to a single namespace
# ## ex: monitor_kubernetes_pods_namespace = "default"
# # monitor_kubernetes_pods_namespace = ""
# ## label selector to target pods which have the label
# # label_selector = "env=dev,app=nginx"
# ## field selector to target pods
# # eg. To scrape pods on a specific node
# # node_selector = "spec.nodeName=$HOSTNAME"
# #
# ## Scrape Services available in Consul Catalog
# # [inputs.prometheus.consul]
# #   enabled = true
# #   agent = "http://localhost:8500"
# #   query_interval = "5m"
# #
# ## [inputs.prometheus.consul.query]
# #   name = "a service name"
# #   tag = "a service tag"
# #   url = 'http://{{if ne .ServiceAddress ""}}{{.ServiceAddress}}{{else}}{{.Address}}{{end}}:{{.ServicePort}}/{{with .ServiceMeta.metrics_path}}{{.}}{{else}}metrics{{end}}'
# #   [inputs.prometheus.consul.query.tags]
# #     host = "{{.Node}}"
# #
# ## Use bearer token for authorization. ('bearer_token' takes priority)
# # bearer_token = "/path/to/bearer/token"
# ## OR
# # bearer_token_string = "abc_123"
# #
# ## HTTP Basic Authentication username and password. ('bearer_token' and
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```
# # 'bearer_token_string' take priority
# # username = ""
# # password = ""
#
# # Specify timeout duration for slower prometheus clients (default is 3s)
# # response_timeout = "3s"
#
# # Optional TLS Config
# # tls_ca = /path/to/cafile
# # tls_cert = /path/to/certfile
# # tls_key = /path/to/keyfile
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # RAS plugin exposes counter metrics for Machine Check Errors provided by RASDaemon (sqlite3 output is required).
# [[inputs.ras]]
# # Optional path to RASDaemon sqlite3 database.
# # Default: /var/lib/rasdemon/ras-mc_event.db
# # db_path = ""

# # Riemann protobuf listener.
# [[inputs.riemann_listener]]
# # URL to listen on.
# # Default is "tcp://:5555"
# # service_address = "tcp://:8094"
# # service_address = "tcp://127.0.0.1:http"
# # service_address = "tcp4://:8094"
# # service_address = "tcp6://:8094"
# # service_address = "tcp6://[2001:db8::1]:8094"
# #
# # Maximum number of concurrent connections.
# # 0 (default) is unlimited.
# # max_connections = 1024
# # Read timeout.
# # 0 (default) is unlimited.
# # read_timeout = "30s"
# # Optional TLS configuration.
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Enables client authentication if set.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
# # Maximum socket buffer size (in bytes when no unit specified).
# # read_buffer_size = "64KiB"
# # Period between keep alive probes.
# # 0 disables keep alive probes.
```
# Defaults to the OS configuration.
# keep_alive_period = "5m"

## SFlow V5 Protocol Listener
[[inputs.sflow]]
# Address to listen for sFlow packets.
# example: service_address = "udp://6343"
# service_address = "udp4://6343"
# service_address = "udp6://6343"
# service_address = "udp://6343"

## Set the size of the operating system's receive buffer.
# example: read_buffer_size = "64KiB"
# read_buffer_size = ""

## Receive SNMP traps
[[inputs.snmp_trap]]
# Transport, local address, and port to listen on. Transport must
# be "udp://". Omit local address to listen on all interfaces.
# example: "udp://127.0.0.1:1234"

## Special permissions may be required to listen on a port less than
## 1024. See README.md for details
#
# service_address = "udp://162"

## Path to mib files
# path = ["/usr/share/snmp/mibs"]

## Deprecated in 1.20.0; no longer running snmptranslate
## Timeout running snmptranslate command
# timeout = "5s"

## Snmp version, defaults to 2c
# version = "2c"

## SNMPv3 authentication and encryption options.
#
## Security Name.
# sec_name = "myuser"
# Authentication protocol; one of "MD5", "SHA" or "".
# auth_protocol = "MD5"
# Authentication password.
# auth_password = "pass"
# Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".
# sec_level = "authNoPriv"

## Privacy protocol used for encrypted messages; one of "DES", "AES", "AES192", "AES192C", "AES256", "AES256C" or "".
# # priv_protocol = ""
# # Privacy password used for encrypted messages.
# # priv_password = ""

## Generic socket listener capable of handling multiple socket types.
# [[inputs.socket_listener]]
# # URL to listen on
# # service_address = "tcp://:8094"
# # service_address = "tcp://127.0.0.1:http"
# # service_address = "tcp4://:8094"
# # service_address = "tcp6://:8094"
# # service_address = "tcp6://[2001:db8::1]:8094"
# # service_address = "udp://:8094"
# # service_address = "udp4://:8094"
# # service_address = "udp6://:8094"
# # service_address = "unix:///tmp/telegraf.sock"
# # service_address = "unixgram:///tmp/telegraf.sock"

# # Change the file mode bits on unix sockets. These permissions may not be
# # respected by some platforms, to safely restrict write permissions it is best
# # to place the socket into a directory that has previously been created
# # with the desired permissions.
# # ex: socket_mode = "777"
# # socket_mode = ""

# # Maximum number of concurrent connections.
# # Only applies to stream sockets (e.g. TCP).
# # 0 (default) is unlimited.
# # max_connections = 1024
#
# # Read timeout.
# # Only applies to stream sockets (e.g. TCP).
# # 0 (default) is unlimited.
# # read_timeout = "30s"
#
# # Optional TLS configuration.
# # Only applies to stream sockets (e.g. TCP).
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Enables client authentication if set.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# # Maximum socket buffer size (in bytes when no unit specified).
# # For stream sockets, once the buffer fills up, the sender will start backing up.
# # For datagram sockets, once the buffer fills up, metrics will start dropping.
# # Defaults to the OS default.
# # read_buffer_size = "64KiB"
# Period between keep alive probes.
# Only applies to TCP sockets.
# 0 disables keep alive probes.
# Defaults to the OS configuration.
# keep_alive_period = "5m"
#
# Data format to consume.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# Content encoding for message payloads, can be set to "gzip" to or
# "identity" to apply no encoding.
# content_encoding = "identity"

## Read metrics from SQL queries
[[inputs.sql]]

## Database Driver
## See https://github.com/influxdata/telegraf/blob/master/docs/SQL_DRIVERS_INPUT.md for
## a list of supported drivers.
# driver = "mysql"
#
## Data source name for connecting
## The syntax and supported options depends on selected driver.
# dsn = "username:password@mysqlserver:3307/dbname?param=value"
#
## Timeout for any operation
## Note that the timeout for queries is per query not per gather.
# timeout = "5s"
#
## Connection time limits
## By default the maximum idle time and maximum lifetime of a connection is unlimited, i.e. the connections
## will not be closed automatically. If you specify a positive time, the connections will be closed after
## idleing or existing for at least that amount of time, respectively.
# connection_max_idle_time = "0s"
# connection_max_life_time = "0s"
#
## Connection count limits
## By default the number of open connections is not limited and the number of maximum idle connections
## will be inferred from the number of queries specified. If you specify a positive number for any of the
## two options, connections will be closed when reaching the specified limit. The number of idle connections
## will be clipped to the maximum number of connections limit if any.
# connection_max_open = 0
# connection_max_idle = auto
#
# [inputs.sql.query]
# ## Query to perform on the server
# query="SELECT user,state,latency,score FROM Scoreboard WHERE application > 0"
# ## Alternatively to specifying the query directly you can select a file here containing the SQL query.
# query_script = "/path/to/sql/script.sql"
#
# ## Name of the measurement
# In case both measurement and 'measurement_col' are given, the latter takes precedence.
# measurement = "sql"
#
# ## Column name containing the name of the measurement
# If given, this will take precedence over the 'measurement' setting. In case a query result
does not contain the specified column, we fall-back to the 'measurement' setting.
# measurement_column = ""
#
# ## Column name containing the time of the measurement
# If omitted, the time of the query will be used.
# time_column = ""
#
# ## Format of the time contained in 'time_col'
# The time must be 'unix', 'unix_ms', 'unix_us', 'unix_ns', or a golang time format.
# See https://golang.org/pkg/time/#Time.Format for details.
# time_format = "unix"
#
# ## Column names containing tags
# An empty include list will reject all columns and an empty exclude list will not exclude any column.
# I.e. by default no columns will be returned as tag and the tags are empty.
# tag_columns_include = []
# tag_columns_exclude = []
#
# ## Column names containing fields (explicit types)
# Convert the given columns to the corresponding type. Explicit type conversions take precedence over
# the automatic (driver-based) conversion below.
# NOTE: Columns should not be specified for multiple types or the resulting type is undefined.
# field_columns_float = []
# field_columns_int = []
# field_columns_uint = []
# field_columns_bool = []
# field_columns_string = []
#
# ## Column names containing fields (automatic types)
# An empty include list is equivalent to ['*'] and all returned columns will be accepted. An empty
# exclude list will not exclude any column. I.e. by default all columns will be returned as fields.
# NOTE: We rely on the database driver to perform automatic datatype conversion.
# field_columns_include = []
# field_columns_exclude = []
## Read metrics from Microsoft SQL Server

```yaml
[[inputs.sqlserver]]

### Specify instances to monitor with a list of connection strings.

### By default, the host is localhost, listening on default port, TCP 1433.

### For Windows, the user is the currently running AD user (SSO).

### See https://github.com/denisenkom/go-mssqldb for detailed connection parameters, in particular, its connections can be created like so:

```text
servers = [
  "Server=192.168.1.10;Port=1433;User Id=<user>;Password=<pw>;app name=telegraf;log=1;",
]
```

### Authentication method

### Valid methods: "connection_string", "AAD"

```text
auth_method = "connection_string"
```

### "database_type" enables a specific set of queries depending on the database type. If specified, it replaces `azuredb = true/false` and `query_version = 2`

### In the config file, the sql server plugin section should be repeated each with a set of servers for a specific database type.

### Possible values for database_type are - "SQLServer" or "AzureSQLDB" or "AzureSQLManagedInstance" or "AzureSQLPool"

```text
database_type = "SQLServer"
```

### A list of queries to include. If not specified, all the below listed queries are used.

```text
include_query = []
```

### A list of queries to explicitly ignore.

```text
exclude_query = ["SQLServerAvailabilityReplicaStates", "SQLServerDatabaseReplicaStates"]
```

### Queries enabled by default for database_type = "SQLServer" are -

```text
SQLServerPerformanceCounters, SQLServerWaitStatsCategorized, SQLServerDatabaseIO, SQLServerProperties, SQLServerMemoryClerks, SQLServerSchedulers, SQLServerRequests, SQLServerVolumeSpace, SQLServerCpu, SQLServerAvailabilityReplicaStates, SQLServerDatabaseReplicaStates
```

### Queries enabled by default for database_type = "AzureSQLDB" are -

```text
```

### Queries enabled by default for database_type = "AzureSQLManagedInstance" are -

```text
```
## Queries enabled by default for database_type = "AzureSQLPool" are -

## Following are old config settings
You may use them only if you are using the earlier flavor of queries, however it is recommended to use the new mechanism of identifying the database_type there by use it's corresponding queries

## Optional parameter, setting this to 2 will use a new version
## of the collection queries that break compatibility with the original ## dashboards.
### Version 2 - is compatible from SQL Server 2012 and later versions and also for SQL Azure DB
## query_version = 2

## If you are using AzureDB, setting this to true will gather resource utilization metrics
## azuredb = false

## Statsd UDP/TCP Server
### [inputs.statsd]
## Protocol, must be "tcp", "udp", "udp4" or "udp6" (default=udp)
## protocol = "udp"

## MaxTCPConnection - applicable when protocol is set to tcp (default=250)
## max_tcp_connections = 250

## Enable TCP keep alive probes (default=false)
## tcp_keep_alive = false

## Specifies the keep-alive period for an active network connection.
## Only applies to TCP sockets and will be ignored if tcp_keep_alive is false.
## Defaults to the OS configuration.
## tcp_keep_alive_period = "2h"

## Address and port to host UDP listener on
## service_address = ":8125"

## The following configuration options control when telegraf clears it's cache
## of previous values. If set to false, then telegraf will only clear it's cache when the daemon is restarted.
## Reset gauges every interval (default=true)
## delete_gauges = true
## Reset counters every interval (default=true)
## delete_counters = true
## Reset sets every interval (default=true)
```yaml
delete_sets = true
```

## Reset timings & histograms every interval (default=true)
```yaml
delete_timings = true
```

## Percentiles to calculate for timing & histogram stats
```yaml
percentiles = [50.0, 90.0, 99.0, 99.9, 99.95, 100.0]
```

## separator to use between elements of a statsd metric
```yaml
metric_separator = "_"
```

## Parses tags in the datadog statsd format
```yaml
parse_data_dog_tags = false
```

## Parses datadog extensions to the statsd format
```yaml
datadog_extensions = false
```

## Parses distributions metric as specified in the datadog statsd format
```yaml
datadog_distributions = false
```

## Statsd data translation templates, more info can be read here:
```yaml
# templates = [
#     "cpu.* measurement*"
# ]
```

## Number of UDP messages allowed to queue up, once filled, the statsd server will start dropping packets
```yaml
allowed_pending_messages = 10000
```

## Number of timing/histogram values to track per-measurement in the calculation of percentiles. Raising this limit increases the accuracy of percentiles but also increases the memory usage and cpu time.
```yaml
percentile_limit = 1000
```

## Max duration (TTL) for each metric to stay cached/reported without being updated.
```yaml
max_ttl = "1000h"
```

## Suricata stats and alerts plugin
```yaml
[[inputs.suricata]]
```

## Data sink for Suricata stats and alerts logs
```yaml
source = "/var/run/suricata-stats.sock"
```
# # Delimiter for flattening field keys, e.g. subitem "alert" of "detect"
# # becomes "detect_alert" when delimiter is ".".
# delimiter = "."
#
# ## Detect alert logs
# # alerts = false

## Accepts syslog messages following RFC5424 format with transports as per RFC5426, RFC5425, or RFC6587

# [[inputs.syslog]]
# ### Specify an ip or hostname with port - eg., tcp://localhost:6514, tcp://10.0.0.1:6514
# ### Protocol, address and port to host the syslog receiver.
# ### If no host is specified, then localhost is used.
# ### If no port is specified, 6514 is used (RFC5425#section-4.1).
# server = "tcp://:6514"
#
# ## TLS Config
# # tls_allowed_cacerts = ["/etc/telegraf/ca.pem"]
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# ## Period between keep alive probes.
# # 0 disables keep alive probes.
# # Defaults to the OS configuration.
# # Only applies to stream sockets (e.g. TCP).
# # keep_alive_period = "5m"
#
# ## Maximum number of concurrent connections (default = 0).
# # 0 means unlimited.
# # Only applies to stream sockets (e.g. TCP).
# # max_connections = 1024
#
# ## Read timeout is the maximum time allowed for reading a single message (default = 5s).
# # 0 means unlimited.
# # read_timeout = "5s"
#
# ## The framing technique with which it is expected that messages are transported (default = "octet-counting").
# # Whether the messages come using the octet-counting (RFC5425#section-4.3.1, RFC6587#section-3.4.1),
# # or the non-transparent framing technique (RFC6587#section-3.4.2).
# # Must be one of "octet-counting", "non-transparent".
# # framing = "octet-counting"
#
# ## The trailer to be expected in case of non-transparent framing (default = "LF").
# # Must be one of "LF", or "NUL".
# # trailer = "LF"
#
# ## Whether to parse in best effort mode or not (default = false).
# # By default best effort parsing is off.
# best_effort = false
#
# The RFC standard to use for message parsing
# By default RFC5424 is used. RFC3164 only supports UDP transport (no streaming support)
# Must be one of "RFC5424", or "RFC3164".
# syslog_standard = "RFC5424"
#
# Character to prepend to SD-PARAMs (default = ".").
# A syslog message can contain multiple parameters and multiple identifiers within structured data section.
# Eg., [id1 name1="val1" name2="val2"][id2 name1="val1" nameA="valA"]
# For each combination a field is created.
# Its name is created concatenating identifier, sdparam_separator, and parameter name.
# sdparam_separator = "."

# Parse the new lines appended to a file
# [inputs.tail]
# File names or a pattern to tail.
# These accept standard unix glob matching rules, but with the addition of
# ** as a "super asterisk". ie:
# "/var/log/**.log" -> recursively find all .log files in /var/log
# "/var/log/*/log" -> find all .log files with a parent dir in /var/log
# "/var/log/apache.log" -> just tail the apache log file
# "/var/log/log[1-2]*" -> tail files without 1-2
# "/var/log/log[^1-2]*" -> identical behavior as above
# See https://github.com/gobwasc/glob for more examples
#
# files = ["/var/mymetrics.out"]
#
# Read file from beginning.
# from_beginning = false
#
# Whether file is a named pipe
# pipe = false
#
# Method used to watch for file updates. Can be either "inotify" or "poll".
# watch_method = "inotify"
#
# Maximum lines of the file to process that have not yet be written by the
# output. For best throughput set based on the number of metrics on each
# line and the size of the output's metric_batch_size.
# max_undelivered_lines = 1000
#
# Character encoding to use when interpreting the file contents. Invalid
# characters are replaced using the unicode replacement character. When set
# to the empty string the data is not decoded to text.
# character_encoding = "utf-8"
# character_encoding = "utf-16le"
character_encoding = "utf-16be"
character_encoding = ""

Data format to consume.
Each data format has its own unique set of configuration options, read
more about them here:
https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md

data_format = "influx"

Set the tag that will contain the path of the tailed file. If you don't want this tag, set it to an empty string.
path_tag = "path"

multiline parser/codec

The pattern should be a regexp which matches what you believe to be an indicator that the field is part of an event consisting of multiple lines of log data.
pattern = "^s"

This field must be either "previous" or "next".
If a line matches the pattern, "previous" indicates that it belongs to the previous line,
whereas "next" indicates that the line belongs to the next one.
match_which_line = "previous"

The invert_match field can be true or false (defaults to false).
If true, a message not matching the pattern will constitute a match of the multiline filter and the what will be applied. (vice-versa is also true)
invert_match = false

After the specified timeout, this plugin sends a multiline event even if no new pattern is found to start a new event. The default timeout is 5s.
timeout = 5s

Generic TCP listener
[[inputs.tcp_listener]]
DEPRECATED: The 'tcp_listener' plugin is deprecated in version 1.3.0, use 'inputs.socket_listener' instead.
DEPRECATED: the TCP listener plugin has been deprecated in favor of the socket_listener plugin
see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/socket_listener

Generic UDP listener
[[inputs.udp_listener]]
DEPRECATED: The 'udp_listener' plugin is deprecated in version 1.3.0, use 'inputs.socket_listener' instead.
DEPRECATED: the TCP listener plugin has been deprecated in favor of the socket_listener plugin
## Read metrics from VMware vCenter

```yaml
[[inputs.vsphere]]
# List of vCenter URLs to be monitored. These three lines must be uncommented
# and edited for the plugin to work.
# vcenters = [ "https://vcenter.local/sdk" ]
# username = "user@corp.local"
# password = "secret"

### VMs

### Typical VM metrics (if omitted or empty, all metrics are collected)

# # [vm_include = [ "/*/vm/**"] # Inventory path to VMs to collect (by default all are collected)
# # [vm_exclude = [] # Inventory paths to exclude

# [vm_metric_include = ["cpu.demand.average", "cpu.idle.summation", "cpu.latency.average", "cpu.readiness.average", "cpu.ready.summation", "cpu.run.summation", "cpu.usagemhz.average", "cpu.used.summation", "cpu.wait.summation", "mem.active.average", "mem.granted.average", "mem.latency.average", "mem.swap.in.average", "mem.swapinRate.average", "mem.swapout.average", "mem.swapoutRate.average", "mem.usage.average", "mem.vmmemctl.average", "net.bytesRx.average", "net.bytesTx.average", "net.droppedRx.summation", "net.droppedTx.summation", "net.usage.average", "power.power.average", "virtualDisk.numberReadAveraged.average", "virtualDisk.numberWriteAveraged.average", "virtualDisk.read.average", "virtualDisk.readOIO.latest", "virtualDisk.throughput.usage.average", "virtualDisk.totalReadLatency.average", "virtualDisk.totalWriteLatency.average", "virtualDisk.write.average"]
```
# "virtualDisk.writeOIO.latest",
# "sys.uptime.latest",
# ]
# # vnm_metric_exclude = [] ## Nothing is excluded by default
# # vrn_instances = true ## true by default
#
# ## Hosts
# ## ## Typical host metrics (if omitted or empty, all metrics are collected)
# # host_include = [ "/*/host/**"] # Inventory path to hosts to collect (by default all are collected)
# # host_exclude [] # Inventory paths to exclude
# host_metric_include = [
#   "cpu.coreUtilization.average",
#   "cpu.costop.summation",
#   "cpu.demand.average",
#   "cpu.idle.summation",
#   "cpu.latency.average",
#   "cpu.readiness.average",
#   "cpu.ready.summation",
#   "cpu.swapwait.summation",
#   "cpu.usage.average",
#   "cpu.usagemhz.average",
#   "cpu.used.summation",
#   "cpu.utilization.average",
#   "cpu.wait.summation",
#   "disk.deviceReadLatency.average",
#   "disk.deviceWriteLatency.average",
#   "disk.kernelReadLatency.average",
#   "disk.kernelWriteLatency.average",
#   "disk.numberReadAveraged.average",
#   "disk.numberWriteAveraged.average",
#   "disk.read.average",
#   "disk.totalReadLatency.average",
#   "disk.totalWriteLatency.average",
#   "disk.write.average",
#   "mem.active.average",
#   "mem.latency.average",
#   "mem.state.latest",
#   "mem.swapin.average",
#   "mem.swapinRate.average",
#   "mem.swapout.average",
#   "mem.swapoutRate.average",
#   "mem.totalCapacity.average",
#   "mem.usage.average",
#   "mem.vmmemctl.average",
#   "net.bytesRx.average",
#   "net.bytesTx.average",
#   "net.droppedRx.summation",
#   "net.droppedTx.summation",
# "net.errorsRx.summation",
# "net.errorsTx.summation",
# "net.usage.average",
# "power.power.average",
# "storageAdapter.numberReadAveraged.average",
# "storageAdapter.numberWriteAveraged.average",
# "storageAdapter.read.average",
# "storageAdapter.write.average",
# "sys.uptime.latest",
# ]
# ## Collect IP addresses? Valid values are "ipv4" and "ipv6"
# ip_addresses = ["ipv6", "ipv4"]
#
# host_metric_exclude = [] ## Nothing excluded by default
# host_instances = true ## true by default
#
# ## Clusters
# # cluster_include = ["/*/host/**"] # Inventory path to clusters to collect (by default all are collected)
# # cluster_exclude = [] # Inventory paths to exclude
# # cluster_metric_include = [] ## if omitted or empty, all metrics are collected
# # cluster_metric_exclude = [] ## Nothing excluded by default
# # cluster_instances = false ## false by default
#
# ## Datastores
# # datastore_include = ["/*/datastore/**"] # Inventory path to datastores to collect (by default all are collected)
# # datastore_exclude = [] # Inventory paths to exclude
# # datastore_metric_include = [] ## if omitted or empty, all metrics are collected
# # datastore_metric_exclude = [] ## Nothing excluded by default
# # datastore_instances = false ## false by default
#
# ## Datacenters
# # datacenter_include = ["/*/host/**"] # Inventory path to clusters to collect (by default all are collected)
# # datacenter_exclude = [] # Inventory paths to exclude
# # datacenter_metric_include = [] ## if omitted or empty, all metrics are collected
# # datacenter_metric_exclude = ["*"] ## Datacenters are not collected by default.
# # datacenter_instances = false ## false by default
#
# ## Plugin Settings
# ## separator character to use for measurement and field names (default: ".")
# # separator = "."
# # number of objects to retrieve per query for realtime resources (vms and hosts)
# # set to 64 for vCenter 5.5 and 6.0 (default: 256)
# # max_query_objects = 256
# # number of metrics to retrieve per query for non-realtime resources (clusters and datastores)
# # set to 64 for vCenter 5.5 and 6.0 (default: 256)
# # max_query_metrics = 256
#
# # number of go routines to use for collection and discovery of objects and metrics
# # collect_concurrency = 1
# # discover_concurrency = 1
#
# # the interval before (re)discovering objects subject to metrics collection (default: 300s)
# # object_discovery_interval = "300s"
#
# # timeout applies to any of the api request made to vcenter
# # timeout = "60s"
#
# # When set to true, all samples are sent as integers. This makes the output
# # data types backwards compatible with Telegraf 1.9 or lower. Normally all
# # samples from vCenter, with the exception of percentages, are integer
# # values, but under some conditions, some averaging takes place internally in
# # the plugin. Setting this flag to "false" will send values as floats to
# # preserve the full precision when averaging takes place.
# # use_int_samples = true
#
# # Custom attributes from vCenter can be very useful for queries in order to slice the
# # metrics along different dimension and for forming ad-hoc relationships. They are disabled
# # by default, since they can add a considerable amount of tags to the resulting metrics. To
# # enable, simply set custom_attribute_exclude to [] (empty set) and use custom_attribute_include
# # to select the attributes you want to include.
# # By default, since they can add a considerable amount of tags to the resulting metrics. To
# # enable, simply set custom_attribute_exclude to [] (empty set) and use custom_attribute_include
# # to select the attributes you want to include.
# # custom_attribute_include = []
# # custom_attribute_exclude = ["*"]
#
# # The number of vSphere 5 minute metric collection cycles to look back for non-realtime metrics. In
# # some versions (6.7, 7.0 and possible more), certain metrics, such as cluster metrics, may be reported
# # with a significant delay (>30min). If this happens, try increasing this number. Please note that increasing
# # it too much may cause performance issues.
# # metric_lookback = 3
#
# # Optional SSL Config
# # ssl_ca = "/path/to/cafile"
# # ssl_cert = "/path/to/certfile"
# # ssl_key = "/path/to/keyfile"
# # Use SSL but skip chain & host verification
# # insecure_skip_verify = false
#
# # The Historical Interval value must match EXACTLY the interval in the daily
# # "Interval Duration" found on the VCenter server under Configure > General > Statistics > Statistic intervals
# # historical_interval = "5m"
# A Webhooks Event collector
# [[inputs.webhooks]]
# # Address and port to host Webhook listener on
# service_address = ":1619"
#
# [inputs.webhooks.filestack]
# path = "/filestack"
#
# [inputs.webhooks.github]
# path = "/github"
# secret = 
#
# [inputs.webhooks.mandrill]
# path = "/mandrill"
#
# [inputs.webhooks.rollbar]
# path = "/rollbar"
#
# [inputs.webhooks.papertrail]
# path = "/papertrail"
#
# [inputs.webhooks.particle]
# path = "/particle"

# This plugin implements the Zipkin http server to gather trace and timing data needed to troubleshoot latency problems in microservice architectures.
# [[inputs.zipkin]]
# path = "/api/v1/spans" # URL path for span data
# port = 9411 # Port on which Telegraf listens

Found in path(s):
* /opt/cola/permits/1256570836_1652755641.29883720/telegraf-1.21.4-1.x86_64.src.rpm-cosi-expand-archive-MIIUpTSQ/etc/telegraf/telegraf.conf

1.752 popt 1.18-1.el8
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1.753 errors 0.9.1

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ebe580a85c40

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1.764 gogo-googleapis 1.4.0

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1.765 x-crypto 0.0.0-20211202192323-5770296d904e

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1.766 nss 3.67.0-7.el8_5

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---
abstract: 'Nearly transparent SSL encapsulation for IO::Socket::INET.'
author:
- 'Steffen Ullrich <sullr@cpan.org>, Peter Behroozi, Marko Asplund'
build_requires:
  ExtUtils::MakeMaker: '0'
configure_requires:
  ExtUtils::MakeMaker: '0'
  Net::SSLeay: '1.46'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.24, CPAN::Meta::Converter version 2.150010'
license: perl
meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
named: IO-Socket-SSL
no_index:
directory:
  - t
  - inc
requires:
  Mozilla::CA: '0'
  Net::SSLeay: '1.46'
  Scalar::Util: '0'
resources:
  bugtracker: https://rt.cpan.org/Dist/Display.html?Queue=IO-Socket-SSL
  homepage: https://github.com/noxxi/p5-io-socket-ssl
  license: http://dev.perl.org/licenses/
  repository: https://github.com/noxxi/p5-io-socket-ssl
  version: '2.066'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'

Found in path(s):
* /opt/cola/permits/1302214105_1652758962.656049/0/libio-socket-ssl-perl-2-066-orig-tar-gz/IO-Socket-SSL-2.066/META.yml
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* /opt/cola/permits/1302214105_1652758962.656049/0/libio-socket-ssl-perl-2-066-orig-tar-gz/IO-Socket-SSL-2.066/lib/IO/Socket/SSL/PublicSuffix.pm
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=head1 NAME
SYNOPSIS

use strict;
use IO::Socket::SSL;

# simple client
my $cl = IO::Socket::SSL->new('www.google.com:443');
print $cl "GET / HTTP/1.0\r\n\n";
print <$cl>;

# simple server
my $srv = IO::Socket::SSL->new(
LocalAddr => '0.0.0.0:1234',
Listen => 10,
SSL_cert_file => 'server-cert.pem',
SSL_key_file => 'server-key.pem',
);
$srv->accept;

DESCRIPTION

IO::Socket::SSL makes using SSL/TLS much easier by wrapping the necessary functionality into the familiar L<IO::Socket> interface and providing secure defaults whenever possible.
This way, existing applications can be made SSL-aware without much effort, at least if you do blocking I/O and don't use select or poll.

But, under the hood, SSL is a complex beast.
So there are lots of methods to make it do what you need if the default behavior is not adequate.
Because it is easy to inadvertently introduce critical security bugs or just hard to debug problems, I would recommend studying the following documentation carefully.

The documentation consists of the following parts:

over 4

item L"Essential Information About SSL/TLS"
item L"Basic SSL Client"
item L"Basic SSL Server"
item L"Common Usage Errors"
Additional documentation can be found in

=over 4
=item * L<IO::Socket::SSL::Intercept> - Doing Man-In-The-Middle with SSL
=item * L<IO::Socket::SSL::Utils> - Useful functions for certificates etc

=head1 Essential Information About SSL/TLS

SSL (Secure Socket Layer) or its successor TLS (Transport Layer Security) are protocols to facilitate end-to-end security. These protocols are used when accessing web sites (https), delivering or retrieving email, and in lots of other use cases.
In the following documentation we will refer to both SSL and TLS as simply 'SSL'.

SSL enables end-to-end security by providing two essential functions:

=over 4
=item Encryption

This part encrypts the data for transit between the communicating parties, so that nobody in between can read them. It also provides tamper resistance so that nobody in between can manipulate the data.

=item Identification

This part makes sure that you talk to the right peer.
If the identification is done incorrectly it is easy to mount man-in-the-middle attacks, e.g. if Alice wants to talk to Bob it would be possible for Mallory to put itself in the middle, so that Alice talks to Mallory and Mallory to Bob.
All the data would still be encrypted, but not end-to-end between Alice and Bob, but only between Alice and Mallory and then between Mallory and Bob. Thus Mallory would be able to read and modify all traffic between Alice and Bob.

Identification is the part which is the hardest to understand and the easiest to get wrong.

With SSL, the Identification is usually done with B<certificates> inside a B<PKI> (Public Key Infrastructure). These Certificates are comparable to an identity card, which contains information about the owner of the card. The card then is somehow B<signed> by the B<issuer> of the card, the B<CA> (Certificate Agency).

To verify the identity of the peer the following must be done inside SSL:

1. Get the certificate from the peer.
   If the peer does not present a certificate we cannot verify it.

2. Check if we trust the certificate, e.g. make sure it's not a forgery.

   We believe that a certificate is not a fake if we either know the certificate already or if we B<trust> the issuer (the CA) and can verify the issuers signature on the certificate.
   In reality there is often a hierarchy of certificate agencies and we only directly trust the root of this hierarchy.
   In this case the peer not only sends his own certificate, but also all B<intermediate certificates>.
   Verification will be done by building a B<trust path> from the trusted root up to the peers certificate and checking in each step if the we can verify the issuers signature.

   This step often causes problems because the client does not know the necessary trusted root certificates. These are usually stored in a system dependent CA store, but often the browsers have their own CA store.

3. Check if the certificate is still valid.
   Each certificate has a lifetime and should not be used after that time because it might be compromised or the underlying cryptography got broken in the mean
time.

Check if the subject of the certificate matches the peer.
This is like comparing the picture on the identity card against the person representing the identity card.

When connecting to a server this is usually done by comparing the hostname used for connecting against the names represented in the certificate.
A certificate might contain multiple names or wildcards, so that it can be used for multiple hosts (e.g. *.example.com and *.example.org).

Although nobody sane would accept an identity card where the picture does not match the person we see, it is a common implementation error with SSL to omit this check or get it wrong.

Check if the certificate was revoked by the issuer.
This might be the case if the certificate was compromised somehow and now somebody else might use it to claim the wrong identity.
Such revocations happened a lot after the heartbleed attack.

For SSL there are two ways to verify a revocation, CRL and OCSP.
With CRLs (Certificate Revocation List) the CA provides a list of serial numbers for revoked certificates. The client somehow has to download the list (which can be huge) and keep it up to date.
With OCSP (Online Certificate Status Protocol) the client can check a single certificate directly by asking the issuer.

Revocation is the hardest part of the verification and none of today's browsers get it fully correct. But, they are still better than most other implementations which don't implement revocation checks or leave the hard parts to the developer.

When accessing a web site with SSL or delivering mail in a secure way the identity is usually only checked one way, e.g. the client wants to make sure it talks to the right server, but the server usually does not care which client it talks to.
But, sometimes the server wants to identify the client too and will request a certificate from the client which the server must verify in a similar way.

=head1 Basic SSL Client
A basic SSL client is simple:

```perl
my $client = IO::Socket::SSL->new('www.example.com:443')
```

or die "error=$!, ssl_error=$SSL_ERROR"

This will take the OpenSSL default CA store as the store for the trusted CA. This usually works on UNIX systems. If there are no certificates in the store it will try use L<Mozilla::CA> which provides the default CAs of Firefox.

In the default settings, L<IO::Socket::SSL> will use a safer cipher set and SSL version, do a proper hostname check against the certificate, and use SNI (server name indication) to send the hostname inside the SSL handshake. This is necessary to work with servers which have different certificates behind the same IP address.

It will also check the revocation of the certificate with OCSP, but currently only if the server provides OCSP stapling (for deeper checks see C<ocsp_resolver> method).

Lots of options can be used to change ciphers, SSL version, location of CA and much more. See documentation of methods for details.

With protocols like SMTP it is necessary to upgrade an existing socket to SSL. This can be done like this:

```perl
my $client = IO::Socket::INET->new('mx.example.com:25') or die $!;
# .. read greeting from server
# .. send EHLO and read response
# .. send STARTTLS command and read response
# .. if response was successful we can upgrade the socket to SSL now:
IO::Socket::SSL->start_SSL($client,
   # explicitly set hostname we should use for SNI
   SSL_hostname => 'mx.example.com'
) or die $SSL_ERROR;
```

A more complete example for a simple HTTP client:

```perl
my $client = IO::Socket::SSL->new(
   # where to connect
   PeerHost => "www.example.com",
   PeerPort => "https",

   # certificate verification - VERIFY_PEER is default
   SSL_verify_mode => SSL_VERIFY_PEER,

   # location of CA store
   # need only be given if default store should not be used
   SSL_ca_path => '/etc/ssl/certs', # typical CA path on Linux
```
SSL_ca_file => '/etc/ssl/cert.pem', # typical CA file on BSD

# or just use default path on system:
IO::Socket::SSL::default_ca(), # either explicitly
# or implicitly by not giving SSL_ca_*

# easy hostname verification
# It will use PeerHost as default name a verification
# scheme as default, which is safe enough for most purposes.
SSL_verifycn_name => 'foo.bar',
SSL_verifycn_scheme => 'http',

# SNI support - defaults to PeerHost
SSL_hostname => 'foo.bar',

) or die "failed connect or ssl handshake: $!,$SSL_ERROR";

# send and receive over SSL connection
print $client "GET / HTTP/1.0\r\n\r\n";
print <$client>;

And to do revocation checks with OCSP (only available with OpenSSL 1.0.0 or
higher and L<Net::SSLeay> 1.59 or higher):

# default will try OCSP stapling and check only leaf certificate
my $client = IO::Socket::SSL->new($dst);

# better yet: require checking of full chain
my $client = IO::Socket::SSL->new(
PeerAddr => $dst,
SSL_ocsp_mode => SSL_OCSP_FULL_CHAIN,
);

# even better: make OCSP errors fatal
# (this will probably fail with lots of sites because of bad OCSP setups)
# also use common OCSP response cache
my $ocsp_cache = IO::Socket::SSL::OCSP_Cache->new;
my $client = IO::Socket::SSL->new(
PeerAddr => $dst,
SSL_ocsp_mode => SSL_OCSP_FULL_CHAIN|SSL_OCSP_FAIL_HARD,
SSL_ocsp_cache => $ocsp_cache,
);

# disable OCSP stapling in case server has problems with it
my $client = IO::Socket::SSL->new(
PeerAddr => $dst,
SSL_ocsp_mode => SSL_OCSP_NO_STAPLE,
);
# check any certificates which are not yet checked by OCSP stapling or
# where we have already cached results. For your own resolving combine
# $ocsp->requests with $ocsp->add_response(uri,response).
my $ocsp = $client->ocsp_resolver();
my $errors = $ocsp->resolve_blocking();
if ($errors) {
    warn "OCSP verification failed: $errors";
    close($client);
}

=head1 Basic SSL Server

A basic SSL server looks similar to other L<IO::Socket> servers, only that it
also contains settings for certificate and key:

    # simple server
    my $server = IO::Socket::SSL->new(
    # where to listen
    LocalAddr => '127.0.0.1',
    LocalPort => 8080,
    Listen => 10,
    # which certificate to offer
    # with SNI support there can be different certificates per hostname
    SSL_cert_file => 'cert.pem',
    SSL_key_file => 'key.pem',
    ) or die "failed to listen: $!";

    # accept client
    my $client = $server->accept or die
    "failed to accept or ssl handshake: $!,\$SSL_ERROR";

This will automatically use a secure set of ciphers and SSL version and also
supports Forward Secrecy with (Elliptic-Curve) Diffie-Hellmann Key Exchange.

If you are doing a forking or threading server, we recommend that you do the SSL
handshake inside the new process/thread so that the master is free for new
connections.
We recommend this because a client with improper or slow SSL handshake could
make the server block in the handshake which would be bad to do on the
listening socket:

    # inet server
    my $server = IO::Socket::INET->new(
    # where to listen
    LocalAddr => '127.0.0.1',
    LocalPort => 8080,
Listen => 10,
);

# accept client
my $client = $server->accept or die;

# SSL upgrade client (in new process/thread)
IO::Socket::SSL->start_SSL($client,
SSL_server => 1,
SSL_cert_file => 'cert.pem',
SSL_key_file => 'key.pem',
) or die "failed to ssl handshake: $SSL_ERROR";

Like with normal sockets, neither forking nor threading servers scale well. It is recommended to use non-blocking sockets instead, see L</"Using Non-Blocking Sockets">

=head1 Common Usage Errors

This is a list of typical errors seen with the use of L<IO::Socket::SSL>:

=over 4
=item *
Disabling verification with C<SSL_verify_mode>.

As described in L</"Essential Information About SSL/TLS">, a proper identification of the peer is essential and failing to verify makes Man-In-The-Middle attacks possible.

Nevertheless, lots of scripts and even public modules or applications disable verification, because it is probably the easiest way to make the thing work and usually nobody notices any security problems anyway.

If the verification does not succeed with the default settings, one can do the following:

=over 8
=item *
Make sure the needed CAs are in the store, maybe use C<SSL_ca_file> or C<SSL_ca_path> to specify a different CA store.

=item *
If the validation fails because the certificate is self-signed and that's what
you expect, you can use the C<SSL_fingerprint> option to accept specific leaf certificates by their certificate or pubkey fingerprint.

=item *

If the validation failed because the hostname does not match and you cannot access the host with the name given in the certificate, you can use C<SSL_verifycn_name> to specify the hostname you expect in the certificate.

=back

A common error pattern is also to disable verification if they found no CA store (different modules look at different "default" places). Because L<IO::Socket::SSL> is now able to provide a usable CA store on most platforms (UNIX, Mac OSX and Windows) it is better to use the defaults provided by L<IO::Socket::SSL>. If necessary these can be checked with the C<default_ca> method.

=item *

Polling of SSL sockets (e.g. select, poll and other event loops).

If you sysread one byte on a normal socket it will result in a syscall to read one byte. Thus, if more than one byte is available on the socket it will be kept in the network stack of your OS and the next select or poll call will return the socket as readable.

But, with SSL you don't deliver single bytes. Multiple data bytes are packaged and encrypted together in an SSL frame. Decryption can only be done on the whole frame, so a sysread for one byte actually reads the complete SSL frame from the socket, decrypts it and returns the first decrypted byte. Further sysreads will return more bytes from the same frame until all bytes are returned and the next SSL frame will be read from the socket.

Thus, in order to decide if you can read more data (e.g. if sysread will block) you must check if there are still data in the current SSL frame by calling C<pending> and if there are no data pending you might check the underlying socket with select or poll.

Another way might be if you try to sysread at least 16kByte all the time. 16kByte is the maximum size of an SSL frame and because sysread returns data from only a single SSL frame you can guarantee that there are no pending data.

See also L</"Using Non-Blocking Sockets">.

=item *

Expecting exactly the same behavior as plain sockets.
IO::Socket::SSL tries to emulate the usual socket behavior as good as possible, but full emulation cannot be done. Specifically a read on the SSL socket might also result in a write on the TCP socket or a write on the SSL socket might result in a read on the TCP socket. Also C<accept> and B<close> on the SSL socket will result in writing and reading data to the TCP socket too.

Especially the hidden writes might result in a connection reset if the underlying TCP socket is already closed by the peer. Unless signal PIPE is explicitly handled by the application this will usually result in the application crashing. It is thus recommended to explicitly IGNORE signal PIPE so that the errors get propagated as EPIPE instead of causing a crash of the application.

=item *

Set 'SSL_version' or 'SSL_cipher_list' to a "better" value.

L<IO::Socket::SSL> tries to set these values to reasonable, secure values which are compatible with the rest of the world. But, there are some scripts or modules out there which tried to be smart and get more secure or compatible settings. Unfortunately, they did this years ago and never updated these values, so they are still forced to do only 'TLSv1' (instead of also using TLSv12 or TLSv11). Or they set 'HIGH' as the cipher list and thought they were secure, but did not notice that 'HIGH' includes anonymous ciphers, e.g. without identification of the peer.

So it is recommended to leave the settings at the secure defaults which L<IO::Socket::SSL> sets and which get updated from time to time to better fit the real world.

=item *

Make SSL settings inaccessible by the user, together with bad builtin settings.

Some modules use L<IO::Socket::SSL>, but don't make the SSL settings available to the user. This is often combined with bad builtin settings or defaults (like switching verification off).

Thus the user needs to hack around these restrictions by using C<set_args_filter_hack> or similar.

=item *

Use of constants as strings.

Constants like C<SSL_VERIFY_PEER> or C<SSL_WANT_READ> should be used as constants and not be put inside quotes, because they represent numerical values.
Forking and handling the socket in parent and child.

A `<fork>` of the process will duplicate the internal user space SSL state of the socket. If both master and child interact with the socket by using their own SSL state strange error messages will happen. Such interaction includes explicit or implicit `<close>` of the SSL socket. To avoid this the socket should be explicitly closed with `<SSL_no_shutdown>`.

Forking and executing a new process.

Since the SSL state is stored in user space it will be duplicated by a `<fork>` but it will be lost when doing `<exec>`. This means it is not possible to simply redirect stdin and stdout for the new process to the SSL socket by duplicating the relevant file handles. Instead explicitly exchanging plain data between child-process and SSL socket are needed.

=head1 Common Problems with SSL

SSL is a complex protocol with multiple implementations and each of these has their own quirks. While most of these implementations work together, it often gets problematic with older versions, minimal versions in load balancers, or plain wrong setups.

Unfortunately these problems are hard to debug. Helpful for debugging are a knowledge of SSL internals, wireshark and the use of the debug settings of `<IO::Socket::SSL>` and `<Net::SSLeay>`, which can both be set with `<IO::Socket::SSL::DEBUG>`.

The following debugs levels are defined, but used not in any consistent way:

=over 4

=item *

0 - No debugging (default).

=item *

1 - Print out errors from `<IO::Socket::SSL>` and ciphers from `<Net::SSLeay>`.
=item *

2 - Print also information about call flow from L<IO::Socket::SSL> and progress information from L<Net::SSLeay>.

=back

Also, C<analyze-ssl.pl> from the ssl-tools repository at L<https://github.com/noxxi/p5-ssl-tools> might be a helpful tool when debugging SSL problems, as do the C<openssl> command line tool and a check with a different SSL implementation (e.g. a web browser).

The following problems are not uncommon:

=over 4

=item *

Bad server setup: missing intermediate certificates.

It is a regular problem that administrators fail to include all necessary certificates into their server setup, e.g. everything needed to build the trust chain from the trusted root. If they check the setup with the browser everything looks ok, because browsers work around these problems by caching any intermediate certificates and apply them to new connections if certificates are missing.

But, fresh browser profiles which have never seen these intermediates cannot fill in the missing certificates and fail to verify; the same is true with L<IO::Socket::SSL>.

=item *

Old versions of servers or load balancers which do not understand specific TLS versions or croak on specific data.

From time to time one encounters an SSL peer, which just closes the connection inside the SSL handshake. This can usually be worked around by downgrading the SSL version, e.g. by setting C<SSL_version>. Modern Browsers usually deal with such servers by automatically downgrading the SSL version and repeat the connection attempt until they succeed.

Worse servers do not close the underlying TCP connection but instead just drop the relevant packet. This is harder to detect because it looks like a
stalled connection. But downgrading the SSL version often works here too.

A cause of such problems are often load balancers or security devices, which have hardware acceleration and only a minimal (and less robust) SSL stack. They can often be detected because they support much fewer ciphers than other implementations.

=item *

Bad or old OpenSSL versions.

L<IO::Socket::SSL> uses OpenSSL with the help of the L<Net::SSLeay> library. It is recommend to have a recent version of this library, because it has more features and usually fewer known bugs.

=item *

Validation of client certificates fail.

Make sure that the purpose of the certificate allows use as ssl client (check with C<< openssl x509 -purpose >>), that the necessary root certificate is in the path specified by C<SSL_ca*> (or the default path) and that any intermediate certificates needed to build the trust chain are sent by the client.

=item *

Validation of self-signed certificate fails even if it is given with C<SSL_ca*> argument.

The C<SSL_ca*> arguments do not give a general trust store for arbitrary certificates but only specify a store for CA certificates which then can be used to verify other certificates. This especially means that certificates which are not a CA get simply ignored, notably self-signed certificates which do not also have the CA-flag set.

This behavior of OpenSSL differs from the more general trust-store concept which can be found in browsers and where it is possible to simply added arbitrary certificates (CA or not) as trusted.

=back

=head1 Using Non-Blocking Sockets

If you have a non-blocking socket, the expected behavior on read, write, accept or connect is to set C<$!> to EWOULDBLOCK if the operation cannot be completed
immediately. Note that EWOULDBLOCK is the same as EAGAIN on UNIX systems, but is different on Windows.

With SSL, handshakes might occur at any time, even within an established connection. In these cases it is necessary to finish the handshake before you can read or write data. This might result in situations where you want to read but must first finish the write of a handshake or where you want to write but must first finish a read. In these cases $! is set to EAGAIN like expected, and additionally $SSL_ERROR is set to either SSL_WANT_READ or SSL_WANT_WRITE. Thus if you get EWOULDBLOCK on a SSL socket you must check $SSL_ERROR for SSL_WANT_* and adapt your event mask accordingly.

Using readline on non-blocking sockets does not make much sense and I would advise against using it. And, while the behavior is not documented for other IO::Socket classes, it will try to emulate the behavior seen there, e.g. to return the received data instead of blocking, even if the line is not complete. If an unrecoverable error occurs it will return nothing, even if it already received some data.

Also, I would advise against using accept with a non-blocking SSL object because it might block and this is not what most would expect. The reason for this is that accept on a non-blocking TCP socket (e.g. IO::Socket::IP, IO::Socket::INET...) results in a new TCP socket which does not inherit the non-blocking behavior of the master socket. And thus, the initial SSL handshake on the new socket inside IO::Socket::SSL::accept will be done in a blocking way. To work around this you are safer by doing a TCP accept and later upgrade the TCP socket in a non-blocking way with start_SSL and accept_SSL.

my $cl = IO::Socket::SSL->new($dst);
$cl->blocking(0);
my $sel = IO::Select->new($cl);
while (1) {
  # with SSL a call for reading n bytes does not result in reading of n
  # bytes from the socket, but instead it must read at least one full SSL
  # frame. If the socket has no new bytes, but there are unprocessed data
  # from the SSL frame can_read will block!

  # wait for data on socket
  $sel->can_read();

  # new data on socket or eof
  READ:
  # this does not read only 1 byte from socket, but reads the complete SSL
  # frame and then just returns one byte. On subsequent calls it than
  # returns more byte of the same SSL frame until it needs to read the
  # next frame.
  my $n = sysread($cl,my $buf,1);

  # do something
}
Additionally there are differences to plain sockets when using select, poll, kqueue or similar technologies to get notified if data are available. Relying only on these calls is not sufficient in all cases since unread data might be internally buffered in the SSL stack. To detect such buffering \texttt{B<pending()>} need to be used. Alternatively the buffering can be avoided by using \texttt{B<sysread> with the maximum size of an SSL frame}. See L</"Common Usage Errors"> for details.

=head1 Advanced Usage

=head2 SNI Support

Newer extensions to SSL can distinguish between multiple hostnames on the same IP address using Server Name Indication (SNI).

Support for SNI on the client side was added somewhere in the OpenSSL 0.9.8 series, but with 1.0 a bug was fixed when the server could not decide about its hostname. Therefore client side SNI is only supported with OpenSSL 1.0 or higher in L</IO::Socket::SSL>. With a supported version, SNI is used automatically on the client side, if it can determine the hostname from \texttt{C<PeerAddr>} or \texttt{C<PeerHost>} (which are synonyms in the underlying IO::Socket:: classes and thus should never be set both or at least not to different values). On unsupported OpenSSL versions it will silently not use SNI. The hostname can also be given explicitly given with \texttt{C<SSL_hostname>}, but in this case it will throw in error, if SNI is not supported.
To check for support you might call \texttt{IO::Socket::SSL->can_client_sni()}. 

On the server side, earlier versions of OpenSSL are supported, but only together with \texttt{Net::SSLeay} version \texttt{>= 1.50}. To check for support you might call \texttt{IO::Socket::SSL->can_server_sni()}. If server side SNI is supported, you might specify different certificates per host with \texttt{SSL_cert*} and \texttt{SSL_key*}, and check the requested name using \texttt{get_servername}.

=head2 Talk Plain and SSL With The Same Socket

It is often required to first exchange some plain data and then upgrade the socket to SSL after some kind of STARTTLS command. Protocols like FTPS even need a way to downgrade the socket again back to plain.

The common way to do this would be to create a normal socket and use \texttt{start_SSL} to upgrade and \texttt{stop_SSL} to downgrade:

```perl
my $sock = IO::Socket::INET->new(...) or die $!
... exchange plain data on $sock until starttls command ...
IO::Socket::SSL->start_SSL($sock,%sslargs) or die $SSL_ERROR;
... now $sock is an IO::Socket::SSL object ...
... exchange data with SSL on $sock until stoptls command ...
$sock->stop_SSL or die $SSL_ERROR;
... now $sock is again an IO::Socket::INET object ...
```

But, lots of modules just derive directly from \texttt{IO::Socket::INET}. While this base class can be replaced with \texttt{IO::Socket::SSL}, these modules cannot easily support different base classes for SSL and plain data and switch between these classes on a starttls command.

To help in this case, \texttt{IO::Socket::SSL} can be reduced to a plain socket on startup, and \texttt{connect_SSL/accept_SSL/start_SSL} can be used to enable SSL and \texttt{stop_SSL} to talk plain again:

```perl
my $sock = IO::Socket::SSL->new(
PeerAddr => ...
SSL_startHandshake => 0,
%sslargs
) or die $!
... exchange plain data on $sock until starttls command ...
$sock->connect_SSL or die $SSL_ERROR;
... now $sock is an IO::Socket::SSL object ...
... exchange data with SSL on $sock until stoptls command ...
$sock->stop_SSL or die $SSL_ERROR;
... $sock is still an IO::Socket::SSL object ...
... but data exchanged again in plain ...
```
Integration Into Own Modules

L<IO::Socket::SSL> behaves similarly to other L<IO::Socket> modules and thus could be integrated in the same way, but you have to take special care when using non-blocking I/O (like for handling timeouts) or using select or poll. Please study the documentation on how to deal with these differences.

Also, it is recommended to not set or touch most of the C<SSL_*> options, so that they keep their secure defaults. It is also recommended to let the user override these SSL specific settings without the need of global settings or hacks like C<set_args_filter_hack>.

The notable exception is C<SSL_verifycn_scheme>.
This should be set to the hostname verification scheme required by the module or protocol.

Description Of Methods

L<IO::Socket::SSL> inherits from another L<IO::Socket> module. The choice of the super class depends on the installed modules:

=over 4
=item *

If L<IO::Socket::IP> with at least version 0.20 is installed it will use this module as super class, transparently providing IPv6 and IPv4 support.

=item *

If L<IO::Socket::INET6> is installed it will use this module as super class, transparently providing IPv6 and IPv4 support.

=item *

Otherwise it will fall back to L<IO::Socket::INET>, which is a perl core module. With L<IO::Socket::INET> you only get IPv4 support.

=back

Please be aware that with the IPv6 capable super classes, it will look first for the IPv6 address of a given hostname. If the resolver provides an IPv6 address, but the host cannot be reached by IPv6, there will be no automatic fallback to IPv4.
To avoid these problems you can enforce IPv4 for a specific socket by using the C<Domain> or C<Family> option with the value AF_INET as described in L<IO::Socket::IP>. Alternatively you can enforce IPv4 globally by loading L<IO::Socket::SSL> with the option 'inet4', in which case it will use the IPv4 only class L<IO::Socket::INET> as the super class.

L<IO::Socket::SSL> will provide all of the methods of its super class, but sometimes it will override them to match the behavior expected from SSL or to provide additional arguments.

The new or changed methods are described below, but please also read the section about SSL specific error handling.

=over 4

=item Error Handling

If an SSL specific error occurs, the global variable C<$SSL_ERROR> will be set. If the error occurred on an existing SSL socket, the method C<errstr> will give access to the latest socket specific error. Both C<$SSL_ERROR> and the C<errstr> method give a dualvar similar to C<$!>, e.g. providing an error number in numeric context or an error description in string context.

=item B<new(...)>

Creates a new L<IO::Socket::SSL> object. You may use all the friendly options that came bundled with the super class (e.g. L<IO::Socket::IP>, L<IO::Socket::INET>, ...) plus (optionally) the ones described below. If you don't specify any SSL related options it will do its best in using secure defaults, e.g. choosing good ciphers, enabling proper verification, etc.

=over 2

=item SSL_server

Set this option to a true value if the socket should be used as a server. If this is not explicitly set it is assumed if the C<Listen> parameter is given when creating the socket.

=item SSL_hostname

This can be given to specify the hostname used for SNI, which is needed if you have multiple SSL hostnames on the same IP address. If not given it will try to determine the hostname from C<PeerAddr>, which will fail if only an IP was given or if this argument is used within C<start_SSL>. 

If you want to disable SNI, set this argument to ".

Currently only supported for the client side and will be ignored for the server side.

See section "SNI Support" for details of SNI the support.

=item SSL_startHandshake

If this option is set to false (defaults to true) it will not start the SSL handshake yet. This has to be done later with C<accept_SSL> or C<connect_SSL>. Before the handshake is started read/write/etc. can be used to exchange plain data.

=item SSL_keepSocketOnError

If this option is set to true (defaults to false) it will not close the underlying TCP socket on errors. In most cases there is no real use for this behavior since both sides of the TCP connection will probably have a different idea of the current state of the connection.

=item SSL_ca | SSL_ca_file | SSL_ca_path

Usually you want to verify that the peer certificate has been signed by a trusted certificate authority. In this case you should use this option to specify the file (C<SSL_ca_file>) or directory (C<SSL_ca_path>) containing the certificate(s) of the trusted certificate authorities.

C<SSL_ca_path> can also be an array or a string containing multiple path, where the path are separated by the platform specific separator. This separator is C<;> on DOS, Windows, Netware, C<,> on VMS and C<> for all the other systems. If multiple path are given at least one of these must be accessible.

You can also give a list of X509* certificate handles (like you get from L<Net::SSLeay> or L<IO::Socket::SSL::Utils::PEM_xxx2cert>) with C<SSL_ca>. These will be added to the CA store before path and file and thus take precedence.

If neither SSL_ca, nor SSL_ca_file or SSL_ca_path are set it will use C<default_ca()> to determine the user-set or system defaults.

If you really don't want to set a CA set SSL_ca_file or SSL_ca_path to C<undef> or SSL_ca to an empty list. (unfortunately C<> is used by some modules using L<IO::Socket::SSL> when CA is not explicitly given).

=item SSL_client_ca | SSL_client_ca_file

If verify_mode is VERIFY_PEER on the server side these options can be used to set the list of acceptable CAs for the client. This way the client can select their required certificate from a list of certificates.

The value for these options is similar to C<SSL_ca> and C<SSL_ca_file>.
Sometimes you have a self-signed certificate or a certificate issued by an unknown CA and you really want to accept it, but don't want to disable verification at all. In this case you can specify the fingerprint of the certificate as C\<algo$\$hex\_fingerprint\>. C<algo> is a fingerprint algorithm supported by OpenSSL, e.g. 'sha1','sha256'... and C<\$hex\_fingerprint\> is the hexadecimal representation of the binary fingerprint. Any colons inside the hex string will be ignored.

If you want to use the fingerprint of the pubkey inside the certificate instead of the certificate use the syntax C\<algo$\$pub$\$hex\_fingerprint\> instead. To get the fingerprint of an established connection you can use C<get\_fingerprint>.

It is also possible to skip C<\$algo>, i.e. only specify the fingerprint. In this case the likely algorithms will be automatically detected based on the length of the digest string.

You can specify a list of fingerprints in case you have several acceptable certificates.
If a fingerprint matches the topmost (i.e. leaf) certificate no additional validations can make the verification fail.

If you create a server you usually need to specify a server certificate which should be verified by the client. Same is true for client certificates, which should be verified by the server.
The certificate can be given as a file with SSL_cert_file or as an internal representation of an X509* object (like you get from L<Net::SSLeay> or L<IO::Socket::SSL::Utils::PEM_xxx2cert>) with SSL_cert.
If given as a file it will automatically detect the format.
Supported file formats are PEM, DER and PKCS#12, where PEM and PKCS#12 can contain the certificate and the chain to use, while DER can only contain a single certificate.

If given as a list of X509* please note, that the all the chain certificates (e.g. all except the first) will be "consumed" by openssl and will be freed if the SSL context gets destroyed - so you should never free them yourself. But the servers certificate (e.g. the first) will not be consumed by openssl and thus must be freed by the application.

For each certificate a key is need, which can either be given as a file with SSL_key_file or as an internal representation of an EVP_PKEY* object with SSL_key (like you get from L<Net::SSLeay> or L<IO::Socket::SSL::Utils::PEM_xxx2key>).
If a key was already given within the PKCS#12 file specified by SSL_cert_file it will ignore any SSL_key or SSL_key_file.

If no SSL_key or SSL_key_file was given it will try to use the PEM file given with SSL_cert_file again, maybe it contains the key too.

If your SSL server should be able to use different certificates on the same IP address, depending on the name given by SNI, you can use a hash reference instead of a file with C<<hostname => cert_file>>.

If your SSL server should be able to use both RSA and ECDSA certificates for the same domain/IP a similar hash reference like with SNI is given. The domain names used to specify the additional certificates should be C<hostname%whatever>, i.e. C<hostname%ecc> or similar. This needs at least OpenSSL 1.0.2. To let the server pick the certificate based on the clients cipher preference C<SSL_honor_cipher_order> should be set to false.

In case certs and keys are needed but not given it might fall back to builtin defaults, see "Defaults for Cert, Key and CA".

Examples:

SSL_cert_file => 'mycert.pem',
SSL_key_file => 'mykey.pem',

SSL_cert_file => {
  "foo.example.org" => 'foo-cert.pem',
  "foo.example.org%ecc" => 'foo-ecc-cert.pem',
  "bar.example.org" => 'bar-cert.pem',
  # used when nothing matches or client does not support SNI
  " => 'default-cert.pem',
  '%ecc' => 'default-ecc-cert.pem',
},
SSL_key_file => {
  "foo.example.org" => 'foo-key.pem',
  "foo.example.org%ecc" => 'foo-ecc-key.pem',
  "bar.example.org" => 'bar-key.pem',
  # used when nothing matches or client does not support SNI
  " => 'default-key.pem',
  '%ecc' => 'default-ecc-key.pem',
}

=item SSL_passwd_cb

If your private key is encrypted, you might not want the default password prompt from Net::SSLeay. This option takes a reference to a subroutine that should return the password required to decrypt your private key.

=item SSL_use_cert
If this is true, it forces IO::Socket::SSL to use a certificate and key, even if you are setting up an SSL client. If this is set to 0 (the default), then you will only need a certificate and key if you are setting up a server.

SSL_use_cert will implicitly be set if SSL_server is set. For convenience it is also set if it was not given but a cert was given for use (SSL_cert_file or similar).

=item SSL_version

Sets the version of the SSL protocol used to transmit data. 'SSLv23' uses a handshake compatible with SSL2.0, SSL3.0 and TLS1.x, while 'SSLv2', 'SSLv3', 'TLSv1', 'TLSv1_1', 'TLSv1_2', or 'TLSv1_3' restrict handshake and protocol to the specified version. All values are case-insensitive. Instead of 'TLSv1_1', 'TLSv1_2', and 'TLSv1_3' one can also use 'TLSv11', 'TLSv12', and 'TLSv13'. Support for 'TLSv1_1', 'TLSv1_2', and 'TLSv1_3' requires recent versions of Net::SSLeay and openssl.

Independent from the handshake format you can limit to set of accepted SSL versions by adding !version separated by ':'.

The default SSL_version is 'SSLv23:!SSLv3:!SSLv2' which means, that the handshake format is compatible to SSL2.0 and higher, but that the successful handshake is limited to TLS1.0 and higher, that is no SSL2.0 or SSL3.0 because both of these versions have serious security issues and should not be used anymore.

You can also use !TLSv1_1 and !TLSv1_2 to disable TLS versions 1.1 and 1.2 while still allowing TLS version 1.0.

Setting the version instead to 'TLSv1' might break interaction with older clients, which need and SSL2.0 compatible handshake. On the other side some clients just close the connection when they receive a TLS version 1.1 request. In this case setting the version to 'SSLv23:!SSLv2:!SSLv3:!TLSv1_1:!TLSv1_2' might help.

=item SSL_cipher_list

If this option is set the cipher list for the connection will be set to the given value, e.g. something like 'ALL:!LOW:!EXP:!aNULL'. Look into the OpenSSL documentation (L<http://www.openssl.org/docs/apps/ciphers.html#CIPHER_STRINGS>) for more details.

Unless you fail to contact your peer because of no shared ciphers it is recommended to leave this option at the default setting. The default setting prefers ciphers with forward secrecy, disables anonymous authentication and
disables known insecure ciphers like MD5, DES etc. This gives a grade A result at the tests of SSL Labs.
To use the less secure OpenSSL builtin default (whatever this is) set SSL_cipher_list to ".

In case different cipher lists are needed for different SNI hosts a hash can be given with the host as key and the cipher suite as value, similar to B<SSL_cert*>.

=item SSL_honor_cipher_order

If this option is true the cipher order the server specified is used instead of the order proposed by the client. This option defaults to true to make use of our secure cipher list setting.

=item SSL_dh_file

To create a server which provides forward secrecy you need to either give the DH parameters or (better, because faster) the ECDH curve. This setting cares about DH parameters.

To support non-elliptic Diffie-Hellman key exchange a suitable file needs to be given here or the SSL_dh should be used with a appropriate value. See dhparam command in openssl for more information.

If neither C<SSL_dh_file> nor C<SSL_dh> are set a builtin DH parameter with a length of 2048 bit is used to offer DH key exchange by default. If you don't want this (e.g. disable DH key exchange) explicitly set this or the C<SSL_dh> parameter to undef.

=item SSL_dh

Like SSL_dh_file, but instead of giving a file you use a preloaded or generated DH*.

=item SSL_ecdh_curve

To create a server which provides forward secrecy you need to either give the DH parameters or (better, because faster) the ECDH curve. This setting cares about the ECDH curve(s).

To support Elliptic Curve Diffie-Hellmann key exchange the OID or NID of at least one suitable curve needs to be provided here.

With OpenSSL 1.1.0+ this parameter defaults to C<auto>, which means that it lets OpenSSL pick the best settings. If support for CTX_set_ecdh_auto is implemented in Net::SSLeay (needs at least version 1.86) it will use this to implement the same default. Otherwise it will default to C<prime256v1>
(builtin of OpenSSL) in order to offer ECDH key exchange by default.

If setting groups or curves is supported by Net::SSLeay (needs at least version 1.86) then multiple curves can be given here in the order of the preference, i.e. C<P-521:P-384:P-256>. When used at the client side this will include the supported curves as extension in the TLS handshake.

If you don't want to have ECDH key exchange this could be set to undef or set C<SSL_ciphers> to exclude all of these ciphers.

You can check if ECDH support is available by calling C<< IO::Socket::SSL->can_ecdh >>.

=item SSL_verify_mode

This option sets the verification mode for the peer certificate.
You may combine SSL_VERIFY_PEER (verify peer), SSL_VERIFY_FAIL_IF_NO_PEER_CERT (fail verification if no peer certificate exists; ignored for clients), SSL_VERIFY_CLIENT_ONCE (verify client once; ignored for clients).
See OpenSSL man page for SSL_CTX_set_verify for more information.

The default is SSL_VERIFY_NONE for server (e.g. no check for client certificate) and SSL_VERIFY_PEER for client (check server certificate).

=item SSL_verify_callback

If you want to verify certificates yourself, you can pass a sub reference along with this parameter to do so. When the callback is called, it will be passed:

=over 4

=item 1.
a true/false value that indicates what OpenSSL thinks of the certificate,

=item 2.
a C-style memory address of the certificate store,

=item 3.
a string containing the certificate's issuer attributes and owner attributes, and

=item 4.
a string containing any errors encountered (0 if no errors).

=item 5.
a C-style memory address of the peer's own certificate (convertible to PEM form with Net::SSLeay::PEM_get_string_X509()).
=item 6.
The depth of the certificate in the chain. Depth 0 is the leaf certificate.

=back

The function should return 1 or 0, depending on whether it thinks the certificate is valid or invalid. The default is to let OpenSSL do all of the busy work.

The callback will be called for each element in the certificate chain.

See the OpenSSL documentation for SSL_CTX_set_verify for more information.

=item SSL_verifycn_scheme

The scheme is used to correctly verify the identity inside the certificate by using the hostname of the peer.
See the information about the verification schemes in B<verify_hostname>.

If you don't specify a scheme it will use 'default', but only complain loudly if the name verification fails instead of letting the whole certificate verification fail. THIS WILL CHANGE, e.g. it will let the certificate verification fail in the future if the hostname does not match the certificate !!!! To override the name used in verification use B<SSL_verifycn_name>.

The scheme 'default' is a superset of the usual schemes, which will accept the hostname in common name and subjectAltName and allow wildcards everywhere. While using this scheme is way more secure than no name verification at all you better should use the scheme specific to your application protocol, e.g. 'http', 'ftp'...

If you are really sure, that you don't want to verify the identity using the hostname you can use 'none' as a scheme. In this case you'd better have alternative forms of verification, like a certificate fingerprint or do a manual verification later by calling B<verify_hostname> yourself.

=item SSL_verifycn_publicsuffix

This option is used to specify the behavior when checking wildcards certificates for public suffixes, e.g. no wildcard certificates for *.com or *.co.uk should be accepted, while *.example.com or *.example.co.uk is ok.

If not specified it will simply use the builtin default of L<IO::Socket::SSL::PublicSuffix>, you can create another object with from_string or from_file of this module.

To disable verification of public suffix set this option to C"". 
=item SSL_verifycn_name

Set the name which is used in verification of hostname. If SSL_verifycn_scheme is set and no SSL_verifycn_name is given it will try to use SSL_hostname or PeerHost and PeerAddr settings and fail if no name can be determined. If SSL_verifycn_scheme is not set it will use a default scheme and warn if it cannot determine a hostname, but it will not fail.

Using PeerHost or PeerAddr works only if you create the connection directly with C<< IO::Socket::SSL->new >>, if an IO::Socket::INET object is upgraded with B<< start_SSL >> the name has to be given in B<< SSL_verifycn_name >> or B<< SSL_hostname >>.

=item SSL_check_crl

If you want to verify that the peer certificate has not been revoked by the signing authority, set this value to true. OpenSSL will search for the CRL in your SSL_ca_path, or use the file specified by SSL_crl_file. See the Net::SSLeay documentation for more details. Note that this functionality appears to be broken with OpenSSL < v0.9.7b, so its use with lower versions will result in an error.

=item SSL_crl_file

If you want to specify the CRL file to be used, set this value to the pathname to be used. This must be used in addition to setting SSL_check_crl.

=item SSL_ocsp_mode

Defines how certificate revocation is done using OCSP (Online Status Revocation Protocol). The default is to send a request for OCSP stapling to the server and if the server sends an OCSP response back the result will be used.

Any other OCSP checking needs to be done manually with C<ocsp_resolver>.

The following flags can be combined with C<|>:

=over 8

=item SSL_OCSP_NO_STAPLE

Don't ask for OCSP stapling.
This is the default if SSL_verify_mode is VERIFY_NONE.

=item SSL_OCSP_TRY_STAPLE

Try OCSP stapling, but don't complain if it gets no stapled response back.
This is the default if SSL_verify_mode is VERIFY_PEER (the default).

=item SSL_OCSP_MUST_STAPLE

Consider it a hard error, if the server does not send a stapled OCSP response back. Most servers currently send no stapled OCSP response back.

=item SSL_OCSP_FAIL_HARD

Fail hard on response errors, default is to fail soft like the browsers do. Soft errors mean, that the OCSP response is not usable, e.g. no response, error response, no valid signature etc. Certificate revocations inside a verified response are considered hard errors in any case.

Soft errors inside a stapled response are never considered hard, e.g. it is expected that in this case an OCSP request will be send to the responsible OCSP responder.

=item SSL_OCSP_FULL_CHAIN

This will set up the \texttt{ocsp_resoler} so that all certificates from the peer chain will be checked, otherwise only the leaf certificate will be checked against revocation.

=back

=item SSL_ocsp_staple_callback

If this callback is defined, it will be called with the SSL object and the OCSP response handle obtained from the peer, e.g. \texttt{C<<$cb->($ssl,$resp)>>}. If the peer did not provide a stapled OCSP response the function will be called with \texttt{C<$resp=undef>}.

Because the OCSP response handle is no longer valid after leaving this function it should not be copied or freed. If access to the response is necessary after leaving this function it can be serialized with \texttt{C<Net::SSLeay::i2d_OCSP_RESPONSE>}. If no such callback is provided, it will use the default one, which verifies the response and uses it to check if the certificate(s) of the connection got revoked.

=item SSL_ocsp_cache

With this option a cache can be given for caching OCSP responses, which could be shared between different SSL contexts. If not given a cache specific to the SSL context only will be used.
You can either create a new cache with
\[ \text{new}([\text{size}]) \] or implement your own cache, which needs to have methods \[ \text{put}($key,\%entry) \] and \[ \text{get}($key) \] (returning \[ \%entry \]) where entry is the hash representation of the OCSP response with fields like \[ \text{nextUpdate} \]. The default implementation of the cache will consider responses valid as long as \[ \text{nextUpdate} \] is less than the current time.

=item SSL_reuse_ctx

If you have already set the above options for a previous instance of \[ \text{IO::Socket::SSL} \], then you can reuse the SSL context of that instance by passing it as the value for the SSL_reuse_ctx parameter. You may also create a new instance of the \[ \text{IO::Socket::SSL::SSL_Context} \] class, using any context options that you desire without specifying connection options, and pass that here instead.

If you use this option, all other context-related options that you pass in the same call to \[ \text{new()} \] will be ignored unless the context supplied was invalid. Note that, contrary to versions of \[ \text{IO::Socket::SSL} \] below v0.90, a global SSL context will not be implicitly used unless you use the set_default_context() function.

=item SSL_create_ctx_callback

With this callback you can make individual settings to the context after it got created and the default setup was done. The callback will be called with the CTX object from Net::SSLeay as the single argument.

Example for limiting the server session cache size:

\[
\text{SSL_create_ctx_callback} \Rightarrow \text{sub} \{ \\
\quad \text{my $ctx = shift;} \\
\quad \text{Net::SSLeay::CTX_sess_set_cache_size($ctx,128);} \\
\}
\]

=item SSL_session_cache_size

If you make repeated connections to the same host/port and the SSL renegotiation time is an issue, you can turn on client-side session caching with this option by specifying a positive cache size. For successive connections, pass the SSL_reuse_ctx option to the \[ \text{new()} \] calls (or use set_default_context()) to make use of the cached sessions. The session cache size refers to the number of unique host/port pairs that can be stored at one time; the oldest sessions in the cache will be removed if new ones are added.

This option does not effect the session cache a server has for it's clients, e.g. it does not affect SSL objects with SSL_server set.
Note that session caching with TLS 1.3 needs at least Net::SSLeay 1.86.

=item SSL_session_cache

Specifies session cache object which should be used instead of creating a new. Overrules SSL_session_cache_size.
This option is useful if you want to reuse the cache, but not the rest of the context.

A session cache object can be created using
C<< IO::Socket::SSL::Session_Cache->new( cachesize ) >>.

Use set_default_session_cache() to set a global cache object.

=item SSL_session_key

Specifies a key to use for lookups and inserts into client-side session cache.
Per default ip:port of destination will be used, but sometimes you want to share the same session over multiple ports on the same server (like with FTPS).

=item SSL_session_id_context

This gives an id for the servers session cache. It's necessary if you want clients to connect with a client certificate. If not given but SSL_verify_mode specifies the need for client certificate a context unique id will be picked.

=item SSL_error_trap

When using the accept() or connect() methods, it may be the case that the actual socket connection works but the SSL negotiation fails, as in the case of an HTTP client connecting to an HTTPS server. Passing a subroutine ref attached to this parameter allows you to gain control of the orphaned socket instead of having it be closed forcibly.
The subroutine, if called, will be passed two parameters: a reference to the socket on which the SSL negotiation failed and the full text of the error message.

=item SSL_npn_protocols

If used on the server side it specifies list of protocols advertised by SSL server as an array ref, e.g. ['spdy/2','http1.1'].
On the client side it specifies the protocols offered by the client for NPN as an array ref.
See also method C<next_proto_negotiated>.

Next Protocol Negotiation (NPN) is available with Net::SSLeay 1.46+ and openssl-1.0.1+. NPN is unavailable in TLSv1.3 protocol.
To check support you might call C<< IO::Socket::SSL->can_npn() >>. If you use this option with an unsupported Net::SSLeay/OpenSSL it will throw an error.

=item SSL_alpn_protocols

If used on the server side it specifies list of protocols supported by the SSL server as an array ref, e.g. ['http/2.0', 'spdy/3.1', 'http/1.1']. On the client side it specifies the protocols advertised by the client for ALPN as an array ref. See also method C<alpn_selected>.

Application-Layer Protocol Negotiation (ALPN) is available with Net::SSLeay 1.56+ and openssl-1.0.2+. More details about the extension are in RFC7301. To check support you might call C<< IO::Socket::SSL->can_alpn() >>. If you use this option with an unsupported Net::SSLeay/OpenSSL it will throw an error.

Note that some client implementations may encounter problems if both NPN and ALPN are specified. Since ALPN is intended as a replacement for NPN, try providing ALPN protocols then fall back to NPN if that fails.

=item SSL_ticket_keycb => [$sub,$data] | $sub

This is a callback used for stateless session reuse (Session Tickets, RFC 5077).

This callback will be called as C<< $sub->($data,[key_name]) >> where C<$data> is the argument given to SSL_ticket_keycb (or undef) and C<$key_name> depends on the mode:

=over 8

=item encrypt ticket

If a ticket needs to be encrypted the callback will be called without C<$key_name>. In this case it should return C<($current_key,$current_key_name)> where C<$current_key> is the current key (32 byte random data) and C<$current_key_name> the name associated with this key (exactly 16 byte). This C<$current_key_name> will be incorporated into the ticket.

=item decrypt ticket

If a ticket needs to be decrypted the callback will be called with C<$key_name> as found in the ticket. It should return C<($key,$current_key_name)> where C<$key> is the key associated with the given C<$key_name> and C<$current_key_name> the name associated with the currently active key.

If C<$current_key_name> is different from the given C<$key_name> the callback will be called again to re-encrypt the ticket with the currently active key.
If no key can be found which matches the given $key_name then this function should return nothing (empty list).

This mechanism should be used to limit the life time for each key encrypting the ticket. Compromise of a ticket encryption key might lead to decryption of SSL sessions which used session tickets protected by this key.

Example:

Net::SSLeay::RAND_bytes(my $oldkey,32);
Net::SSLeay::RAND_bytes(my $newkey,32);
my $oldkey_name = pack("a16","oldsecret");
my $newkey_name = pack("a16","newsecret");

my @keys = (
    [ $newkey_name, $newkey ], # current active key
    [ $oldkey_name, $oldkey ], # already expired
);

my $keycb = [ sub {
    my ($mykeys,$name) = @_;

    # return (current_key, current_key_name) if no name given
    return ($mykeys->[0][1],$mykeys->[0][0]) if ! $name;

    # return (matching_key, current_key_name) if we find a key matching # the given name
    for(my $i = 0; $i<@$mykeys; $i++) {
        next if $name ne $mykeys->[i][0];
        return ($mykeys->[i][1],$mykeys->[0][0]);
    }

    # no matching key found
    return;
},
); \@keys ];

my $srv = IO::Socket::SSL->new(..., SSL_ticket_keycb => $keycb);

=item B<accept>

This behaves similar to the accept function of the underlying socket class, but additionally does the initial SSL handshake. But because the underlying socket class does return a blocking file handle even when accept is called on a
non-blocking socket, the SSL handshake on the new file object will be done in a blocking way. Please see the section about non-blocking I/O for details. If you don't like this behavior you should do accept on the TCP socket and then upgrade it with C<start_SSL> later.

=item B<connect(...)>

This behaves similar to the connect function but also does an SSL handshake. Because you cannot give SSL specific arguments to this function, you should better either use C<new> to create a connect SSL socket or C<start_SSL> to upgrade an established TCP socket to SSL.

=item B<close(...)>

Contrary to a close for a simple INET socket a close in SSL also mandates a proper shutdown of the SSL part. This is done by sending a close notify message by both peers.

A naive implementation would thus wait until it receives the close notify message from the peer - which conflicts with the commonly expected semantic that a close will not block. The default behavior is thus to only send a close notify but not wait for the close notify of the peer. If this is required C<SSL_fast_shutdown> need to be explicitly set to false.

There are also cases where a SSL shutdown should not be done at all. This is true for example when forking to let a child deal with the socket and closing the socket in the parent process. A naive explicit C<close> or an implicit close when destroying the socket in the parent would send a close notify to the peer which would make the SSL socket in the client process unusable. In this case an explicit C<close> with C<SSL_no_shutdown> set to true should be done in the parent process.

For more details and other arguments see C<stop_SSL> which gets called from C<close> to shutdown the SSL state of the socket.

=item B<sysread( BUF, LEN, [ OFFSET ] )>

This function behaves from the outside the same as B<sysread> in other L<IO::Socket> objects, e.g. it returns at most LEN bytes of data. But in reality it reads not only LEN bytes from the underlying socket, but at a single SSL frame. It then returns up to LEN bytes it decrypted from this SSL frame. If the frame contained more data than requested it will return only LEN data, buffer the rest and return it on further read calls. This means, that it might be possible to read data, even if the underlying socket is not readable, so using poll or select might not be sufficient.

sysread will only return data from a single SSL frame, e.g. either the pending data from the already buffered frame or it will read a frame from the underlying
socket and return the decrypted data. It will not return data spanning several SSL frames in a single call.

Also, calls to sysread might fail, because it must first finish an SSL handshake.

To understand these behaviors is essential, if you write applications which use event loops and/or non-blocking sockets. Please read the specific sections in this documentation.

=item B<syswrite( BUF, [ LEN, [ OFFSET ]])>

This function behaves from the outside the same as B<syswrite> in other L<IO::Socket> objects, e.g. it will write at most LEN bytes to the socket, but there is no guarantee, that all LEN bytes are written. It will return the number of bytes written.

Because it basically just calls SSL_write from OpenSSL syswrite will write at most a single SSL frame. This means, that no more than 16.384 bytes, which is the maximum size of an SSL frame, will be written at once.

For non-blocking sockets SSL specific behavior applies. Please read the specific section in this documentation.

=item B<peek( BUF, LEN, [ OFFSET])>

This function has exactly the same syntax as B<sysread>, and performs nearly the same task but will not advance the read position so that successive calls to peek() with the same arguments will return the same results. This function requires OpenSSL 0.9.6a or later to work.

=item B<pending()>

This function gives you the number of bytes available without reading from the underlying socket object. This function is essential if you work with event loops, please see the section about polling SSL sockets.

=item B<get_fingerprint([algo,certificate,pubkey])>

This method returns the fingerprint of the given certificate in the form C<algo$digest_hex>, where C<algo> is the used algorithm, default 'sha256'. If no certificate is given the peer certificate of the connection is used. If C<pubkey> is true it will not return the fingerprint of the certificate but instead the fingerprint of the pubkey inside the certificate as C<algo$pub$digest_hex>.

=item B<get_fingerprint_bin([algo,certificate,pubkey])>

This method returns the binary fingerprint of the given certificate by using
the algorithm C<algo>, default 'sha256'.
If no certificate is given the peer certificate of the connection is used.
If C<pubkey> is true it will not return the fingerprint of the certificate but
instead the fingerprint of the pubkey inside the certificate.

=item B<get_cipher()>

Returns the string form of the cipher that the IO::Socket::SSL object is using.

=item B<get_sslversion()>

Returns the string representation of the SSL version of an established
connection.

=item B<get_sslversion_int()>

Returns the integer representation of the SSL version of an established
connection.

=item B<get_session_reused()>

This returns true if the session got reused and false otherwise. Note that with
a reused session no certificates are send within the handshake and no ciphers
are offered and thus functions which rely on this might not work.

=item B<dump_peer_certificate()>

Returns a parsable string with select fields from the peer SSL certificate.
This method directly returns the result of the dump_peer_certificate() method of
Net::SSLeay.

=item B<peer_certificate($field;[$refresh])>

If a peer certificate exists, this function can retrieve values from it.
If no field is given the internal representation of certificate from Net::SSLeay
is returned.
If refresh is true it will not used a cached version, but check again in case
the certificate of the connection has changed due to renegotiation.

The following fields can be queried:

=over 8

=item authority (alias issuer)

The certificate authority which signed the certificate.

=item owner (alias subject)
The owner of the certificate.

=item commonName (alias cn) - only for Net::SSLeay version >=1.30

The common name, usually the server name for SSL certificates.

=item subjectAltNames - only for Net::SSLeay version >=1.33

Alternative names for the subject, usually different names for the same server, like example.org, example.com, *.example.com.

It returns a list of (typ,value) with typ GEN_DNS, GEN_IPADD etc (these constants are exported from IO::Socket::SSL).
See Net::SSLeay::X509_get_subjectAltNames.

=back

=item B<sock_certificate($field)>

This is similar to C<peer_certificate> but will return the sites own certificate. The same arguments for B<$field> can be used.
If no B<$field> is given the certificate handle from the underlying OpenSSL will be returned. This handle will only be valid as long as the SSL connection exists and if used afterwards it might result in strange crashes of the application.

=item B<peer_certificates>

This returns all the certificates send by the peer, e.g. first the peers own certificate and then the rest of the chain. You might use B<CERT_asHash> from L<IO::Socket::SSL::Utils> to inspect each of the certificates.

This function depends on a version of Net::SSLeay >= 1.58.

=item B<get_servername>

This gives the name requested by the client if Server Name Indication (SNI) was used.

=item B<verify_hostname($hostname,$scheme,$publicsuffix)>

This verifies the given hostname against the peer certificate using the given scheme. Hostname is usually what you specify within the PeerAddr. See the C<SSL_verifycn_publicsuffix> parameter for an explanation of suffix checking and for the possible values.

Verification of hostname against a certificate is different between various applications and RFCs. Some scheme allow wildcards for hostnames, some only
in subjectAltNames, and even their different wildcard schemes are possible. RFC 6125 provides a good overview.

To ease the verification the following schemes are predefined (both protocol name and rfcXXXX name can be used):

=over 8

=item rfc2818, xmpp (rfc3920), ftp (rfc4217)

Extended wildcards in subjectAltNames and common name are possible, e.g. *.example.org or even www*.example.org. The common name will be only checked if no DNS names are given in subjectAltNames.

=item http (alias www)

While name checking is defined in rfc2818 the current browsers usually accept also an IP address (w/o wildcards) within the common name as long as no subjectAltNames are defined. Thus this is rfc2818 extended with this feature.

=item smtp (rfc2595), imap, pop3, acap (rfc4642), netconf (rfc5538), syslog (rfc5425), snmp (rfc5953)

Simple wildcards in subjectAltNames are possible, e.g. *.example.org matches www.example.org but not lala.www.example.org. If nothing from subjectAltNames match it checks against the common name, where wildcards are also allowed to match the full leftmost label.

=item ldap (rfc4513)

Simple wildcards are allowed in subjectAltNames, but not in common name. Common name will be checked even if subjectAltNames exist.

=item sip (rfc5922)

No wildcards are allowed and common name is checked even if subjectAltNames exist.

=item gist (rfc5971)

Simple wildcards are allowed in subjectAltNames and common name, but common name will only be checked if their are no DNS names in subjectAltNames.

=item default

This is a superset of all the rules and is automatically used if no scheme is given but a hostname (instead of IP) is known. Extended wildcards are allowed in subjectAltNames and common name and common name is checked always.
No verification will be done. Actually is does not make any sense to call verify_hostname in this case.

The scheme can be given either by specifying the name for one of the above predefined schemes, or by using a hash which can have the following keys and values:

- **check_cn**: 0 | 'always' | 'when_only'
  - Determines if the common name gets checked. If 'always' it will always be checked (like in ldap), if 'when_only' it will only be checked if no names are given in subjectAltNames (like in http), for any other values the common name will not be checked.

- **wildcards_in_alt**: 0 | 'full_label' | 'anywhere'
  - Determines if and where wildcards in subjectAltNames are possible. If 'full_label' only cases like *.example.org will be possible (like in ldap), for 'anywhere' www*.example.org is possible too (like http), dangerous things like but www.*.org or even '*' will not be allowed.
  - For compatibility with older versions 'leftmost' can be given instead of 'full_label'.

- **wildcards_in_cn**: 0 | 'full_label' | 'anywhere'
  - Similar to wildcards_in_alt, but checks the common name. There is no predefined scheme which allows wildcards in common names.

- **ip_in_cn**: 0 | 1 | 4 | 6
  - Determines if an IP address is allowed in the common name (no wildcards are allowed). If set to 4 or 6 it only allows IPv4 or IPv6 addresses, any other true value allows both.

- **callback**: \&coderef
  - If you give a subroutine for verification it will be called with the arguments ($hostname,$commonName,@subjectAltNames), where hostname is the name given for verification, commonName is the result from peer_certificate('cn') and subjectAltNames is the result from peer_certificate('subjectAltNames').
All other arguments for the verification scheme will be ignored in this case.

=back

=item B<next_proto_negotiated()>

This method returns the name of negotiated protocol - e.g. 'http/1.1'. It works for both client and server side of SSL connection.

NPN support is available with Net::SSLeay 1.46+ and openssl-1.0.1+. To check support you might call C<< IO::Socket::SSL->can_npn() >>.

=item B<alpn_selected()>

Returns the protocol negotiated via ALPN as a string, e.g. 'http/1.1', 'http/2.0' or 'spdy/3.1'.

ALPN support is available with Net::SSLeay 1.56+ and openssl-1.0.2+. To check support, use C<< IO::Socket::SSL->can_alpn() >>.

=item B<errstr()>

Returns the last error (in string form) that occurred. If you do not have a real object to perform this method on, call IO::Socket::SSL::errstr() instead.

For read and write errors on non-blocking sockets, this method may include the string C<SSL wants a read first!> or C<SSL wants a write first!> meaning that the other side is expecting to read from or write to the socket and wants to be satisfied before you get to do anything. But with version 0.98 you are better comparing the global exported variable $SSL_ERROR against the exported symbols SSL_WANT_READ and SSL_WANT_WRITE.

=item B<opened()>

This returns false if the socket could not be opened, 1 if the socket could be opened and the SSL handshake was successful done and -1 if the underlying IO::Handle is open, but the SSL handshake failed.

=item B<< IO::Socket::SSL->start_SSL($socket, ... ) >>

This will convert a glob reference or a socket that you provide to an IO::Socket::SSL object. You may also pass parameters to specify context or connection options as with a call to new(). If you are using this function on an accept()ed socket, you must set the parameter "SSL_server" to 1, i.e. IO::Socket::SSL->start_SSL($socket, SSL_server => 1). If you have a class that inherits from IO::Socket::SSL and you want the $socket to be blessed into your own class instead, use MyClass->start_SSL($socket) to achieve the desired effect.
Note that if `start_SSL()` fails in SSL negotiation, `$socket` will remain blessed in its original class. For non-blocking sockets you better just upgrade the socket to IO::Socket::SSL and call `accept_SSL` or `connect_SSL` and the upgraded object. To just upgrade the socket set B<SSL_startHandshake> explicitly to 0. If you call `start_SSL` w/o this parameter it will revert to blocking behavior for `accept_SSL` and `connect_SSL`.

If given the parameter "Timeout" it will stop if after the timeout no SSL connection was established. This parameter is only used for blocking sockets, if it is not given the default Timeout from the underlying IO::Socket will be used.

=item B<stop_SSL(...)>

This is the opposite of `start_SSL()`, `connect_SSL()` and `accept_SSL()`, e.g. it will shutdown the SSL connection and return to the class before `start_SSL()`. It gets the same arguments as `close()`, in fact `close()` calls `stop_SSL()` (but without downgrading the class).

Will return true if it succeeded and undef if failed. This might be the case for non-blocking sockets. In this case `$!` is set to EWOULDBLOCK and the ssl error to SSL_WANT_READ or SSL_WANT_WRITE. In this case the call should be retried again with the same arguments once the socket is ready.

For calling from C<stop_SSL> C<SSL_fast_shutdown> default to false, e.g. it waits for the close_notify of the peer. This is necessary in case you want to downgrade the socket and continue to use it as a plain socket.

After `stop_SSL` the socket can again be used to exchange plain data.

=item B<connect_SSL>, B<accept_SSL>

These functions should be used to do the relevant handshake, if the socket got created with C<new> or upgraded with C<start_SSL> and C<SSL_startHandshake> was set to false. They will return undef until the handshake succeeded or an error got thrown. As long as the function returns undef and `$!` is set to EWOULDBLOCK one could retry the call after the socket got readable (SSL_WANT_READ) or writeable (SSL_WANT_WRITE).

=item B<ocsp_resolver>

This will create an OCSP resolver object, which can be used to create OCSP requests for the certificates of the SSL connection. Which certificates are verified depends on the setting of C<SSL_ocsp_mode>: by default only the leaf certificate will be checked, but with SSL_OCSP_FULL_CHAIN all chain certificates will be checked.
Because to create an OCSP request the certificate and its issuer certificate need to be known it is not possible to check certificates when the trust chain is incomplete or if the certificate is self-signed.

The OCSP resolver gets created by calling \C<\$ssl->ocsp_resolver>> and provides the following methods:

=over 8

=item hard_error

This returns the hard error when checking the OCSP response. Hard errors are certificate revocations. With the \C<\$ssl->ocsp_mode>> of \SSL_OCSP_FAIL_HARD any soft error (e.g. failures to get signed information about the certificates) will be considered a hard error too.

The OCSP resolving will stop on the first hard error.

The method will return \C<undef> as long as no hard errors occurred and still requests to be resolved. If all requests got resolved and no hard errors occurred the method will return \C<"">.

=item soft_error

This returns the soft error(s) which occurred when asking the OCSP responders.

=item requests

This will return a hash consisting of \C<(url,request)>-tuples, e.g. which contain the OCSP request string and the URL where it should be sent too. The usual way to send such a request is as HTTP POST request with a content-type of \C<application/ocsp-request> or as a GET request with the base64 and url-encoded request is added to the path of the URL.

After you've handled all these requests and added the response with \C<\$add_response> you should better call this method again to make sure, that no more requests are outstanding. IO::Socket::SSL will combine multiple OCSP requests for the same server inside a single request, but some server don't give a response to all these requests, so that one has to ask again with the remaining requests.

=item add_response($uri,$response)

This method takes the HTTP body of the response which got received when sending the OCSP request to \C<$uri>. If no response was received or an error occurred one should either retry or consider \C<$response> as empty which will trigger a soft error.
The method returns the current value of \texttt{C<hard_error>}, e.g. a defined value when no more requests need to be done.

=item resolve_blocking(%args)

This combines \texttt{C<requests> and C<add_response>} which \texttt{L<HTTP::Tiny>} to do all necessary requests in a blocking way. \texttt{C<%args>} will be given to \texttt{L<HTTP::Tiny>} so that you can put proxy settings etc here. \texttt{L<HTTP::Tiny>} will be called with \texttt{C<verify_SSL>} of false, because the OCSP responses have their own signatures so no extra SSL verification is needed.

If you don't want to use blocking requests you need to roll your own user agent with \texttt{C<requests>} and \texttt{C<add_response>}.

=back

=item B<< IO::Socket::SSL->new_from_fd($fd, [mode], %sslargs) >>

This will convert a socket identified via a file descriptor into an SSL socket. Note that the argument list does not include a "MODE“ argument; if you supply one, it will be thoughtfully ignored (for compatibility with \texttt{IO::Socket::INET}). Instead, a mode of '+' is assumed, and the file descriptor passed must be able to handle such I/O because the initial SSL handshake requires bidirectional communication.

Internally the given $fd will be upgraded to a socket object using the \texttt{C<new_from_fd>} method of the super class (\texttt{L<IO::Socket::INET>} or similar) and then \texttt{C<start_SSL>} will be called using the given \texttt{C<%sslargs>}. If \texttt{C<$fd>} is already an \texttt{IO::Socket} object you should better call \texttt{C<start_SSL>} directly.

=item B<IO::Socket::SSL::default_ca([ path|dir| SSL_ca_file => ..., SSL_ca_path => ... ])>

Determines or sets the default CA path.
If existing path or dir or a hash is given it will set the default CA path to this value and never try to detect it automatically.
If \texttt{C<undef>} is given it will forget any stored defaults and continue with detection of system defaults.
If no arguments are given it will start detection of system defaults, unless it has already stored user-set or previously detected values.

The detection of system defaults works similar to OpenSSL, e.g. it will check the directory specified in environment variable SSL\_CERT\_DIR or the path OPENSSLDIR/certs (SSLCERTS: on VMS) and the file specified in environment variable SSL\_CERT\_FILE or the path OPENSSLDIR/cert.pem (SSLCERTS:cert.pem on VMS). Contrary to OpenSSL it will check if the SSL\_ca\_path contains PEM files with the hash as file name and if the SSL\_ca\_file looks like PEM.
If no usable system default can be found it will try to load and use
L<Mozilla::CA> and if not available give up detection.
The result of the detection will be saved to speed up future calls.

The function returns the saved default CA as hash with SSL_ca_file and
SSL_ca_path.

=item B<IO::Socket::SSL::set_default_context(…)>_

You may use this to make IO::Socket::SSL automatically re-use a given context
(unless specifically overridden in a call to new()).
It accepts one argument, which should be either an IO::Socket::SSL object or an
IO::Socket::SSL::SSL_Context object.
See the SSL_reuse_ctx option of new() for more details.
Note that this sets the default context globally, so use with caution (esp. in
mod_perl scripts).

=item B<IO::Socket::SSL::set_default_session_cache(…)>_

You may use this to make IO::Socket::SSL automatically re-use a given session
cache (unless specifically overridden in a call to new()).
It accepts one argument, which should be an IO::Socket::SSL::Session_Cache
object or similar (e.g. something which implements get_session, add_session and
del_session like IO::Socket::SSL::Session_Cache does).
See the SSL_session_cache option of new() for more details.
Note that this sets the default cache globally, so use with caution.

=item B<IO::Socket::SSL::set_defaults(%args)>_

With this function one can set defaults for all SSL_* parameter used for
creation of the context, like the SSL_verify* parameter. Any SSL_* parameter can
be given or the following short versions:

=over 8

=item mode - SSL_verify_mode

=item callback - SSL_verify_callback

=item scheme - SSL_verifycn_scheme

=item name - SSL_verifycn_name

=back

=item B<IO::Socket::SSL::set_client_defaults(%args)>_

Similar to C<set_defaults>, but only sets the defaults for client mode.
Similar to `set_defaults`, but only sets the defaults for server mode.

Sometimes one has to use code which uses unwanted or invalid arguments for SSL, typically disabling SSL verification or setting wrong ciphers or SSL versions. With this hack it is possible to override these settings and restore sanity.

Example:

```perl
IO::Socket::SSL::set_args_filter_hack( sub {
    my ($is_server,$args) = @_;  
    if ( ! $is_server ) {  
        # client settings - enable verification with default CA
        # and fallback hostname verification etc
        delete @{$args}{qw(
            SSL_verify_mode
            SSL_ca_file
            SSL_ca_path
            SSL_verifycn_scheme
            SSL_version
        )};  
        # and add some fingerprints for known certs which are signed by
        # unknown CAs or are self-signed
        $args->{SSL_fingerprint} = ...
    }
}));
```

With the short setting `set_args_filter_hack('use_defaults')` it will prefer the default settings in all cases. These default settings can be modified with `set_defaults`, `set_client_defaults` and `set_server_defaults`.

The following methods are unsupported (not to mention futile!) and IO::Socket::SSL will emit a large CROAK() if you are silly enough to use them:

```perl
=over 4

=item truncate

=item stat

=item ungetc

=item setbuf
```
Note that send() and recv() cannot be reliably trapped by a tied filehandle (such as that used by IO::Socket::SSL) and so may send unencrypted data over the socket. Object-oriented calls to these functions will fail, telling you to use the print/printf/syswrite and read/sysread families instead.

=head1 DEPRECATIONS

The following functions are deprecated and are only retained for compatibility:

=over 2
=back

=item context_init()

use the SSL_reuse_ctx option if you want to re-use a context

=item socketToSSL() and socket_to_SSL()

use IO::Socket::SSL->start_SSL() instead

=item kill_socket()

use close() instead

=item get_peer_certificate()

use the peer_certificate() function instead. Used to return X509_Certificate with methods subject_name and issuer_name. Now simply returns $self which has these methods (although deprecated).

=item issuer_name()

use peer_certificate('issuer') instead

=item subject_name()

use peer_certificate('subject') instead

=back
EXAMPLES

See the 'example' directory, the tests in 't' and also the tools in 'util'.

BUGS

If you use IO::Socket::SSL together with threads you should load it (e.g. use or require) inside the main thread before creating any other threads which use it. This way it is much faster because it will be initialized only once. Also there are reports that it might crash the other way.

Creating an IO::Socket::SSL object in one thread and closing it in another thread will not work.

IO::Socket::SSL does not work together with Storable::fd_retrieve/fd_store. See BUGS file for more information and how to work around the problem.

Non-blocking and timeouts (which are based on non-blocking) are not supported on Win32, because the underlying IO::Socket::INET does not support non-blocking on this platform.

If you have a server and it looks like you have a memory leak you might check the size of your session cache. Default for Net::SSLeay seems to be 20480, see the example for SSL_create_ctx_callback for how to limit it.

TLS 1.3 support regarding session reuse is incomplete.

SEE ALSO

IO::Socket::INET, IO::Socket::INET6, IO::Socket::IP, Net::SSLeay.

THANKS

Many thanks to all who added patches or reported bugs or helped IO::Socket::SSL another way. Please keep reporting bugs and help with patches, even if they just fix the documentation.

Special thanks to the team of Net::SSLeay for the good cooperation.

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Marko Asplund, &lt;marko.asplund at kronodoc.fi&gt;, was the original author of IO::Socket::SSL.

Patches incorporated from various people, see file Changes.

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in the event an application does not supply such function or
table, the facility still operates, and performs whatever part of
its purpose remains meaningful.

(For example, a function in a library to compute square roots has
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application. Therefore, Subsection 2d requires that any
application-supplied function or table used by this function must
be optional: if the application does not supply it, the square
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must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

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c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official
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dns.c - Recursive, Reentrant DNS Resolver.

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(For example, a function in a library to compute square roots has
a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a
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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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a) Accompany the work with the complete corresponding
machine-readable source code for the Library including whatever
changes were used in the work (which must be distributed under
Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable "work that
uses the Library", as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified
executable containing the modified Library. (It is understood
that the user who changes the contents of definitions files in the
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to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the
Library. A suitable mechanism is one that (1) uses at run time a
copy of the library already present on the user's computer system,
rather than copying library functions into the executable, and (2)
will operate properly with a modified version of the library, if
the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

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specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above
specified materials from the same place.

e) Verify that the user has already received a copy of these
materials or that you have already sent this user a copy.

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which the executable runs, unless that component itself accompanies
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It may happen that this requirement contradicts the license
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Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that
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The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

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"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

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The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

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written offer, valid for at least three years and valid for as
long as you offer spare parts or customer support for that product
model, to give anyone who possesses the object code either (1) a
copy of the Corresponding Source for all the software in the
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more than your reasonable cost of physically performing this
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only if you received the object code with such an offer, in accord
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1.791 pcre 8.42-6.el8
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1.792 opensaml-messaging-impl 3.4.5

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 */

/** Message channel confidentiality flag. */
/**
 * Get whether message channel confidentiality is active.
 *
 * @return Returns the confidentialityActive.
 */
/**
 * Set whether message channel confidentiality is active.
 *
 * @param flag The confidentialityActive to set.
 */
1.793 fsnotify 1.4.9

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1.794 otel-trace 0.20.0

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    */
(By Douglas Crockford <douglas@crockford.com>)

--------------------------------------------------
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 */

--------------------------------------------------
For lib/py/compat/win32/stdint.h

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// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124
//
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Gocheck - A rich testing framework for Go

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Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the
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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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If distribution of object code is made by offering access to copy
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therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library
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library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file
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derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
file is unrestricted, regardless of whether it is legally a derivative
work. (Executables containing this object code plus portions of the
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Otherwise, if the work is a derivative of the Library, you may
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Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or
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a) Accompany the work with the complete corresponding
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changes were used in the work (which must be distributed under
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with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

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1.820 x-sync 0.0.0-20201207232520-09787c993a3a

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Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

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Yoyodyne, Inc., hereby disclaims all copyright interest in the program
'Gnomovision' (which makes passes at compilers) written by James Hacker.

{signature of Ty Coon}, 1 April 1989
Ty Coon, President of Vice

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1.822 hdrhistogram 2.1.9
1.822.1 Available under license:
No license file was found, but licenses were detected in source scan.

/**
 * Written by Gil Tene of Azul Systems, and released to the public domain,
 * as explained at http://creativecommons.org/publicdomain/zero/1.0/
 */

Found in path(s):
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/WriterReaderPhaser.java
No license file was found, but licenses were detected in source scan.

/**
 * Written by Gil Tene of Azul Systems, and released to the public domain,
 * as explained at http://creativecommons.org/publicdomain/zero/1.0/
 * @author Gil Tene
 */

Found in path(s):
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/AtomicHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/RecordedValuesIterator.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/DoubleRecorder.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/ShortCountsHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/EncodableHistogram.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-jar/org/HdrHistogram/ZigZagEncoding.java
* /opt/cola/permits/174180979_1651176763.07/0/hdrhistogram-2-1-9-sources-
No license file was found, but licenses were detected in source scan.

/*
 * package-info.java
 * Written by Gil Tene of Azul Systems, and released to the public domain,
 * as explained at http://creativecommons.org/publicdomain/zero/1.0/
 */

Found in path(s):
/*
 * package-info.java
 * Written by Gil Tene of Azul Systems, and released to the public domain,
 * as explained at http://creativecommons.org/publicdomain/zero/1.0/
 */

package org.HdrHistogram;

final class Version {
    public static final String version="$VERSION$";
    public static final String build_time="$BUILD_TIME$";
}

Found in path(s):
/*
 * package-info.java
 * Written by Gil Tene of Azul Systems, and released to the public domain,
 * as explained at http://creativecommons.org/publicdomain/zero/1.0/
 */

*/

package org.HdrHistogram;

final class Version {
    public static final String version="$VERSION$";
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}

Found in path(s):
/*
 * package-info.java
 * Written by Gil Tene of Azul Systems, and released to the public domain,
 * as explained at http://creativecommons.org/publicdomain/zero/1.0/
 */

*/

No license file was found, but licenses were detected in source scan.

/*
 * shared.xs
 * Copyright (c) 2001-2002, 2006 Larry Wall
 * You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.
 * "Hand any two wizards a piece of rope and they would instinctively pull in opposite directions."
*/
Contributed by Artur Bergman <sky AT crucially DOT net>
* Pulled in the (an)other direction by Nick Ing-Simmons
* <nick AT ing-simmons DOT net>
* CPAN version produced by Jerry D. Hedden <jdhedden AT cpan DOT org>
*/

Found in path(s):
No license file was found, but licenses were detected in source scan.

ppport.h -- Perl/Pollution/Portability Version 3.19

Automatically created by Devel::PPPort running under perl 5.010000.

Do NOT edit this file directly! -- Edit PPPort_pm.PL and the includes in parts/inc/ instead.

Use 'perldoc ppport.h' to view the documentation below.
--diff=program    use diff program and options
--compat-version=version provide compatibility with Perl version
--cplusplus accept C++ comments
--quiet don't output anything except fatal errors
--nodiag don't show diagnostics
--nohints don't show hints
--nochanges don't suggest changes
--nofilter don't filter input files
--strip strip all script and doc functionality from ppport.h
--list-provided list provided API
--list-unsupported list unsupported API
--api-info=name show Perl API portability information

=head1 COMPATIBILITY

This version of F<ppport.h> is designed to support operation with Perl installations back to 5.003, and has been tested up to 5.10.0.

=head1 OPTIONS

=head2 --help
Display a brief usage summary.

=head2 --version
Display the version of F<ppport.h>.

=head2 --patch=I<file>
If this option is given, a single patch file will be created if any changes are suggested. This requires a working diff program to be installed on your system.

=head2 --copy=I<suffix>
If this option is given, a copy of each file will be saved with the given suffix that contains the suggested changes. This does not require any external programs. Note that this does not automagically add a dot between the original filename and the suffix. If you want the dot, you have to include it in the option argument.
If neither C<--patch> or C<--copy> are given, the default is to simply print the diffs for each file. This requires either C<Text::Diff> or a C<diff> program to be installed.

=head2 --diff=I<program>

Manually set the diff program and options to use. The default is to use C<Text::Diff>, when installed, and output unified context diffs.

=head2 --compat-version=I<version>

Tell F<ppport.h> to check for compatibility with the given Perl version. The default is to check for compatibility with Perl version 5.003. You can use this option to reduce the output of F<ppport.h> if you intend to be backward compatible only down to a certain Perl version.

=head2 --cplusplus

Usually, F<ppport.h> will detect C++ style comments and replace them with C style comments for portability reasons. Using this option instructs F<ppport.h> to leave C++ comments untouched.

=head2 --quiet

Be quiet. Don't print anything except fatal errors.

=head2 --nodiag

Don't output any diagnostic messages. Only portability alerts will be printed.

=head2 --nohints

Don't output any hints. Hints often contain useful portability notes. Warnings will still be displayed.

=head2 --nochanges

Don't suggest any changes. Only give diagnostic output and hints unless these are also deactivated.

=head2 --nofilter

Don't filter the list of input files. By default, files not looking like source code (i.e. not *.xs, *.c, *.cc, *.cpp or *.h) are skipped.
Strip all script and documentation functionality from F<ppport.h>.
This reduces the size of F<ppport.h> dramatically and may be useful
if you want to include F<ppport.h> in smaller modules without
increasing their distribution size too much.

The stripped F<ppport.h> will have a C<--unstrip> option that allows
you to undo the stripping, but only if an appropriate C<Devel::PPPort>
module is installed.

Lists the API elements for which compatibility is provided by
F<ppport.h>. Also lists if it must be explicitly requested,
if it has dependencies, and if there are hints or warnings for it.

Lists the API elements that are known not to be supported by
F<ppport.h> and below which version of Perl they probably
won't be available or work.

Show portability information for API elements matching I<name>.
If I<name> is surrounded by slashes, it is interpreted as a regular
expression.

In order for a Perl extension (XS) module to be as portable as possible
across differing versions of Perl itself, certain steps need to be taken.

Including this header is the first major one. This alone will give you
access to a large part of the Perl API that hasn't been available in
earlier Perl releases. Use

perl ppport.h --list-provided

to see which API elements are provided by ppport.h.
You should avoid using deprecated parts of the API. For example, using
global Perl variables without the C<PL_> prefix is deprecated. Also,
some API functions used to have a C<perl_> prefix. Using this form is
also deprecated. You can safely use the supported API, as F<ppport.h>
will provide wrappers for older Perl versions.

=item *

If you use one of a few functions or variables that were not present in
earlier versions of Perl, and that can't be provided using a macro, you
have to explicitly request support for these functions by adding one or
more C<#define>s in your source code before the inclusion of F<ppport.h>.

These functions or variables will be marked C<explicit> in the list shown
by C<--list-provided>.

Depending on whether you module has a single or multiple files that
use such functions or variables, you want either C<static> or global
variants.

For a C<static> function or variable (used only in a single source
file), use:

#define NEED_function
#define NEED_variable

For a global function or variable (used in multiple source files),
use:

#define NEED_function_GLOBAL
#define NEED_variable_GLOBAL

Note that you mustn't have more than one global request for the
same function or variable in your project.

<table>
<thead>
<tr>
<th>Function / Variable</th>
<th>Static Request</th>
<th>Global Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL_parser</td>
<td>NEED_PL_parser</td>
<td>NEED_PL_parser_GLOBAL</td>
</tr>
<tr>
<td>PL_signals</td>
<td>NEED_PL_signals</td>
<td>NEED_PL_signals_GLOBAL</td>
</tr>
<tr>
<td>eval_pv()</td>
<td>NEED_eval_pv</td>
<td>NEED_eval_pv_GLOBAL</td>
</tr>
<tr>
<td>grok_bin()</td>
<td>NEED_grok_bin</td>
<td>NEED_grok_bin_GLOBAL</td>
</tr>
<tr>
<td>grok_hex()</td>
<td>NEED_grok_hex</td>
<td>NEED_grok_hex_GLOBAL</td>
</tr>
<tr>
<td>grok_number()</td>
<td>NEED_grok_number</td>
<td>NEED_grok_number_GLOBAL</td>
</tr>
<tr>
<td>grok_numeric_radix()</td>
<td>NEED_grok_numeric_radix</td>
<td>NEED_grok_numeric_radix_GLOBAL</td>
</tr>
<tr>
<td>grok_oct()</td>
<td>NEED_grok_oct</td>
<td>NEED_grok_oct_GLOBAL</td>
</tr>
<tr>
<td>load_module()</td>
<td>NEED_load_module</td>
<td>NEED_load_module_GLOBAL</td>
</tr>
<tr>
<td>my_snprintf()</td>
<td>NEED_my_snprintf</td>
<td>NEED_my_snprintf_GLOBAL</td>
</tr>
</tbody>
</table>
To avoid namespace conflicts, you can change the namespace of the explicitly exported functions / variables using the C<DPPP_NAMESPACE> macro. Just C<#define> the macro before including C<ppport.h>:

```
#define DPPP_NAMESPACE MyOwnNamespace_
#include "ppport.h"
```

The default namespace is C<DPPP_>.

=back

The good thing is that most of the above can be checked by running F<ppport.h> on your source code. See the next section for details.

=head1 EXAMPLES

To verify whether F<ppport.h> is needed for your module, whether you should make any changes to your code, and whether any special defines should be used, F<ppport.h> can be run as a Perl script to check your source code. Simply say:

```
perl ppport.h
```

The result will usually be a list of patches suggesting changes that should at least be acceptable, if not necessarily the most
efficient solution, or a fix for all possible problems.

If you know that your XS module uses features only available in newer Perl releases, if you're aware that it uses C++ comments, and if you want all suggestions as a single patch file, you could use something like this:

    perl ppport.h --compat-version=5.6.0 --cplusplus --patch=test.diff

If you only want your code to be scanned without any suggestions for changes, use:

    perl ppport.h --nochanges

You can specify a different C<diff> program or options, using the C<--diff> option:

    perl ppport.h --diff='diff -C 10'

This would output context diffs with 10 lines of context.

If you want to create patched copies of your files instead, use:

    perl ppport.h --copy=.new

To display portability information for the C<newSVvpn> function, use:

    perl ppport.h --api-info=newSVvpn

Since the argument to C<--api-info> can be a regular expression, you can use

    perl ppport.h --api-info=/_nomg$/

to display portability information for all C<_nomg> functions or

    perl ppport.h --api-info=/.

to display information for all known API elements.

=head1 BUGS

If this version of F<ppport.h> is causing failure during the compilation of this module, please check if newer versions of either this module or C<Devel::PPPort> are available on CPAN before sending a bug report.
If `<ppport.h>` was generated using the latest version of `Devel::PPPort` and is causing failure of this module, please file a bug report using the CPAN Request Tracker at `<http://rt.cpan.org/>`.

Please include the following information:

=over 4

=item 1.

The complete output from running `"perl -V"`

=item 2.

This file.

=item 3.

The name and version of the module you were trying to build.

=item 4.

A full log of the build that failed.

=item 5.

Any other information that you think could be relevant.

=back

For the latest version of this code, please get the `Devel::PPPort` module from CPAN.

=head1 COPYRIGHT

Version 3.x, Copyright (c) 2004-2009, Marcus Holland-Moritz.

Version 2.x, Copyright (C) 2001, Paul Marquess.

Version 1.x, Copyright (C) 1999, Kenneth Albanowski.

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

=head1 SEE ALSO

See `<Devel::PPPort>`. 
use strict;

# Disable broken TRIE-optimization
BEGIN { eval '${^RE_TRIE_MAXBUF} = -1' if $] >= 5.009004 && $] <= 5.009005 }

my $VERSION = 3.19;

my %opt = ( quiet => 0, diag => 1, hints => 1, changes => 1, cplusplus => 0, filter => 1, strip => 0, version => 0, );

my($ppport) = $0 =~ /\[\w.\]+$/;
my $LF = '(?:\r\n|\[\r\n\])';   # line feed
my $HS = ' \t\]';             # horizontal whitespace

# Never use C comments in this file!
my $ccs = '/\*\*';
my $cce = '\*\/';
my $rccs = quotemeta $ccs;
my $rcce = quotemeta $cce;

eval {
  require Getopt::Long;
  Getopt::Long::GetOptions(%opt, qw( help quiet diag! filter! hints! changes! cplusplus strip version
    patch=s copy=s diff=s compat-version=s
    list-provided list-unsupported api-info=s )) or usage();
};

if ($@ and grep /^-/, @ARGV) {
  usage() if "$ARGV" =~ /^-?h(?:elp)?$/;
  die "Getopt::Long not found. Please don't use any options.\n"
}

if ($opt{version}) {
  print "This is $0 $VERSION.\n";
  exit 0;
}
usage() if $opt{help};
strip() if $opt{strip};

if (exists $opt{compat-version}) {
    my($r,$v,$s) = eval { parse_version($opt{compat-version}) };
    if ($@) {
        die "Invalid version number format: $opt{compat-version}'\n";
    }
    die "Only Perl 5 is supported\n" if $r != 5;
    die "Invalid version number: $opt{compat-version}'\n" if $v >= 1000 || $s >= 1000;
    $opt{compat-version} = sprintf "%d.%.03d%.03d", $r, $v, $s;
} else {
    $opt{compat-version} = 5;
}

my %API = map { /^\w+|[^|]*|[^|]*|[^|]*$/ ? ($1 => { ($2 ? ( base => $2 ) : ()),
        ($3 ? ( todo => $3 ) : ()),
        (index($4, 'v') >= 0 ? ( varargs => 1 ) : ()),
        (index($4, 'p') >= 0 ? ( provided => 1 ) : ()),
        (index($4, 'n') >= 0 ? ( nothxarg => 1 ) : ())
    ) : die "invalid spec: $_" } qw(
    AvFILLp|5.004050||p
    AvFILL||
    CLASS||n
    CPERLscope|5.005000||p
    CX_CURPAD_SAVE|||
    CX_CURPAD_SV|||
    CopFILEAV|5.006000||p
    CopFILEGV_set|5.006000||p
    CopFILEGV|5.006000||p
    CopFILESV|5.006000||p
    CopFILE_set|5.006000||p
    CopFILE|5.006000||p
    CopSTASHPV_set|5.006000||p
    CopSTASHPV|5.006000||p
    CopSTASH_eq|5.006000||p
    CopSTASH_set|5.006000||p
    CopSTASH|5.006000||p
    CopyD|5.009002||p
    Copy||
    CvPADLIST||
    CvSTASH||
    CvWEAKOUTSIDE||
)
Open Source Used In BGP TE Controller Version 4.3.0  10006

IVTYPE|5.006000||p
IVdf|5.006000||p
LEAVE|||
LVRET|||
MARK|||
MULTICALL|5.011000|
MY_CXT_CLONE|5.009002||p
MY_CXT_INIT|5.007003||p
MY_CXT|5.007003||p
MoveD|5.009002||p
Move|||
NOOP|5.005000||p
NUM2PTR|5.006000||p
NVTYPE|5.006000||p
NVef|5.006001||p
NVff|5.006001||p
NVgf|5.006001||p
Newxc|5.009003||p
Newxz|5.009003||p
Newx|5.009003||p
Nullav|||
Nullch|||
Nullcv|||
Nullhv|||
Nullsv|||
ORIGMARK|||
PAD_BASE_SV|||
PAD_CLONE_VARS|||
PAD_COMPPNAME_FLAGS|||
PAD_COMPPNAME_GEN_set|||
PAD_COMPPNAME_GEN|||
PAD_COMPPNAME_OURSTASH|||
PAD_COMPPNAME_PV|||
PAD_COMPPNAME_TYPE|||
PAD_DUP|||
PAD_RESTORE_LOCAL|||
PAD_SAVE_LOCAL|||
PAD_SAVE_SETNULJPAD|||
PAD_SETSV|||
PAD_SET_CUR_NOSAVE|||
PAD_SET_CUR|||
PAD_SV'\]]|
PAD_SV|||
PERLIO_FUNCS_CAST|5.009003||p
PERLIO_FUNCS_DECL|5.009003||p
PERL_ABS|5.008001||p
PERL_BCDVERSION|5.011000||p
PERL_GCC_BRACE_GROUPS_FORBIDDEN|5.008001||p
SvSetMagicSV||5.004000|
SvSetSV_nosteal||5.004000|
SvSetSV||
SvTAINTED_off||5.004000|
SvTAINTED_on||5.004000|
SvTAINTED||5.004000|
SvTRUE|||
SvTYPE||
SvUNLOCK||5.007003|
SvUOK||5.007001|5.006000|p
SvUOK||5.006000|
SvUTF8_off||5.006000|
SvUTF8_on||5.006000|
SvUTF8||5.006000|
SvUTF8x||5.004000|p
SvUTF8x||5.004000|p
SvUVX||5.004000|p
SvUVX||5.004000|p
SvVOK||5.008001|
SvVSTRING_mg||5.009004|p
THIS||n
UNDERBAR||5.009002|p
UTF8_MAXBYTES||5.009002|p
UVSIZE||5.006000|p
UVTYPE||5.006000|p
UVXf||5.007001|p
UVof||5.006000|p
UVuf||5.006000|p
UVxf||5.006000|p
WARN_ALL||5.006000|p
WARN_AMBIGUOUS||5.006000|p
WARN_ASSERTIONS||5.011000|p
WARN_BAREWORD||5.006000|p
WARN_CLOSED||5.006000|p
WARN_CLOSURE||5.006000|p
WARN_DEBUGGING||5.006000|p
WARN_DEPRECATED||5.006000|p
WARN_DIGIT||5.006000|p
WARN_EXEC||5.006000|p
WARN_EXITING||5.006000|p
WARN_GLOB||5.006000|p
WARN_INPLACE||5.006000|p
WARN_INTERNAL||5.006000|p
WARN_IO||5.006000|p
WARN_LAYER||5.008000|p
av_exists\[5.006000|av_extend\]|av_fetch\]|av_fill\]|av_iter_p\[5.011000]\|av_len\]|av_make\]|av_pop\]|av_push\]|av_reify\]|av_shift\]|av_store\]|av_undef\]|av_unshift\]|ax\]|bad_type\]|bind_match\]|block_end\]|block_gimme\[5.004000|block_start\]|boolSV\[5.004000]\pboot_core_PerlIO\]|boot_core_UNIFORM\]|boot_core_mro\]|bytes_from_utf8\[5.007001]\|bytes_to_uni\]|bytes_to_utf8\[5.006001|call_argv\[5.006000]\pcall_atexit\[5.006000|call_list\[5.004000|call_method\[5.006000]\pcall_pv\[5.006000]\pcall_sv\[5.006000]\pcalloc\[5.007002\n|cando\]|cast_i32\[5.006000|cast_iv\[5.006000|cast_ulong\[5.006000|cast_uv\[5.006000|check_type_and_open\]|check_uni\]|checkcomma\]|checkposixcc\]|ckWARN\[5.006000]\pck_anoncode\]|ck_bitop\]|ck_concat\]|ck_defined\|
ck_delete
ck_die
ck_each
ck_eof
ck_eval
ck_exec
ck_exists
ck_exit
ck_ftst
ck_glob
ck_grep
ck_index
ck_join
ck_lfun
ck_listiof
ck_match
ck_method
ck_null
ck_open
ck_readline
ck_repeat
ck_require
ck_return
ck_rfun
ck_rvconst
ck_select
ck_shift
ck_sort
ck_spair
ck_split
ck_subr
ck_substr
ck_svconst
ck_trunc
ck_unpack
ckwarn_d[5.009003]
ckwarn[5.009003]
c1_and
cl_anything
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cl_init
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);

if (exists $opt{'list-unsupported'}) {
  my $f;
  for $f (sort { lc $a cmp lc $b } keys %API) {
    next unless $API{$f}{todo};
    print "$f ", "/x(40-length($f)), ", ", format_version($API{$f}{todo}), ",\n";
  }
}
exit 0;
}
# Scan for possible replacement candidates
my(%replace, %need, %hints, %warnings, %depends);
my $replace = 0;
my($hint, $define, $function);
sub find_api
{
my $code = shift;
$code =~ s{
/ (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
| "[^"\\]*(?:\\.[^"\\]*)*"
| '[^'\\]*(?:\\.[^'\\]*)*' }{}egsx;
grep { exists $API{$_} } $code =~ /(\w+)/mg;
}
while (<DATA>) {
if ($hint) {
my $h = $hint->[0] eq 'Hint' ? \%hints : \%warnings;
if (m{^\s*\*\s(.*?)\s*$}) {
for (@{$hint->[1]}) {
$h->{$_} ||= ''; # suppress warning with older perls
$h->{$_} .= "$1\n";
}
}
else { undef $hint }
}
$hint = [$1, [split /,?\s+/, $2]]
if m{^\s*$rccs\s+(Hint|Warning):\s+(\w+(?:,?\s+\w+)*)\s*$};
if ($define) {
if ($define->[1] =~ /\\$/) {
$define->[1] .= $_;
}
else {
if (exists $API{$define->[0]} && $define->[1] !~ /^DPPP_\(/) {
my @n = find_api($define->[1]);
push @{$depends{$define->[0]}}, @n if @n
}
undef $define;
}
}
$define = [$1, $2] if m{^\s*#\s*define\s+(\w+)(?:\([^)]*\))?\s+(.*)};

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if ($function) {
    if ($^__) { 
        if (exists $API{$function->[0]}) {  
            my @n = find_api($function->[1]);  
            push @{$depends{$function->[0]}}, @n if @n  
        }
        undef $function;
    } else {  
        $function->[1] .= $_;
    }
}

$function = [$_] if m{^DPPP_\(my_(\w+)\)};

$replace   = $_ if m{^[^s*srccs\s+Replace:\s+(w+)\s+srcces\s+\$};
$replace{$_} = 1 if $replace and m{^[^s*#s*define\s+(w+)\(?\([^()]*\)\)?\s+\((w+)\).*srccs\s+Replace\s+srcces\s+\$};
$replace{$2} = $1 if m{^[^s*srccs\s+(w+)(s*\w+)\s+Depends\s+(w+)(s*\w+)\s+srcces\s+\$}} {
    my @deps = map { s/\s+//g; $_ } split /,/, $3;
    my $d;
    for $d (map { s/\s+//g; $_ } split /,/, $1) {
        push @{$depends{$d}}, @deps;
    }
}

$need{$1} = 1 if m{^[^$if\s+defined\($(\w+)\(_GLOBAL\)?\)\]};

for (values %depends) {
    my %s;
    $_ = [sort grep !$s{$_}++, @$_] if @$_;
}

if (exists $opt{'api-info'}) {
    my $f;
    my $count = 0;
    my $match = $opt{'api-info'} =~ m!^/(.*)/$! ? $1 : "$Q$opt{'api-info'}\$";
    for $f (sort { lc $a cmp lc $b } keys %API) {
        next unless $f =~ /$match/;
        print "\n\n" if $f == "$\n"
    }
    my $info = 0;
    if ($API{$f}{base} || $API{$f}{todo}) {
        my $base = format_version($API{$f}{base} || $API{$f}{todo});
        print "$Supported at least starting from perl-$base\n";
    }
$info++;
}
if ($API{$f}{provided}) {
    my $todo = $API{$f}{todo} ? format_version($API{$f}{todo}) : "5.003";
    print "Support by $ppport provided back to perl-$todo.
";
    print "Support needs to be explicitly requested by NEED_$f\n" if exists $need{$f};
    print "Depends on: ", @{$depends{$f}}).",\n" if exists $depends{$f};
    print "\nShint{\$f}\" if exists $hints{$f};
    print "\nWARNING:\n\nwarnings{\$f}\" if exists $warnings{$f};
    $info++;
}
print "No portability information available.\n" unless $info;
$count++;
}
$count or print "Found no API matching $opt{\'api-info\'}.\n";
print "\n";
exit 0;
}
if (exists $opt{\'list-provided\'}) {
    my $f;
    for $f (sort { lc $a cmp lc $b } keys %API) {
        next unless $API{$f}{provided};
        my @flags;
        push @flags, 'explicit' if exists $need{$f};
        push @flags, 'depend'   if exists $depends{$f};
        push @flags, 'hint'     if exists $hints{$f};
        push @flags, 'warning'  if exists $warnings{$f};
        my $flags = @flags ? '\['.join(', ', @flags).']' : '\';
        print "$f\n$flags\n";
    }
    exit 0;
}
my @files;
my @srcext = qw( .xs .c .h .cc .cpp -c.in -xs.in )
my $srcext = join '|', map { quotemeta $_ } @srcext;
if (@ARGV) {
    my %seen;
    for (@ARGV) {
        if (-e) {
            if (-f) {
                push @files, $_ unless $seen{$_}++;
            }
            else { warn "\n\n\$\_ is not a file.\n" }
        }
        else {
        }
my @new = grep { -f } glob $_
or warn "'$_' does not exist.\n";
push @files, grep { !$seen{$_}++ } @new;
}
}
}
else {
eval {
require File::Find;
File::Find::find(sub {
$File::Find::name =~ /($srcext)$/i
and push @files, $File::Find::name;
}, '.');
};
if ($@) {
@files = map { glob "*$_" } @srcext;
}
}
if (!@ARGV || $opt{filter}) {
my(@in, @out);
my %xsc = map { /(.*)\.xs$/ ? ("$1.c" => 1, "$1.cc" => 1) : () } @files;
for (@files) {
my $out = exists $xsc{$_} || /\b\Q$ppport\E$/i || !/($srcext)$/i;
push @{ $out ? \@out : \@in }, $_;
}
if (@ARGV && @out) {
warning("Skipping the following files (use --nofilter to avoid this):\n| ", join "\n| ", @out);
}
@files = @in;
}
die "No input files given!\n" unless @files;
my(%files, %global, %revreplace);
%revreplace = reverse %replace;
my $filename;
my $patch_opened = 0;
for $filename (@files) {
unless (open IN, "<$filename") {
warn "Unable to read from $filename: $!\n";
next;
}
info("Scanning $filename ...");
my $c = do { local $/; <IN> };

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close IN;
my %file = (orig => $c, changes => 0);
# Temporarily remove C/XS comments and strings from the code
my @ccom;
$c =~ s{
( ^$HS*\#$HS*include\b[^\r\n]+\b(?:\Q$ppport\E|XSUB\.h)\b[^\r\n]*
| ^$HS*\#$HS*(?:define|elif|if(?:def)?)\b[^\r\n]* )
| ( ^$HS*\#[^\r\n]*
| "[^"\\]*(?:\\.[^"\\]*)*"
| '[^'\\]*(?:\\.[^'\\]*)*'
| / (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]* ) )
}{ defined $2 and push @ccom, $2;
defined $1 ? $1 : "$ccs$#ccom$cce" }mgsex;
$file{ccom} = \@ccom;
$file{code} = $c;
$file{has_inc_ppport} = $c =~ /^$HS*#$HS*include[^\r\n]+\b\Q$ppport\E\b/m;
my $func;
for $func (keys %API) {
my $match = $func;
$match .= "|$revreplace{$func}" if exists $revreplace{$func};
if ($c =~ /\b(?:Perl_)?($match)\b/) {
$file{uses_replace}{$1}++ if exists $revreplace{$func} && $1 eq $revreplace{$func};
$file{uses_Perl}{$func}++ if $c =~ /\bPerl_$func\b/;
if (exists $API{$func}{provided}) {
$file{uses_provided}{$func}++;
if (!exists $API{$func}{base} || $API{$func}{base} > $opt{'compat-version'}) {
$file{uses}{$func}++;
my @deps = rec_depend($func);
if (@deps) {
$file{uses_deps}{$func} = \@deps;
for (@deps) {
$file{uses}{$_} = 0 unless exists $file{uses}{$_};
}
}
for ($func, @deps) {
$file{needs}{$_} = 'static' if exists $need{$_};
}
}
}
if (exists $API{$func}{todo} && $API{$func}{todo} > $opt{'compat-version'}) {
if ($c =~ /\b$func\b/) {
$file{uses_todo}{$func}++;

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}
}
}
}
while ($c =~ /^$HS*#$HS*define$HS+(NEED_(\w+?)(_GLOBAL)?)\b/mg) {
if (exists $need{$2}) {
$file{defined $3 ? 'needed_global' : 'needed_static'}{$2}++;
}
else { warning("Possibly wrong #define $1 in $filename") }
}
for (qw(uses needs uses_todo needed_global needed_static)) {
for $func (keys %{$file{$_}}) {
push @{$global{$_}{$func}}, $filename;
}
}
$files{$filename} = \%file;
}
# Globally resolve NEED_'s
my $need;
for $need (keys %{$global{needs}}) {
if (@{$global{needs}{$need}} > 1) {
my @targets = @{$global{needs}{$need}};
my @t = grep $files{$_}{needed_global}{$need}, @targets;
@targets = @t if @t;
@t = grep /\.xs$/i, @targets;
@targets = @t if @t;
my $target = shift @targets;
$files{$target}{needs}{$need} = 'global';
for (@{$global{needs}{$need}}) {
$files{$_}{needs}{$need} = 'extern' if $_ ne $target;
}
}
}
for $filename (@files) {
exists $files{$filename} or next;
info("=== Analyzing $filename ===");
my %file = %{$files{$filename}};
my $func;
my $c = $file{code};
my $warnings = 0;

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for $func (sort keys %{$file{uses_Perl}})) {
    if ($API{$func}{varargs}) {
        unless ($API{$func}{nothxarg}) {
            my $changes = ($c =~ s/\b(Perl_$func\s*\(.*\))?!aTHX_?\(s*\)*/\1 (\2 eq ') ? 'aTHX' : 'aTHX_ ' . $2 \ge/); 
            if ($changes) {
                warning("Doesn't pass interpreter argument aTHX to Perl_$func");
                $file{changes} += $changes;
            } 
        } 
        else {
            warning("Uses Perl_$func instead of $func");
            $file{changes} += ($c =~ s/\bPerl_$func\s*\(\s*aTHX_?\)*/\func\1\s*(\2 eq ') ? 'aTHX' : 'aTHX_ ' . $2 \ge/); 
        } 
    } 
    else {
        for $func (sort keys %{$file{uses_replace}}) {
            warning("Uses $func instead of $replace{$func}");
            $file{changes} += ($c =~ s/\b$func\s*\(\s*aTHX_?\)*/$func\1\s*(\2 eq ') ? 'aTHX' : 'aTHX_ ' . $2 \ge/); 
        } 
    } 
}

for $func (sort keys %{$file{uses_provided}}) {
    if ($file{uses}->{$func}) {
        if (exists $file{uses_deps}->{$func}) {
            diag("Uses $func, which depends on ", join(',', @$file{uses_deps}->{$func}));
        } 
    } 
    $warnings += hint($func);
}

unless ($opt{quiet}) {
    for $func (sort keys %{$file{uses_todo}}) {
        print "*** WARNING: Uses $func, which may not be portable below perl ",
            format_version($API{$func}{todo}), ", even with \$ppport\n";
        $warnings++;
    } 
}

for $func (sort keys %{$file{needed_static}}) {
    my $message = "";
    if (not exists $file{uses}->{$func}) {
        $message = "No need to define NEED_$func if $func is never used";
    }
}
elsif (exists $file{needs}[$func] && $file{needs}[$func] ne 'static') {
    $message = "No need to define NEED_$func when already needed globally";
}
if ($message) {
    diag($message);
    $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_$func\b.*$LF//mg);
}

for $func (sort keys %{$file{needed_global}}) {
    my $message = ";;
    if (not exists $global{uses}[$func]) {
        $message = "No need to define NEED_${func}_GLOBAL if $func is never used";
    }
    elsif (exists $file{needs}[$func]) {
        if ($file{needs}[$func] eq 'extern') {
            $message = "No need to define NEED_${func}_GLOBAL when already needed globally";
        }
        elsif ($file{needs}[$func] eq 'static') {
            $message = "No need to define NEED_${func}_GLOBAL when only used in this file";
        }
    }
    if ($message) {
        diag($message);
        $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_${func}_GLOBAL\b.*$LF//mg);
    }
}

$file{needs_inc_ppport} = keys %{$file{uses}};

if ($file{needs_inc_ppport}) {
    my $pp = ";

    for $func (sort keys %{$file{needs}}) {
        my $type = $file{needs}[$func];
        next if $type eq 'extern';
        my $suffix = $type eq 'global' ? '_GLOBAL' : "
        unless (exists $file{"needed_$type"}[$func]) {
            if ($type eq 'global') {
                diag("Files [@{$global{needs}[$func]}] need $func, adding global request");
            }
            else {
                diag("File needs $func, adding static request");
            }
        }
        $pp .= "#define NEED_$func$suffix\n";
    }
}
if ($pp && ($c =~ s/^(?=$HS*#$HS*define$HS+NEED_\w+)/$pp/m)) {
  $pp = ""
  $file{changes}++;
}

unless ($file{has_inc_ppport}) {
  diag("Needs to include "$ppport"");
  $pp = qq(include "$ppport"
)
}

if ($pp) {
  $file{changes} += ($c =~ s/^($HS*#$HS*define$HS+NEED_\w+.*?)^/$1$pp/ms)
    || ($c =~ s/^($HS*#$HS*include.*\Q$ppport\E)/$pp/m)
    || ($c =~ s/^($HS*#$HS*include.*XSUB.*$s+?)^/$1$pp/m)
    || ($c =~ s/^/$pp/);
}
else {
  if ($file{has_inc_ppport}) {
    diag("No need to include "$ppport"");
    $file{changes} += ($c =~ s/^$HS*?#$HS*include.*\Q$ppport.*?$LF//m);
  }
}

# put back in our C comments
my $ix;
my $cppc = 0;
my @ccom = @{$file{ccom}};
for $ix (0 .. $#ccom) {
  if (!$opt{cplusplus} && $ccom[$ix] =~ s!^//!!) {
    $cppc++;
    $file{changes} += $c =~ s/$rccs$ix$rcce/$ccs$ccom[$ix] $cce/;
  }
  else {
    $c =~ s/$rccs$ix$rcce/$ccom[$ix]/;
  }
}

if ($cppc) {
  my $s = $cppc != 1 ? 's' : " ;
  warning("Uses $cppc C++ style comment$s, which is not portable");
}

my $s = $warnings != 1 ? 's' : " ;
my $warn = $warnings ? " ($warnings warning$s)" : " ;
info("Analysis completed$warn");

if ($file{changes}) {
if (exists $opt{copy}) {
    my $newfile = "$filename$opt{copy}";
    if (-e $newfile) {
        error("$newfile' already exists, refusing to write copy of '$filename'");  
    } else {
        local *F;
        if (open F, ">$newfile") {
            info("Writing copy of '$filename' with changes to '$newfile'");
            print F $c;
            close F;
        } else {
            error("Cannot open '$newfile' for writing: $!");
        }
    }
} elsif (exists $opt{patch} || $opt{changes}) {
    if (exists $opt{patch}) {
        unless ($patch_opened) {
            if (open PATCH, ">$opt{patch}") {
                $patch_opened = 1;
            } else {
                error("Cannot open '$opt{patch}' for writing: $!");
                delete $opt{patch};
                $opt{changes} = 1;
                goto fallback;
            }
        }
        mydiff(*PATCH, $filename, $c);
    } else {
        fallback:
        info("Suggested changes:.");
        mydiff(*STDOUT, $filename, $c);
    } else {
        my $s = $file{changes} == 1 ? '' : 's';
        info("$file{changes} potentially required change$s detected");
    }
} else {
    info("Looks good");
}
close PATCH if $patch_opened;

exit 0;

sub try_use { eval "use @_;"; return $@ eq ""
}

sub mydiff
{
    local *F = shift;
    my($file, $str) = @_;
    my $diff;
    
    if (exists $opt{diff}) {
        $diff = run_diff($opt{diff}, $file, $str);
    }
    
    if (!defined $diff and try_use('Text::Diff')) {
        $diff = Text::Diff::diff($file, $str, { STYLE => 'Unified' });
        $diff = <<HEADER . $diff;
--- $file
+++ $file.patched
 HEADER
    }
    
    if (!defined $diff) {
        $diff = run_diff('diff -u', $file, $str);
    }
    
    if (!defined $diff) {
        $diff = run_diff('diff', $file, $str);
    }
    
    if (!defined $diff) {
        error("Cannot generate a diff. Please install Text::Diff or use --copy.");
        return;
    }
    
    print F $diff;
}

sub run_diff
{
    my($prog, $file, $str) = @_;
    my $tmp = 'dppptemp';
    my $suf = 'aaa';
    my $diff = ";
    local *F;
while (-e "$tmp.$suf") { $suf++ }
$tmp = "$tmp.$suf";

if (open F, ">$tmp") {
    print F $str;
    close F;

    if (open F, "$prog $file $tmp |") {
        while (<F>) {
            s/$tmp\E/$file.patched/;
            $diff .= $ _;
        }
        close F;
        unlink $tmp;
        return $diff;
    }

    unlink $tmp;
} else {
    error("Cannot open '$tmp' for writing: $!");
}

return undef;

sub rec_depend
{
    my($func, $seen) = @_;
    return () unless exists $depends{$func};
    $seen = {%{$seen||{}}};
    return () if $seen->{$func}++;
    my %s;
    grep !s{$_}++, map { ($_, rec_depend($_, $seen)) } @{$depends{$func}};
}

sub parse_version
{
    my $ver = shift;

    if ($ver =~ /^\d+\.(\d+).\d+$/) {
        return ($1, $2, $3);
    } elsif ($ver !~ /^\d+\.[\d_]+$/) {
        die "cannot parse version '$ver'un";
    }
}
$ver =~ s/_//g;
$ver =~ s/$/000000/;

my($r,$v,$s) = $ver =~ /\d+/.(\d{3})/(\d{3})/;

$v = int $v;
$s = int $s;

if ($r < 5 || ($r == 5 && $v < 6)) {
  if ($s % 10) {
    die "cannot parse version '$ver'\n";
  }
}

return ($r, $v, $s);
}

sub format_version
{
  my $ver = shift;

  $ver =~ s/$/000000/;
  my($r,$v,$s) = $ver =~ /\d+/.(\d{3})/(\d{3})/;

  $v = int $v;
  $s = int $s;

  if ($r < 5 || ($r == 5 && $v < 6)) {
    if ($s % 10) {
      die "invalid version '$ver'\n";
    }
    $s /= 10;
    $ver = sprintf "%d.%03d", $r, $v;
    $s > 0 and $ver .= sprintf "._%02d", $s;
  }

  return $ver;
}

return sprintf "%d.%d.%d", $r, $v, $s;
}

sub info
{
  $opt{quiet} and return;
  print @_, "\n";
}
sub diag
{
$opt{quiet} and return;
$opt{diag} and print @_, "\n";
}
sub warning
{
$opt{quiet} and return;
print "*** ", @_, "\n";
}
sub error
{
print "*** ERROR: ", @_, "\n";
}
my %given_hints;
my %given_warnings;
sub hint
{
$opt{quiet} and return;
my $func = shift;
my $rv = 0;
if (exists $warnings{$func} && !$given_warnings{$func}++) {
my $warn = $warnings{$func};
$warn =~ s!^!*** !mg;
print "*** WARNING: $func\n", $warn;
$rv++;
}
if ($opt{hints} && exists $hints{$func} && !$given_hints{$func}++) {
my $hint = $hints{$func};
$hint =~ s/^/ /mg;
print " --- hint for $func ---\n", $hint;
}
$rv;
}
sub usage
{
my($usage) = do { local(@ARGV,$/)=($0); <> } =~ /^=head\d$HS+SYNOPSIS\s*^(.*?)\s*^=/ms;
my %M = ( 'I' => '*' );
$usage =~ s/^\s*perl\s+\S+/$^X $0/;
$usage =~ s/([A-Z])<([^>]+)>/$M{$1}$2$M{$1}/g;
print <<ENDUSAGE;
Usage: $usage

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See perldoc $0 for details.
ENDUSAGE
exit 2;
}
sub strip
{
my $self = do { local(@ARGV,$/)=($0); <> };
my($copy) = $self =~ /^=head\d\s+COPYRIGHT\s*^(.*?)^=\w+/ms;
$copy =~ s/^(?=\S+)/ /gms;
$self =~ s/^$HS+Do NOT edit.*?(?=^-)/$copy/ms;
$self =~ s/^SKIP.*(?=^__DATA__)/SKIP
if (\@ARGV && \$ARGV[0] eq '--unstrip') {
eval { require Devel::PPPort };
\$@ and die "Cannot require Devel::PPPort, please install.\\n";
if (eval \$Devel::PPPort::VERSION < $VERSION) {
die "$0 was originally generated with Devel::PPPort $VERSION.\\n"
. "Your Devel::PPPort is only version \$Devel::PPPort::VERSION.\\n"
. "Please install a newer version, or --unstrip will not work.\\n";
}
Devel::PPPort::WriteFile(\$0);
exit 0;
}
print <<END;
Sorry, but this is a stripped version of \$0.
To be able to use its original script and doc functionality,
please try to regenerate this file using:
\$^X \$0 --unstrip
END
/ms;
my($pl, $c) = $self =~ /(.*^__DATA__)(.*)/ms;
$c =~ s{
/ (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
| ( "[^"\\]*(?:\\.[^"\\]*)*"
| '[^'\\]*(?:\\.[^'\\]*)*' )
| ($HS+) }{ defined $2 ? ' ' : ($1 || '') }gsex;
$c =~ s!\s+$!!mg;
$c =~ s!^$LF!!mg;
$c =~ s!^\s*#\s*!#!mg;
$c =~ s!^\s+!!mg;

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open OUT, ">$0" or die "cannot strip $0: $!
;  
print OUT "$pl$c
;  
exit 0; 
} 

__DATA__
 */ 

Found in path(s):
No license file was found, but licenses were detected in source scan.

License: GPL+ or Artistic

Found in path(s):
No license file was found, but licenses were detected in source scan.

Copyright 2006 - 2017 Jerry D. Hedden. All rights reserved.
This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

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=head1 NAME

threads::shared - Perl extension for sharing data structures between threads

=head1 VERSION

This document describes threads::shared version 1.58

=head1 SYNOPSIS

use threads;
use threads::shared;

my $var :shared;
my %hsh :shared;
my @ary :shared;
my ($scalar, @array, %hash);
share($scalar);
share(@array);
share(%hash);

$var = $scalar_value;
$var = $shared_ref_value;
$var = shared_clone($non_shared_ref_value);
$var = shared_clone({'foo' => [qw/foo bar baz/]});

$hsh{'foo'} = $scalar_value;
$hsh{'bar'} = $shared_ref_value;
$hsh{'baz'} = shared_clone($non_shared_ref_value);
$hsh{'quz'} = shared_clone([1..3]);

$ary[0] = $scalar_value;
$ary[1] = $shared_ref_value;
$ary[2] = shared_clone($non_shared_ref_value);
$ary[3] = shared_clone([ {} , [] ]);  

{ lock(%hash); ... }  

cond_wait($scalar);  
cond_timedwait($scalar, time() + 30);  
cond_broadcast(@array);  
cond_signal(%hash);  

my $lockvar :shared;  
# condition var != lock var  
cond_wait($var, $lockvar);  
cond_timedwait($var, time()+30, $lockvar);  

=head1 DESCRIPTION

By default, variables are private to each thread, and each newly created thread gets a private copy of each existing variable. This module allows you to share variables across different threads (and pseudo-forks on Win32). It is used together with the L<threads> module.

This module supports the sharing of the following data types only: scalars and scalar refs, arrays and array refs, and hashes and hash refs.

=head1 EXPORT

The following functions are exported by this module: C<share>, C<shared_clone>, C<is_shared>, C<cond_wait>, C<cond_timedwait>, C<cond_signal> and C<cond_broadcast>
Note that if this module is imported when \texttt{threads} has not yet been loaded, then these functions all become no-ops. This makes it possible to write modules that will work in both threaded and non-threaded environments.

\section*{FUNCTIONS}

\item \texttt{share} \texttt{VARIABLE}

\texttt{share} takes a variable and marks it as shared:

my ($scalar, @array, %hash);
share($scalar);
share(@array);
share(%hash);

\texttt{share} will return the shared rvalue, but always as a reference.

Variables can also be marked as shared at compile time by using the \texttt{share} attribute:

my ($var, %hash, @array) :shared;

Shared variables can only store scalars, refs of shared variables, or refs of shared data (discussed in next section):

my ($var, %hash, @array) :shared;
my $bork;

# Storing scalars
$var = 1;
$hash{‘foo’} = ‘bar’;
$array[0] = 1.5;

# Storing shared refs
$var = \%hash;
$hash{‘ary’} = \@array;
$array[1] = \$var;

# The following are errors:
#  $var = \$bork;             # ref of non-shared variable
#  $hash{‘bork’} = [];       # non-shared array ref
#  push(@array, [ ‘x’ => 1 ]); # non-shared hash ref

\item \texttt{shared_clone} \texttt{REF}
C<shared_clone> takes a reference, and returns a shared version of its argument, performing a deep copy on any non-shared elements. Any shared elements in the argument are used as is (i.e., they are not cloned).

my $cpy = shared_clone({'foo' => [qw/foo bar baz/]});

Object status (i.e., the class an object is blessed into) is also cloned.

my $obj = {'foo' => [qw/foo bar baz/]};
bless($obj, 'Foo');
my $cpy = shared_clone($obj);
print(ref($cpy), "\n"); # Outputs 'Foo'

For cloning empty array or hash refs, the following may also be used:

$var = &share([]); # Same as $var = shared_clone([]);
$var = &share({}); # Same as $var = shared_clone({});

Not all Perl data types can be cloned (e.g., globs, code refs). By default, C<shared_clone> will L<croak|Carp> if it encounters such items. To change this behaviour to a warning, then set the following:

$threads::shared::clone_warn = 1;

In this case, C<undef> will be substituted for the item to be cloned. If set to zero:

$threads::shared::clone_warn = 0;

then the C<undef> substitution will be performed silently.

=item is_shared VARIABLE

C<is_shared> checks if the specified variable is shared or not. If shared, returns the variable's internal ID (similar to C<refaddr()> (see L<Scalar::Util>). Otherwise, returns C<undef>.

if (is_shared($var)) {
    print("\$var is shared\n");
} else {
    print("\$var is not shared\n");
}

When used on an element of an array or hash, C<is_shared> checks if the specified element belongs to a shared array or hash. (It does not check the contents of that element.)

my %hash :shared:
if (is_shared(%hash)) {
    print("%hash is shared\n");
}

$hash{'elem'} = 1;
if (is_shared($hash{'elem'})) {
    print("$hash{'elem'} is in a shared hash\n");
}

=C<lock> places a B<advisory> lock on a variable until the lock goes out of scope. If the variable is locked by another thread, the C<lock> call will block until it's available. Multiple calls to C<lock> by the same thread from within dynamically nested scopes are safe -- the variable will remain locked until the outermost lock on the variable goes out of scope.

C<lock> follows references exactly I<one> level:

my %hash :shared;
my $ref = %hash;
lock($ref);       # This is equivalent to lock(%hash)

Note that you cannot explicitly unlock a variable; you can only wait for the lock to go out of scope. This is most easily accomplished by locking the variable inside a block.

my $var :shared;
{
    lock($var);
    # $var is locked from here to the end of the block
    ...
}
    # $var is now unlocked

As locks are advisory, they do not prevent data access or modification by another thread that does not itself attempt to obtain a lock on the variable.

You cannot lock the individual elements of a container variable:

my %hash :shared;
$hash{'foo'} = 'bar';
#lock($hash{'foo'});    # Error
lock(%hash);            # Works

If you need more fine-grained control over shared variable access, see L<Thread::Semaphore>.
The C<cond_wait> function takes a B<locked> variable as a parameter, unlocks the variable, and blocks until another thread does a C<cond_signal> or C<cond_broadcast> for that same locked variable. The variable that C<cond_wait> blocked on is re-locked after the C<cond_wait> is satisfied. If there are multiple threads C<cond_wait>ing on the same variable, all but one will re-block waiting to reacquire the lock on the variable. (So if you're only using C<cond_wait> for synchronization, give up the lock as soon as possible). The two actions of unlocking the variable and entering the blocked wait state are atomic, the two actions of exiting from the blocked wait state and re-locking the variable are not.

In its second form, C<cond_wait> takes a shared, B<unlocked> variable followed by a shared, B<locked> variable. The second variable is unlocked and thread execution suspended until another thread signals the first variable.

It is important to note that the variable can be notified even if no thread C<cond_signal> or C<cond_broadcast> on the variable. It is therefore important to check the value of the variable and go back to waiting if the requirement is not fulfilled. For example, to pause until a shared counter drops to zero:

{ lock($counter); cond_wait($counter) until $counter == 0; }

In its two-argument form, C<cond_timedwait> takes a B<locked> variable and an absolute timeout in I<epoch> seconds (see L<time() in perlfunc|perlfunc/time> for more) as parameters, unlocks the variable, and blocks until the timeout is reached or another thread signals the variable. A false value is returned if the timeout is reached, and a true value otherwise. In either case, the variable is re-locked upon return.

Like C<cond_wait>, this function may take a shared, B<locked> variable as an additional parameter; in this case the first parameter is an B<unlocked> condition variable protected by a distinct lock variable.

Again like C<cond_wait>, waking up and reacquiring the lock are not atomic, and you should always check your desired condition after this function returns. Since the timeout is an absolute value, however, it does not have to be recalculated with each pass.
lock($var);
my $abs = time() + 15;
until ($ok = desired_condition($var)) {
    last if !cond_timedwait($var, $abs);
}
# we got it if $ok, otherwise we timed out!

=item cond_signal VARIABLE

The C<cond_signal> function takes a B<locked> variable as a parameter and unblocks one thread that's C<cond_wait>ing on that variable. If more than one thread is blocked in a C<cond_wait> on that variable, only one (and which one is indeterminate) will be unblocked.

If there are no threads blocked in a C<cond_wait> on the variable, the signal is discarded. By always locking before signaling, you can (with care), avoid signaling before another thread has entered cond_wait().

C<cond_signal> will normally generate a warning if you attempt to use it on an unlocked variable. On the rare occasions where doing this may be sensible, you can suppress the warning with:

{ no warnings 'threads'; cond_signal($foo); }

=item cond_broadcast VARIABLE

The C<cond_broadcast> function works similarly to C<cond_signal>. C<cond_broadcast>, though, will unblock B<all> the threads that are blocked in a C<cond_wait> on the locked variable, rather than only one.

=head1 OBJECTS

L<threads::shared> exports a version of L<bless()|perlfunc/"bless REF"> that works on shared objects such that L<blessings> propagate across threads.

# Create a shared 'Foo' object
my $foo :shared = shared_clone({});
bless($foo, 'Foo');

# Create a shared 'Bar' object
my $bar :shared = shared_clone({});
bless($bar, 'Bar');
# Put 'bar' inside 'foo'
$foo->{'bar'} = $bar;

# Rebless the objects via a thread
threads->create(sub {
    # Rebless the outer object
    bless($foo, 'Yin');

    # Cannot directly rebless the inner object
    #bless($foo->{'bar'}, 'Yang');

    # Retrieve and rebless the inner object
    my $obj = $foo->{'bar'};
    bless($obj, 'Yang');
    $foo->{'bar'} = $obj;
})->join();

print(ref($foo), "\n");  # Prints 'Yin'
print(ref($foo->{'bar'}), "\n");  # Prints 'Yang'
print(ref($bar), "\n");  # Also prints 'Yang'

=head1 NOTES

L<threads::shared> is designed to disable itself silently if threads are not available. This allows you to write modules and packages that can be used in both threaded and non-threaded applications.

If you want access to threads, you must C<use threads> before you C<use threads::shared>. L<threads> will emit a warning if you use it after L<threads::shared>.

=head1 WARNINGS

=over 4

=item cond_broadcast() called on unlocked variable

=item cond_signal() called on unlocked variable

See L</"cond_signal VARIABLE">, above.

=back

=head1 BUGS AND LIMITATIONS

When C<share> is used on arrays, hashes, array refs or hash refs, any data they contain will be lost.
my @arr = qw(foo bar baz);
share(@arr);
# @arr is now empty (i.e., == ());

# Create a 'foo' object
my $foo = { 'data' => 99 }; 
bless($foo, 'foo');

# Share the object
share($foo);        # Contents are now wiped out
print("ERROR: \$foo is empty\n")
    if (!exists($foo->{'data'}));

Therefore, populate such variables B<after> declaring them as shared.  (Scalar
and scalar refs are not affected by this problem.)

Blessing a shared item after it has been nested in another shared item does
not propagate the blessing to the shared reference:

my $foo = &share({});
my $bar = &share({});
$bar->{foo} = $foo;
bless($foo, 'baz');        # $foo is now of class 'baz',
    # but $bar->{foo} is unblessed.

Therefore, you should bless objects before sharing them.

It is often not wise to share an object unless the class itself has been
written to support sharing.  For example, a shared object's destructor may
get called multiple times, once for each thread's scope exit, or may not
get called at all if it is embedded inside another shared object.  Another
issue is that the contents of hash-based objects will be lost due to the
above mentioned limitation.  See F<examples/class.pl> (in the CPAN
distribution of this module) for how to create a class that supports object
sharing.

Destructors may not be called on objects if those objects still exist at
global destruction time.  If the destructors must be called, make sure
there are no circular references and that nothing is referencing the
objects before the program ends.

Does not support C<splice> on arrays.  Does not support explicitly changing
array lengths via $#array -- use C<push> and C<pop> instead.

Taking references to the elements of shared arrays and hashes does not
autovivify the elements, and neither does slicing a shared array/hash over
non-existent indices/keys autovivify the elements.
C<share()> allows you to C<< share($hashref->{key}) >> and C<< share($arrayref->[idx]) >> without giving any error message. But the C<< $hashref->{key} >> or C<< $arrayref->[idx] >> is B<not> shared, causing the error "lock can only be used on shared values" to occur when you attempt to C<< lock($hashref->{key}) >> or C<< lock($arrayref->[idx]) >> in another thread.

Using C<refaddr()> is unreliable for testing whether or not two shared references are equivalent (e.g., when testing for circular references). Use L<is_shared()>|"is_shared VARIABLE">, instead:

use threads;
use threads::shared;
use Scalar::Util qw(refaddr);

# If ref is shared, use threads::shared's internal ID.
# Otherwise, use refaddr().
my $addr1 = is_shared($ref1) || refaddr($ref1);
my $addr2 = is_shared($ref2) || refaddr($ref2);

if ($addr1 == $addr2) {
    # The refs are equivalent
}

L<each()>|perlfunc/"each HASH"> does not work properly on shared references embedded in shared structures. For example:

my %foo :shared;
$foo{bar} = shared_clone({'a'=>'x', 'b'=>'y', 'c'=>'z'});

while (my ($key, $val) = each(%{$foo{bar}})) {
    ...
}

Either of the following will work instead:

my $ref = $foo{bar};
while (my ($key, $val) = each(%{$ref})) {
    ...
}

foreach my $key (keys(%{$foo{bar}})) {
    my $val = $foo{bar}[$key];
    ...
}

This module supports dual-valued variables created using C<dualvar()> from
L<Scalar::Util>. However, while C<$!> acts like a dualvar, it is implemented as a tied SV. To propagate its value, use the follow construct, if needed:

```
my $errno :shared = dualvar($!, $!);
```

View existing bug reports at, and submit any new bugs, problems, patches, etc. to: L<http://rt.cpan.org/Public/Dist/Display.html?Name=threads-shared>

=head1 SEE ALSO

threads::shared on MetaCPAN:
L<https://metacpan.org/release/threads-shared>

Code repository for CPAN distribution:

L<threads>, L<perlthrtut>

L<http://www.perl.com/pub/a/2002/06/11/threads.html> and

Perl threads mailing list:
L<http://lists.perl.org/list/ithreads.html>

Sample code in the I<examples> directory of this distribution on CPAN.

=head1 AUTHOR

Artur Bergman E<lt>sky AT crucially DOT netE<gt>

Documentation borrowed from the old Thread.pm.

CPAN version produced by Jerry D. Hedden E<lt>jhedden AT cpan DOT orgE<gt>.

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=cut

Found in path(s):

No license file was found, but licenses were detected in source scan.

---
abstract: 'Perl extension for sharing data structures between threads'
author:
  - 'Artur Bergman, Jerry D. Hedden <jdhedden AT cpan DOT org>'
buildRequires:
  ExtUtils::MakeMaker: '0'
configure_requires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.24, CPAN::Meta::Converter version 2.150010'
license: perl
meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
name: threads-shared
no_index:
directory:
  - t
  - inc
requires:
  Carp: '0'
  Config: '0'
  ExtUtils::testlib: '0'
  Scalar::Util: '0'
  Test::More: '0'
  XSLoader: '0'
  strict: '0'
  threads: '1.73'
  warnings: '0'
  version: '1.58'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'

Found in path(s):

1.824 grpc-go 1.44.0

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// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124
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/opt/cola/permits/1325813661_1652340648.0069036/0/docker-ce-20.10.14-3.el8.x86_64.src.rpm-cosi-expand-archive-cugdV2aM/usr/bin/docker-init: binary file matches

Found in path(s):
* /bin/grep

1.834 v8 6.8.275.32

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assembler-arm.cc, assembler-arm.h, assembler-ia32-inl.h,
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Written by:       Philip Hazel
Email local part: ph10
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@page
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@example
@example
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@end group
@end smallexample

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@example
@example
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@end group
@end smallexample

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@c Local Variables:
@c ispell-local-pdict: "ispell-dict"
1.844 perl-scalar-list-utils 1.49-2.el8

1.844.1 Available under license:
   No license file was found, but licenses were detected in source scan.

=head1 NAME

List::Util::XS - Indicate if List::Util was compiled with a C compiler

=head1 SYNOPSIS

use List::Util::XS 1.20;

=head1 DESCRIPTION

C<List::Util::XS> can be used as a dependency to ensure List::Util was
installed using a C compiler and that the XS version is installed.

During installation C<$List::Util::XS::VERSION> will be set to
C<undef> if the XS was not compiled.

Starting with release 1.23_03, Scalar-List-Util is B<always> using
the XS implementation, but for backwards compatibility, we still
ship the C<List::Util::XS> module which just loads C<List::Util>.

=head1 SEE ALSO

L<Scalar::Util>, L<List::Util>, L<List::MoreUtils>

=head1 COPYRIGHT

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=cut

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# modify it under the same terms as Perl itself.
=head1 KNOWN BUGS

=head2 RT #95409

L<https://rt.cpan.org/Ticket/Display.html?id=95409>

If the block of code given to L</pairmap> contains lexical variables that are captured by a returned closure, and the closure is executed after the block has been re-used for the next iteration, these lexicals will not see the correct values. For example:

my @subs = pairmap {
    my $var = "$a is $b";
    sub { print "$var\n" }; 
} one => 1, two => 2, three => 3;

$_->() for @subs;

Will incorrectly print

three is 3
three is 3
three is 3

This is due to the performance optimisation of using C<MULTICALL> for the code block, which means that fresh SVs do not get allocated for each call to the block. Instead, the same SV is re-assigned for each iteration, and all the closures will share the value seen on the final iteration.

To work around this bug, surround the code with a second set of braces. This creates an inner block that defeats the C<MULTICALL> logic, and does get fresh SVs allocated each time:

my @subs = pairmap {
    {
        my $var = "$a is $b";
        sub { print "$var\n"; }
    }
} one => 1, two => 2, three => 3;

This bug only affects closures that are generated by the block but used afterwards. Lexical variables that are only used during the lifetime of the block's execution will take their individual values for each invocation, as normal.

=head2 uniqnum() on oversized bignums
Due to the way that C<uniqnum()> compares numbers, it cannot distinguish
differences between bignums (especially bigints) that are too large to fit in
the native platform types. For example,

my $x = Math::BigInt->new( "1" x 100 );
my $y = $x + 1;

say for uniqnum( $x, $y );

Will print just the value of C<$x>, believing that C<$y> is a numerically-
equivalent value. This bug does not affect C<uniqstr()> which will correctly
observe that the two values stringify to different strings.

=head1 SUGGESTED ADDITIONS

The following are additions that have been requested, but I have been reluctant
to add due to them being very simple to implement in perl

# How many elements are true

sub true { scalar grep { $_ } @_ }

# How many elements are false

sub false { scalar grep { !_$_ } @_ }

=head1 SEE ALSO

L<Scalar::Util>, L<List::MoreUtils>

=head1 COPYRIGHT

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Recent additions and current maintenance by
Paul Evans, <leonerd@leonerd.org.uk>.

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 */

/*
----------------------------------------------------------------------
ppport.h -- Perl/Pollution/Portability Version 3.19_02

Automatically created by Devel::PPPort running under perl 5.010000.

Do NOT edit this file directly! -- Edit PPPort_pm.PL and the
includes in parts/inc/ instead.

Use 'perldoc ppport.h' to view the documentation below.

----------------------------------------------------------------------

SKIP

=pod

=head1 NAME

ppport.h - Perl/Pollution/Portability version 3.19_02

=head1 SYNOPSIS

perl ppport.h [options] [source files]

Searches current directory for files if no [source files] are given

--help show short help

--version show version
--patch=file    write one patch file with changes
--copy=suffix   write changed copies with suffix
--diff=program  use diff program and options

--compat-version=version  provide compatibility with Perl version
--cplusplus         accept C++ comments

--quiet            don't output anything except fatal errors
--nodiag           don't show diagnostics
--nohints          don't show hints
--nochanges        don't suggest changes
--nofilter         don't filter input files

--strip            strip all script and doc functionality from ppport.h

--list-provided    list provided API
--list-unsupported list unsupported API
--api-info=name    show Perl API portability information

=head1 COMPATIBILITY

This version of F<ppport.h> is designed to support operation with Perl installations back to 5.003, and has been tested up to 5.11.5.

=head1 OPTIONS

=head2 --help

Display a brief usage summary.

=head2 --version

Display the version of F<ppport.h>.

=head2 --patch=I<file>

If this option is given, a single patch file will be created if any changes are suggested. This requires a working diff program to be installed on your system.

=head2 --copy=I<suffix>

If this option is given, a copy of each file will be saved with the given suffix that contains the suggested changes. This does not require any external programs. Note that this does not automagically add a dot between the original filename and the
suffix. If you want the dot, you have to include it in the option argument.

If neither C<--patch> or C<--copy> are given, the default is to simply print the diffs for each file. This requires either C<Text::Diff> or a C<diff> program to be installed.

=head2 --diff=I<program>

Manually set the diff program and options to use. The default is to use C<Text::Diff>, when installed, and output unified context diffs.

=head2 --compat-version=I<version>

Tell F<ppport.h> to check for compatibility with the given Perl version. The default is to check for compatibility with Perl version 5.003. You can use this option to reduce the output of F<ppport.h> if you intend to be backward compatible only down to a certain Perl version.

=head2 --cplusplus

Usually, F<ppport.h> will detect C++ style comments and replace them with C style comments for portability reasons. Using this option instructs F<ppport.h> to leave C++ comments untouched.

=head2 --quiet

Be quiet. Don't print anything except fatal errors.

=head2 --nodiag

Don't output any diagnostic messages. Only portability alerts will be printed.

=head2 --nohints

Don't output any hints. Hints often contain useful portability notes. Warnings will still be displayed.

=head2 --nochanges

Don't suggest any changes. Only give diagnostic output and hints unless these are also deactivated.

=head2 --nofilter
Don't filter the list of input files. By default, files not looking like source code (i.e. not *.xs, *.c, *.cc, *.cpp or *.h) are skipped.

=head2 --strip

Strip all script and documentation functionality from F<ppport.h>. This reduces the size of F<ppport.h> dramatically and may be useful if you want to include F<ppport.h> in smaller modules without increasing their distribution size too much.

The stripped F<ppport.h> will have a C<--unstrip> option that allows you to undo the stripping, but only if an appropriate C<Devel::PPPort> module is installed.

=head2 --list-provided

Lists the API elements for which compatibility is provided by F<ppport.h>. Also lists if it must be explicitly requested, if it has dependencies, and if there are hints or warnings for it.

=head2 --list-unsupported

Lists the API elements that are known not to be supported by F<ppport.h> and below which version of Perl they probably won't be available or work.

=head2 --api-info=I<name>

Show portability information for API elements matching I<name>. If I<name> is surrounded by slashes, it is interpreted as a regular expression.

=head1 DESCRIPTION

In order for a Perl extension (XS) module to be as portable as possible across differing versions of Perl itself, certain steps need to be taken.

=over 4

=item *

Including this header is the first major one. This alone will give you access to a large part of the Perl API that hasn't been available in earlier Perl releases. Use

perl ppport.h --list-provided
to see which API elements are provided by ppport.h.

=item *

You should avoid using deprecated parts of the API. For example, using global Perl variables without the C<PL_> prefix is deprecated. Also, some API functions used to have a C<perl_> prefix. Using this form is also deprecated. You can safely use the supported API, as F<ppport.h> will provide wrappers for older Perl versions.

=item *

If you use one of a few functions or variables that were not present in earlier versions of Perl, and that can't be provided using a macro, you have to explicitly request support for these functions by adding one or more C<#define>s in your source code before the inclusion of F<ppport.h>.

These functions or variables will be marked C<explicit> in the list shown by C<--list-provided>.

Depending on whether you module has a single or multiple files that use such functions or variables, you want either C<static> or global variants.

For a C<static> function or variable (used only in a single source file), use:

    #define NEED_function
    #define NEED_variable

For a global function or variable (used in multiple source files), use:

    #define NEED_function_GLOBAL
    #define NEED_variable_GLOBAL

Note that you mustn't have more than one global request for the same function or variable in your project.

<table>
<thead>
<tr>
<th>Function / Variable</th>
<th>Static Request</th>
<th>Global Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL_parser</td>
<td>NEED_PL_parser</td>
<td>NEED_PL_parser_GLOBAL</td>
</tr>
<tr>
<td>PL_signals</td>
<td>NEED_PL_signals</td>
<td>NEED_PL_signals_GLOBAL</td>
</tr>
<tr>
<td>eval_pv()</td>
<td>NEED_eval_pv</td>
<td>NEED_eval_pv_GLOBAL</td>
</tr>
<tr>
<td>grok_bin()</td>
<td>NEED_grok_bin</td>
<td>NEED_grok_bin_GLOBAL</td>
</tr>
<tr>
<td>grok_hex()</td>
<td>NEED_grok_hex</td>
<td>NEED_grok_hex_GLOBAL</td>
</tr>
<tr>
<td>grok_number()</td>
<td>NEED_grok_number</td>
<td>NEED_grok_number_GLOBAL</td>
</tr>
<tr>
<td>grok_numeric_radix()</td>
<td>NEED_grok_numeric_radix</td>
<td>NEED_grok_numeric_radix_GLOBAL</td>
</tr>
</tbody>
</table>
To avoid namespace conflicts, you can change the namespace of the explicitly exported functions / variables using the C<\$DPPP_NAMESPACE> macro. Just C<\#define> the macro before including C<ppport.h>:

```perl
#define DPPP_NAMESPACE MyOwnNamespace_
#include "ppport.h"
```

The default namespace is C<\$DPPP_>.

=back

The good thing is that most of the above can be checked by running F<ppport.h> on your source code. See the next section for details.

=head1 EXAMPLES

To verify whether F<ppport.h> is needed for your module, whether you should make any changes to your code, and whether any special defines should be used, F<ppport.h> can be run as a Perl script to check your source code. Simply say:

```perl
perl ppport.h
```
The result will usually be a list of patches suggesting changes that should at least be acceptable, if not necessarily the most efficient solution, or a fix for all possible problems.

If you know that your XS module uses features only available in newer Perl releases, if you're aware that it uses C++ comments, and if you want all suggestions as a single patch file, you could use something like this:

    perl ppport.h --compat-version=5.6.0 --cplusplus --patch=test.diff

If you only want your code to be scanned without any suggestions for changes, use:

    perl ppport.h --nochanges

You can specify a different C<diff> program or options, using the C<--diff> option:

    perl ppport.h --diff='diff -C 10'

This would output context diffs with 10 lines of context.

If you want to create patched copies of your files instead, use:

    perl ppport.h --copy=.new

To display portability information for the C<newSVpvn> function, use:

    perl ppport.h --api-info=newSVpvn

Since the argument to C<--api-info> can be a regular expression, you can use

    perl ppport.h --api-info=/_nomg$/

to display portability information for all C<_nomg> functions or

    perl ppport.h --api-info=/./

to display information for all known API elements.

=head1 BUGS

If this version of F<ppport.h> is causing failure during the compilation of this module, please check if newer versions
of either this module or C<Devel::PPPort> are available on CPAN
before sending a bug report.

If F<ppport.h> was generated using the latest version of
C<Devel::PPPort> and is causing failure of this module, please
file a bug report using the CPAN Request Tracker at L<http://rt.cpan.org/>.

Please include the following information:

=over 4
=item 1.
The complete output from running "perl -V"
=item 2.
This file.
=item 3.
The name and version of the module you were trying to build.
=item 4.
A full log of the build that failed.
=item 5.
Any other information that you think could be relevant.
=back

For the latest version of this code, please get the C<Devel::PPPort>
module from CPAN.

=head1 COPYRIGHT

Version 3.x, Copyright (c) 2004-2010, Marcus Holland-Moritz.

Version 2.x, Copyright (C) 2001, Paul Marquess.

Version 1.x, Copyright (C) 1999, Kenneth Albanowski.

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modify it under the same terms as Perl itself.

=head1 SEE ALSO
See L<Devel::PPPort>.

=cut

use strict;

# Disable broken TRIE-optimization
BEGIN { eval ${^RE_TRIE_MAXBUF} = -1 if $] >= 5.009004 && $] <= 5.009005 }

my $VERSION = 3.19_02;

my %opt = (
    quiet => 0,
    diag => 1,
    hints => 1,
    changes => 1,
    cplusplus => 0,
    filter => 1,
    strip => 0,
    version => 0,
);

my($ppport) = $0 =~ /\([\w.]+)\)/;
my $LF = '(?:\r\n|\[\r\n\])';   # line feed
my $HS = '\[ \t\]';             # horizontal whitespace

# Never use C comments in this file!
my $ccs = '/.*'/;
my $cce = '*.';/
my $rccs = quotemeta $ccs;
my $rcce = quotemeta $cce;

eval {
    require Getopt::Long;
    Getopt::Long::GetOptions(
        \%opt, qw(
            help quiet diag! filter! hints! changes! cplusplus strip version
            patch=s copy=s diff=s compat-version=s
            list-provided list-unsupported api-info=s
        )) or usage();
};

if ($@ and grep /^-/, @ARGV) {
    usage() if "@ARGV" =~ /^~/?h(?=\?:elp)?$/;
    die "Getopt::Long not found. Please don't use any options\.\n";
}

if ($opt{version}) {

print "This is $0 $VERSION.
";
exit 0;
}

usage() if $opt{help};
strip() if $opt{strip};

if (exists $opt{'compat-version'}) {
    my($r,$v,$s) = eval { parse_version($opt{'compat-version'}) };
    if ($@) {
        die "Invalid version number format: $opt{'compat-version'}\n";
    }
    die "Only Perl 5 is supported" if $r != 5;
    die "Invalid version number: $opt{'compat-version'}\n" if $v >= 1000 || $s >= 1000;
    $opt{'compat-version'} = sprintf "%d.%03d%03d", $r, $v, $s;
} else {
    $opt{'compat-version'} = 5;
}

my %API = map { /^(\w+)\|$([^|]*)\|([^|]*)\|([^]*)$/
    ? ( $1 => {
        ($2 ? ( base => $2 ) : ()),
        ($3 ? ( todo => $3 ) : ()),
        (index($4, 'v') >= 0 ? ( varargs => 1 ) : ()),
        (index($4, 'p') >= 0 ? ( provided => 1 ) : ()),
        (index($4, 'n') >= 0 ? ( nothxarg => 1 ) : ()),
    })
    : die "invalid spec: $_" } qw(
    AvFILLp[5.004050][p
    AvFILL][l
    CLASS][l
    CPERLscope[5.005000][p
    CX_CURPAD_SAVE][l
    CX_CURPAD_SV][l
    CopFILEAV[5.006000][p
    CopFILEGV_set[5.006000][p
    CopFILEGV[5.006000][p
    CopFILESV[5.006000][p
    CopFILE_set[5.006000][p
    CopFILE[5.006000][p
    CopSTASHPV_set[5.006000][p
    CopSTASHPV[5.006000][p
    CopSTASH_eq[5.006000][p
    CopSTASH_set[5.006000][p
    CopSTASH[5.006000][p
    CopyD[5.009002][p
    Copy][l
IS_NUMBER_NEG|5.007002||p
IS_NUMBER_NOT_INT|5.007002||p
IVSIZE|5.006000||p
IVTYPE|5.006000||p
IVdI|5.006000||p
LEAVE|||
LVRET|||
MARK|||
MULTICALL|5.011005|
MY_CTX_CLONE|5.009002||p
MY_CTX_INIT|5.007003||p
MY_CTX|5.007003||p
MoveD|5.009002||p
Move|||
NOOP|5.005000||p
NUM2PTR|5.006000||p
NVTYPE|5.006000||p
NVef|5.006001||p
NVff|5.006001||p
NVgf|5.006001||p
Newxc|5.009003||p
Newxz|5.009003||p
Newx|5.009003||p
Nullav|||
Nullch|||
Nullcv|||
Nullhv|||
Nullsv|||
ORIGMARK|||
PAD_BASE_SV|||
PAD_CLONE_VARS|||
PAD_COMPNAME_FLAGS|||
PAD_COMPNAME_GEN_set|||
PAD_COMPNAME_GEN|||
PAD_COMPNAME_OURSTASH|||
PAD_COMPNAME_PV|||
PAD_COMPNAME_TYPE|||
PAD_DUP|||
PAD_RESTORE_LOCAL|||
PAD_SAVE_LOCAL|||
PAD_SAVE_SETNULLPAD|||
PAD_SETSV|||
PAD_SET_CUR_NOSAVE|||
PAD_SET_CUR|||
PAD_SV'|||
PAD_SV|||
PERLIO_FUNCS_CAST|5.009003||p
PERLIO_FUNCS_DECL|5.009003||p
SvSHARED_HASH|5.009003||p
SvSHARE|5.007003|
SvSTASH_set|5.009003||p
SvSTASH|||
SvSetMagicSV_nosteal|5.004000|
SvSetMagicSV|5.004000|
SvSetSV_nosteal|5.004000|
SvSetSV|||
SvTAINTED_off|5.004000|
SvTAINTED_on|5.004000|
SvTAINTED|5.004000|
SvTAINt|||
SvTRUE|||
SvTYPE|||
SvUNLOCK|5.007003|
SvUOK|5.007001|5.006000||p
SvUPGRADE|||
SvUTF8_off|5.006000|
SvUTF8_on|5.006000|
SvUTF8|5.006000|
SvUVXx|5.004000||p
SvUVX|5.004000||p
SvUV_nomg|5.009001||p
SvUV_set|5.009003||p
SvUVx|5.004000||p
SvUV|5.004000||p
SvVOK|5.008001|
SvVSTRING_mg|5.009004||p
THIS||n
UNDERBAR|5.009002||p
UTF8_MAXBYTES|5.009002||p
UVSIZE|5.006000||p
UVTYPE|5.006000||p
UVX|5.007001||p
UVof|5.006000||p
UVuf|5.006000||p
UVxf|5.006000||p
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yywarn|
);
if (exists $opt{'list-unsupported'}) {
my $f;
for $f (sort { lc $a cmp lc $b } keys %API) {
next unless $API{$f}{todo};
print "$f ", '.'x(40-length($f)), " ", format_version($API{$f}{todo}), "\n";
}
exit 0;
}
# Scan for possible replacement candidates
my(%replace, %need, %hints, %warnings, %depends);
my $replace = 0;
my($hint, $define, $function);
sub find_api
{
my $code = shift;
$code =~ s{
/ (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
| "[^"\\]*(?:\\.[^"\\]*)*"
| '[^'\\]*(?:\\.[^'\\]*)*' }{}egsx;
grep { exists $API{$_} } $code =~ /(\w+)/mg;
}
while (<DATA>) {
if ($hint) {
my $h = $hint->[0] eq 'Hint' ? \%hints : \%warnings;
if (m{^\s*\*\s(.*?)\s*$}) {
for (@{$hint->[1]}) {
$h->{$_} ||= ''; # suppress warning with older perls
$h->{$_} .= "$1\n";
}
}
else { undef $hint }
}
$hint = [$1, [split /,?\s+/, $2]]
if m{^\s*$rccs\s+(Hint|Warning):\s+(\w+(?:,?\s+\w+)*)\s*$};
if ($define) {
if ($define->[1] =~ /\\$/) {
$define->[1] .= $_;
}
else {
if (exists $API{$define->[0]} && $define->[1] !~ /^DPPP_\(/) {
my @n = find_api($define->[1]);
push @{$depends{$define->[0]}}, @n if @n

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$define = [S1, S2] if m{^s*#s*define\$s+\$(w+)(?:(^)["\']?)\$s+(\.*\$)\$};

if ($function) {
    if (/\^/) { 
        if (exists $API{$function->[0]}) { 
            my @n = find_api($function->[1]); 
            push @{$depends{$function->[0]}}, @n if @n 
        } 
        undef $function; 
    } else { 
        $function->[1] .= ";
    } 
}

$function = [S1, "] if m{^DPPP\_(my_(\w+))\};

$replace   = S1 if m{^s*$rcce$\$s+Replace:\$s+(\+\$)\$s+$rce$s*\$};
$replace{S2} = S1 if $replace and m{^s*$#s*define\$s+\$(w+)(?:\([^\])]*\)\$s+\$(w+)\$s+$rce$s*\$}; 
$replace{S2} = S1 if m{^s*$#s*define\$s+\$(w+)(?:\([^\])]*\)\$s+\$(w+).*$rcce$\$s+Replace\$s+$rce$s*\$};
$replace{S1} = S2 if m{^s*$rcce$s+Replace \$(w+) with \$(w+)$s+$rce$s*\$};

if (m{^s*$rcce$s+\$(w+)(\$s*\$w+)*\$s+\$on$s+\$(w+\$(s*,\$s*\$w+)*\$s+$rce$s*\$)}) { 
    my @n = map { s/s+/\$; \$_ } split /, $3; 
    my $d; 
    for $d (map { s/s+/\$; \$_ } split /, $1) { 
        push @{$depends{$d}}, @n; 
    } 
}

$need{S1} = 1 if m{^#if\$s+defined\$need\$(\$w+)(?:\$GLOBAL)\$};

for (values %depends) { 
    my %s; 
    \$_ = [sort grep !$s{\$_}++, \$_]; 
}

if (exists $opt{\'api-info\'})) { 
    my $f; 
    my $count = 0; 
    my $match = $opt{\'api-info\'} =~ m!^/(.*)/$! ? $1 : "^Q$opt{\'api-info\'}\$"; 
    for $f (sort { lc Sa cmp lc $b } keys %API) {

next unless $f =~ /$match/;
print "\n== $f ==\n";
my $info = 0;
if ($API{$f}{base} || $API{$f}{todo}) {
    my $base = format_version($API{$f}{base} || $API{$f}{todo});
    print "Supported at least starting from perl-$base\n";
    $info++;
}
if ($API{$f}{provided}) {
    my $todo = $API{$f}{todo} ? format_version($API{$f}{todo}) : "5.003";
    print "Support by $ppport provided back to perl-$todo\n";
    print "Support needs to be explicitly requested by NEED_$f\n" if exists $need{$f};
    print "Depends on ", join(’, ’, @{$depends{$f}}), ",\n" if exists $depends{$f};
    print "\n\nShints[$f]" if exists $Shints{$f};
    print "WARNING:\n\n$warnings{$f}" if exists $warnings{$f};
    $info++;
}
print "\n\n\nWARNING:\n\n$warnings{$f}" if exists $warnings{$f};
print "No portability information available\n" unless $info;
$count++;
}
$count or print "Found no API matching $api\n";
exit 0;
}

if (exists $opt{’list-provided’}) {
    my $f;
    for $f (sort { lc $a cmp lc $b } keys %API) {
        next unless $API{$f}{provided};
        my @flags;
        push @flags, ‘explicit’ if exists $need{$f};
        push @flags, ‘depend’ if exists $depends{$f};
        push @flags, ‘hint’ if exists $Shints{$f};
        push @flags, ‘warning’ if exists $warnings{$f};
        my $flags = @flags ? ‘\[’.join(’, ’, @flags).’]\’ : ”;
        print "$f$flags\n";
    }
    exit 0;
}

my @files;
my @srcext = qw(.xs .c .h .cc .cpp -c.inc -xs.inc );
my $srcext = join ‘|’, map { quotemeta $_ } @srcext;

if (@ARGV) {
    my %seen;
    for (@ARGV) {
        if (-e) {

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if (-f) {
push @files, $_ unless $seen{$_}++;
}
else { warn "'$_' is not a file.\n" }
}
else {
my @new = grep { -f } glob $_
or warn "'$_' does not exist.\n";
push @files, grep { !$seen{$_}++ } @new;
}
}
}
else {
eval {
require File::Find;
File::Find::find(sub {
$File::Find::name =~ /($srcext)$/i
and push @files, $File::Find::name;
}, '.');
};
if ($@) {
@files = map { glob "*$_" } @srcext;
}
}
if (!@ARGV || $opt{filter}) {
my(@in, @out);
my %xsc = map { /(.*)\.xs$/ ? ("$1.c" => 1, "$1.cc" => 1) : () } @files;
for (@files) {
my $out = exists $xsc{$_} || /\b\Q$ppport\E$/i || !/($srcext)$/i;
push @{ $out ? \@out : \@in }, $_;
}
if (@ARGV && @out) {
warning("Skipping the following files (use --nofilter to avoid this):\n| ", join "\n| ", @out);
}
@files = @in;
}
die "No input files given!\n" unless @files;
my(%files, %global, %revreplace);
%revreplace = reverse %replace;
my $filename;
my $patch_opened = 0;
for $filename (@files) {
unless (open IN, "<$filename") {
warn "Unable to read from $filename: $!\n";

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next;
}

info("Scanning $filename ...");

my $c = do { local $/; <IN> };
close IN;

my %file = (orig => $c, changes => 0);

# Temporarily remove C/XS comments and strings from the code
my @ccom;
$c =~ s{
 ( ^$HS*#\$HS*include\b[^\r\n]+\b(?:\Q$ppport\E|XSUB\h)b[^\r\n]*)
 | ^$HS*#\$HS*?:define|elif|if(?:def)?\b[^\r\n]*
 | ( ^$HS*[^\r\n]*
 | "[^\r\n]*\?(?:[^\r\n]*)"* "[^\r\n]*\?(?:[^\r\n]*)"* "[^\r\n]*\?(?:[^\r\n]*)"* / (?: \*[^\*]*\*+(?:[^$ccs]\[^*]*\*+)* / | /[^\r\n]* )
 | defined $2 and push @ccom, $2;
}{}mgsex;

$file{ccom} = \@ccom;
$file{code} = $c;
$file{has_inc_ppport} = $c =~ /^$HS*#\$HS*include[^\r\n]+\b\Q$ppport\E\b[^\r\n]*$/;

my $func;
for $func (keys %API) {
    my $match = $func;
    $match .= "\$revreplace\{$func\}" if exists $revreplace\{$func\};
    if ($c =~ /Ab\(:,?$match)\b/) {
        $file{uses_replace}{$1}++ if exists $revreplace\{$func\} && $1 eq $revreplace\{$func\};
        $file{uses_Perl}{$func}++ if $c =~ /Ab\$func\b/;
        if (exists $API\{$func\}{provided}) {
            $file{uses_provided}{$func}++;
            if (!exists $API\{$func\}{base} || $API\{$func\}{base} > $opt{compat-version}) {
                $file{uses}{$func}++; my @deps = rec_depend($func);
            }
            if (@deps) {
                $file{uses_deps}{$func} = \@deps;
                for (@deps) {
                    $file{uses}{$_} = 0 unless exists $file{uses}{$_};
                }
            }
        }
        for ($func, @deps) {
            $file{needs}{$_} = 'static' if exists $need{$_};
        }
    }
}
}
}
}
if (exists $API{$func}{todo} && $API{$func}{todo} > $opt{'compat-version'}) {
if ($c =~ /\b$func\b/) {
$file{uses_todo}{$func}++;
}
}
}
}
while ($c =~ /^$HS*#$HS*define$HS+(NEED_(\w+?)(_GLOBAL)?)\b/mg) {
if (exists $need{$2}) {
$file{defined $3 ? 'needed_global' : 'needed_static'}{$2}++;
}
else { warning("Possibly wrong #define $1 in $filename") }
}
for (qw(uses needs uses_todo needed_global needed_static)) {
for $func (keys %{$file{$_}}) {
push @{$global{$_}{$func}}, $filename;
}
}
$files{$filename} = \%file;
}
# Globally resolve NEED_'s
my $need;
for $need (keys %{$global{needs}}) {
if (@{$global{needs}{$need}} > 1) {
my @targets = @{$global{needs}{$need}};
my @t = grep $files{$_}{needed_global}{$need}, @targets;
@targets = @t if @t;
@t = grep /\.xs$/i, @targets;
@targets = @t if @t;
my $target = shift @targets;
$files{$target}{needs}{$need} = 'global';
for (@{$global{needs}{$need}}) {
$files{$_}{needs}{$need} = 'extern' if $_ ne $target;
}
}
}
for $filename (@files) {
exists $files{$filename} or next;
info("=== Analyzing $filename ===");

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my %file = %{$files{$filename}};
my $func;
my $c = $file{code};
my $warnings = 0;

for $func (sort keys %{$file{uses_Perl}}) {
  if (SAPI[$func] {varargs}) {
    unless (SAPI[$func] {nothxarg}) {
      my $changes = ($c =~ s{\bPerl_$func\$*\($*\)?(?!aTHX_?)\(\[[^\s)\]*\]\()\$1\s*(.+)?\s*}$1 . ($2 eq ') ? 'aTHX' : 'aTHX_' . $2 )ge);
      if ($changes) {
        warning("Doesn't pass interpreter argument aTHX to Perl_$func");
        $file{changes} += $changes;
      }
    }
  }
  else {
    warning("Uses Perl_$func instead of $func");
    $file{changes} += ($c =~ s{\bPerl_$func\$*\($*\)?(?!aTHX_?)\(\[[^\s)\]*\]\()\$1\s*(.+)?\s*}$func$1(g);
  }
}

for $func (sort keys %{$file{uses_replace}}) {
  warning("Uses $func instead of $replace{$func}");
  $file{changes} += ($c =~ s/$func/$replace{$func}/g);
}

for $func (sort keys %{$file{uses_provided}}) {
  if ($file{uses} {$func}) {
    if (exists $file{uses_deps} {$func}) {
      diag("Uses $func, which depends on ", join(', ', @{$file{uses_deps} {$func}}));
    }
    else {
      diag("Uses $func");
    }
  }
  $warnings += hint($func);
}

unless ($opt{quiet}) {
  for $func (sort keys %{$file{uses_todo}}) {
    print "*** WARNING: Uses $func, which may not be portable below perl ",
          format_version(SAPI[$func] {todo}), ", even with "$ppport"
    $warnings++;
  }
}


for $func (sort keys %{$file{needed_static}}) {
    my $message = ";
    if (not exists $file{uses}{$func}) {
        $message = "No need to define NEED_$func if $func is never used";
    } elsif (exists $file{needs}{$func} && $file{needs}{$func} ne 'static') {
        $message = "No need to define NEED_$func when already needed globally";
    }
    if ($message) {
        diag($message);
        $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_$func$b.*$LF//mg);
    }
}

for $func (sort keys %{$file{needed_global}}) {
    my $message = ";
    if (not exists $global{uses}{$func}) {
        $message = "No need to define NEED_$func_GLOBAL if $func is never used";
    } elsif (exists $file{needs}{$func}) {
        if ($file{needs}{$func} eq 'extern') {
            $message = "No need to define NEED_$func_GLOBAL when already needed globally";
        } elsif ($file{needs}{$func} eq 'static') {
            $message = "No need to define NEED_$func_GLOBAL when only used in this file";
        }
    }
    if ($message) {
        diag($message);
        $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_$func_GLOBAL\b.*$LF//mg);
    }
}

$file{needs_inc_ppport} = keys %{$file{uses}};

if ($file{needs_inc_ppport}) {
    my $pp = ";

    for $func (sort keys %{$file{needs}}) {
        my $type = $file{needs}{$func};
        next if $type eq 'extern';
        my $suffix = $type eq 'global' ? '_GLOBAL' : " ";
        unless (exists $file{"needed_$type"}{$func}) {
            if ($type eq 'global') {
                diag("Files [@ {$global{needs}{$func}}] need $func, adding global request");
            } else {
                $message_async = "No need to define NEED_$func when already needed globally";
                if ($message_async) {
                    diag($message_async);
                    $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_$func$Hsb.*$LF//mg);
                }
            }
        }
    }
}
diag("File needs $func, adding static request");
}
$pp .= "#define NEED_$func$suffix\n";
}
}

if ($pp && ($c =~ s/^(?=$HS*#define$HS+NEED_\w+)/$pp/m)) {
    $pp = "";
    $file{changes}++;
}

unless ($file{has_inc_ppport}) {
    diag("Needs to include '$ppport'");
    $pp = qq(#include "$ppport"
)
} else {
    diag("No need to include '$ppport'");
    $file{changes} += ($c =~ s/^(?=$HS*#include.*\Q$ppport\E).*/$pp/m)
        || ($c =~ s/^(?=$HS*#include.*XSUB.*?)/$pp/m)
        || ($c =~ s/^/$pp/);
}

my $ix;
my $cppc = 0;
my @ccom = @{$file{ccom}};
for $ix (0 .. $#ccom) {
    if (!$opt{cplusplus} && $ccom[$ix] =~ s!^//!!) {
        $cppc++;
        $file{changes} += $c =~ s/$rccs$ix$rcce/$ccs$ccom[$ix] $cce/;
    } else {
        $c =~ s/$rccs$ix$rcce/$ccom[$ix]/;
    }
}

if ($cppc) {
    my $s = $cppc != 1 ? 's' : ';
    warning("Uses $cppc C++ style comment$s, which is not portable");
}
my $s = $warnings != 1 ? 's' : '';
my $warn = $warnings ? " ($warnings warning$s)" : '';
info("Analysis completed$warn");
if ($file{changes}) {
if (exists $opt{copy}) {
my $newfile = "$filename$opt{copy}";
if (-e $newfile) {
error("'$newfile' already exists, refusing to write copy of '$filename'");
}
else {
local *F;
if (open F, ">$newfile") {
info("Writing copy of '$filename' with changes to '$newfile'");
print F $c;
close F;
}
else {
error("Cannot open '$newfile' for writing: $!");
}
}
}
elsif (exists $opt{patch} || $opt{changes}) {
if (exists $opt{patch}) {
unless ($patch_opened) {
if (open PATCH, ">$opt{patch}") {
$patch_opened = 1;
}
else {
error("Cannot open '$opt{patch}' for writing: $!");
delete $opt{patch};
$opt{changes} = 1;
goto fallback;
}
}
mydiff(\*PATCH, $filename, $c);
}
else {
fallback:
info("Suggested changes:");
mydiff(\*STDOUT, $filename, $c);
}
}
else {
my $s = $file{changes} == 1 ? '' : 's';
info("$file{changes} potentially required change$s detected");
}

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} else {
    info("Looks good");
}

close PATCH if $patch_opened;

exit 0;

sub try_use { eval "use @_;"; return $@ eq "" }

sub mydiff {
    local *F = shift;
    my($file, $str) = @_;
    my $diff;

    if (exists $opt{diff}) {
        $diff = run_diff($opt{diff}, $file, $str);
    }

    if (!defined $diff and try_use('Text::Diff')) {
        $diff = Text::Diff::diff($file, $str, { STYLE => 'Unified' });
        $diff = <<HEADER . $diff;
        --- $file
        +++ $file.patched
        HEADER
    }

    if (!defined $diff) {
        $diff = run_diff('diff -u', $file, $str);
    }

    if (!defined $diff) {
        $diff = run_diff('diff', $file, $str);
    }

    if (!defined $diff) {
        error("Cannot generate a diff. Please install Text::Diff or use --copy.");
        return;
    }

    print F $diff;
}

sub run_diff
my($prog, $file, $str) = @_; 
my $tmp = 'dppptemp'; 
my $suf = 'aaa'; 
my $diff = ''; 
local *F; 

while (-e "$tmp.$suf") { $suf++; } 
$tmp = "$tmp.$suf";

if (open F, ">$tmp") { 
print F $str;

if (open F, "$prog $file $tmp |") { 
while (<F>) { 
s/$tmp/E/$file.patched/;
$diff .= $_;
} 
close F;
unlink $tmp;
return $diff;
}
unlink $tmp;
} else {
  error("Cannot open '$tmp' for writing: $!");
}
return undef;
}

sub rec_depend 
{ 
my($func, $seen) = @_; 
return () unless exists $depends{$func}; 
$seen = {%{$seen||{}}}; 
return () if $seen->{$func}++; 
my %s; 
grep !%{$_}++, map { ($_, rec_depend($_, $seen)) } @{$depends{$func}}; 
}

sub parse_version 
{ 
my $ver = shift;

if ($ver =~ /^\d+\./) { 

return ($1, $2, $3);
}
elsif ($ver !~ /^\d+\.[\d_]+$/) {
    die "cannot parse version '$ver'\n";
}

$ver =~ s/_//g;
$ver =~ s/$/000000/;

my($r,$v,$s) = $ver =~ /\d+\.(\d{3})(\d{3})/;

$v = int $v;
$s = int $s;

if ($r < 5 || ($r == 5 && $v < 6)) {
    if ($s % 10) {
        die "cannot parse version '$ver'\n";
    }
}

return ($r, $v, $s);
}

sub format_version {
    my $ver = shift;

    $ver =~ s/$/000000/;
    my($r,$v,$s) = $ver =~ /\d+\.(\d{3})(\d{3})/;

    $v = int $v;
    $s = int $s;

    if ($r < 5 || ($r == 5 && $v < 6)) {
        if ($s % 10) {
            die "invalid version '$ver'\n";
        }
        $s /= 10;
        $ver = sprintf "%d.%03d", $r, $v;
        $s > 0 and $ver .= sprintf "_%02d", $s;
    }
    $ver;
}

return sprintf "%d.%d.%d", $r, $v, $s;
}
sub info {
$opt{quiet} and return;
print @_, "\n";
}

sub diag {
$opt{quiet} and return;
$opt{diag} and print @_, "\n";
}

sub warning {
$opt{quiet} and return;
print "*** ", @_, "\n";
}

sub error {
print "*** ERROR: ", @_, "\n";
}

my %given_hints;
my %given_warnings;
sub hint {
$opt{quiet} and return;
my $func = shift;
my $rv = 0;
if (exists $warnings{$func} && !$given_warnings{$func}++) {
my $warn = $warnings{$func};
$warn =~ s!^!*** !mg;
print "*** WARNING: $func\n", $warn;
$rv++;
}
if ($opt{hints} && exists $hints{$func} && !$given_hints{$func}++) {
my $hint = $hints{$func};
$hint =~ s/^/   /mg;
print "   --- hint for $func ---\n", $hint;
}
$rv;
}

sub usage {
my($usage) = do { local(@ARGV,$/)=($0); <> } =~ /=head\d$/;SYNOPSIS.*(.*?);$/s*?/=ms;
my %M = ( 'I' => '*' );
$usage =~ s/^\s*perl\s+\S+/$^X $0/;
$usage =~ s/([A-Z])<([^>]+)>/$M{$1}$2$M{$1}/g;

print <<ENDUSAGE;

Usage: $usage

See perldoc $0 for details.

ENDUSAGE

exit 2;
}

sub strip
{
  my $self = do { local(@ARGV,$/)=("$0"); <> };
  my($copy) = $self =~ /^=head\d\s+COPYRIGHT\s*\^(.*)^=\w+$/m;
  $copy =~ s/^(?=$HS+)/    /gms;
  $self =~ s/^$HS+Do NOT edit.*?(?=^-)/$copy/ms;
  $self =~ s/^SKIP.*(?=^__DATA__)/SKIP
  if ($@ and die "Cannot require Devel::PPPort, please install.";
  if (eval $Devel::PPPort::VERSION < $VERSION) {
    die "$0 was originally generated with Devel::PPPort $VERSION."
    . "Your Devel::PPPort is only version \$Devel::PPPort::VERSION."
    . "Please install a newer version, or --unstrip will not work.";
  }
  Devel::PPPort::WriteFile("$0");
  exit 0;
}

print <<END;
Sorry, but this is a stripped version of "$0."
To be able to use its original script and doc functionality,
please try to regenerate this file using:

\$^X \$0 --unstrip

END

```perl
my($pl, $c) = $self =~ /(.*^__DATA__)(.*)/ms;
$c =~ s/{/(?:[^*]*[^*]+[^*$]+(?!\$ccs)[^*]+[^*$]+)*/ |
    /[^\n]*
| ( "[^\n]*\n|[^\n]*")*"
| "[^\n]*\n|[^\n]*")*"
```
__DATA__

*/

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# This program is free software; you can redistribute it and/or
# modify it under the same terms as Perl itself.
=head1 NAME

Scalar::Util - A selection of general-utility scalar subroutines

=head1 SYNOPSIS

use Scalar::Util qw(blessed dualvar isdual readonly refaddr reftype
tainted weaken isweak isvstring looks_like_number
set_prototype);

# and other useful utils appearing below

=head1 DESCRIPTION

C<Scalar::Util> contains a selection of subroutines that people have expressed
would be nice to have in the perl core, but the usage would not really be high
enough to warrant the use of a keyword, and the size would be so small that
being individual extensions would be wasteful.

By default C<Scalar::Util> does not export any subroutines.

=cut

=head1 FUNCTIONS FOR REFERENCES
The following functions all perform some useful activity on reference values.

=head2 blessed

my $pkg = blessed( $ref );

If C<$ref> is a blessed reference, the name of the package that it is blessed into is returned. Otherwise C<undef> is returned.

$scalar = "foo";
$class  = blessed $scalar;  # undef

$ref    = [];  
$class  = blessed $ref;     # undef

$obj    = bless [], "Foo";
$class  = blessed $obj;      # "Foo"

Take care when using this function simply as a truth test (such as in C<if(blessed $ref)...>) because the package name C<"0"> is defined yet false.

=head2 refaddr

my $addr = refaddr( $ref );

If C<$ref> is reference, the internal memory address of the referenced value is returned as a plain integer. Otherwise C<undef> is returned.

$addr = refaddr "string";    # undef
$addr = refaddr $var;        # eg 12345678
$addr = refaddr [];          # eg 23456784

$obj    = bless {}, "Foo";
$addr = refaddr $obj;        # eg 88123488

=head2 reftype

my $type = reftype( $ref );

If C<$ref> is a reference, the basic Perl type of the variable referenced is returned as a plain string (such as C<ARRAY> or C<HASH>). Otherwise C<undef> is returned.

$type = reftype "string";    # undef
$type = reftype $var;        # SCALAR
$type = reftype [];          # ARRAY

$obj    = bless {}, "Foo";
$type = reftype $obj;         # HASH

=head2 weaken

weaken( $ref );

The lvalue C<$ref> will be turned into a weak reference. This means that it will not hold a reference count on the object it references. Also, when the reference count on that object reaches zero, the reference will be set to undef. This function mutates the lvalue passed as its argument and returns no value.

This is useful for keeping copies of references, but you don't want to prevent the object being DESTROY-ed at its usual time.

{  
  my $var;
  $ref = \$var;
  weaken($ref);        # Make $ref a weak reference
}
# $ref is now undef

Note that if you take a copy of a scalar with a weakened reference, the copy will be a strong reference.

my $var;
my $foo = \$var;
weaken($foo);        # Make $foo a weak reference
my $bar = $foo;      # $bar is now a strong reference

This may be less obvious in other situations, such as C<grep()>, for instance when grepping through a list of weakened references to objects that may have been destroyed already:

@object = grep { defined } @object;

This will indeed remove all references to destroyed objects, but the remaining references to objects will be strong, causing the remaining objects to never be destroyed because there is now always a strong reference to them in the @object array.

=head2 unweaken

unweaken( $ref );

I<Since version 1.36.>

The lvalue C<REF> will be turned from a weak reference back into a normal
(strong) reference again. This function mutates the lvalue passed as its argument and returns no value. This undoes the action performed by L</weaken>.

This function is slightly neater and more convenient than the otherwise-equivalent code

    my $tmp = $REF;
    undef $REF;
    $REF = $tmp;

(because in particular, simply assigning a weak reference back to itself does not work to unweaken it; C <$REF = $REF> does not work).

=head2 isweak

    my $weak = isweak( $ref );

Returns true if C<$ref> is a weak reference.

    $ref = \$foo;
    $weak = isweak($ref);       # false
    weaken($ref);
    $weak = isweak($ref);       # true

B<NOTE>: Copying a weak reference creates a normal, strong, reference.

    $copy = $ref;
    $weak = isweak($copy);     # false

=head1 OTHER FUNCTIONS

=head2 dualvar

    my $var = dualvar( $num, $string );

Returns a scalar that has the value C<$num> in a numeric context and the value C<$string> in a string context.

    $foo = dualvar 10, "Hello";
    $num = $foo + 2;          # 12
    $str = $foo . " world";   # Hello world

=head2 isdual

    my $dual =isdual( $var );

If C<$var> is a scalar that has both numeric and string values, the result is true.

```perl
$foo = dualvar 86, "Nix";
$dual = isdual($foo);   # true
```

Note that a scalar can be made to have both string and numeric content through numeric operations:

```perl
$foo = "10";
$dual = isdual($foo);   # false
$bar = $foo + 0;
$dual = isdual($foo);   # true
```

Note that although C<$!> appears to be a dual-valued variable, it is actually implemented as a magical variable inside the interpreter:

```perl
$! = 1;
print("$!
");   # "Operation not permitted"
$dual = isdual($!);   # false
```

You can capture its numeric and string content using:

```perl
$err = dualvar $!, $!;
$dual = isdual($err);   # true
```

=head2 isvstring

```perl
my $vstring = isvstring( $var );
```

If C<$var> is a scalar which was coded as a vstring, the result is true.

```perl
$vs   = v49.46.48;
$fmt  = isvstring($vs) ? "%vd" : "%s";  #true
printf($fmt,$vs);
```

=head2 looks_like_number

```perl
my $isnum = looks_like_number( $var );
```

Returns true if perl thinks C<$var> is a number. See L<perlapi/looks_like_number>.

=head2 openhandle

```perl
my $fh = openhandle( $fh );
```
Returns \texttt{C<$fh> itself} if \texttt{C<$fh>} may be used as a filehandle and is open, or is a tied handle. Otherwise \texttt{C<undef>} is returned.

\begin{verbatim}
$fh = openhandle(*STDIN);    # \*STDIN
$fh = openhandle(*STDIN);    # \*STDIN
$fh = openhandle(*NOTOPEN);  # undef
$fh = openhandle("scalar"); # undef
\end{verbatim}

=head2 readonly

my $ro = readonly( $var );

Returns true if \texttt{C<$var>} is readonly.

\begin{verbatim}
sub foo { readonly($_[0]) }  
$readonly = foo($bar);       # false
$readonly = foo(0);         # true
\end{verbatim}

=head2 set_prototype

my $code = set_prototype( $code, $prototype );

Sets the prototype of the function given by the \texttt{C<$code>} reference, or deletes it if \texttt{C<$prototype>} is \texttt{C<undef>. Returns the \texttt{C<$code>} reference itself.}

\begin{verbatim}
set_prototype \&foo, '$$'; 
\end{verbatim}

=head2 tainted

my $t = tainted( $var );

Return true if \texttt{C<$var>} is tainted.

\begin{verbatim}
$taint = tainted("constant");  # false
$taint = tainted($ENV{PWD});    # true if running under -T
\end{verbatim}

=head1 DIAGNOSTICS

Module use may give one of the following errors during import.

=over

=item Weak references are not implemented in the version of perl

The version of perl that you are using does not implement weak references, to use L</isweak> or L</weaken> you will need to use a newer release of perl.
Vstrings are not implemented in the version of perl

The version of perl that you are using does not implement Vstrings, to use L</isvstring> you will need to use a newer release of perl.

=head1 KNOWN BUGS

There is a bug in perl5.6.0 with UV's that are >= 1<<31. This will show up as tests 8 and 9 of dualvar.t failing

=head1 SEE ALSO

L</List::Util>

=head1 COPYRIGHT

Copyright (c) 1997-2007 Graham Barr <gharr@pobox.com>. All rights reserved. This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Additionally L</weaken> and L</isweak> which are

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=cut

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---

abstract: 'Common Scalar and List utility subroutines'
author: 
  - 'Graham Barr <gbarr@cpan.org>'
build_requires:
  ExtUtils::MakeMaker: '0'
configure_requires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 0
generated_by: 'ExtUtils::MakeMaker version 7.24, CPAN::Meta::Converter version 2.150010'
license: perl
meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
name: Scalar-List-Utils
no_index:
directory:
  - t
  - inc
requires:
  Test::More: '0'
  perl: '5.006'
resources:
  repository: https://github.com/Scalar-List-Utils/Scalar-List-Utils.git
  version: '1.49'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'

Found in path(s):

No license file was found, but licenses were detected in source scan.

This distribution is a replacement for the builtin distribution.

This package contains a selection of subroutines that people have expressed would be nice to have in the perl core, but the usage would not really be high enough to warrant the use of a keyword, and the size so small such that being individual extensions would be wasteful.

After unpacking the distribution, to install this module type

perl Makefile.PL
make
make test
make install

KNOWN BUGS

There is a bug in perl5.6.0 with UV's that are >= 1<<31. This will show up as tests 8 and 9 of dualvar.t failing

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Found in path(s):

1.845 sys-mountinfo 0.4.1

1.845.1 Available under license:

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1.846 gobject-introspection 1.56.1 1.el8
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   c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

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   (For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.
When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We
concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

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   d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

   (For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)
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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not
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1.861 jinja2-time 0.2.0

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1.874 cryptacular 1.2.4

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Metadata-Version: 1.1
Name: python-etcd
Version: 0.4.5
Summary: A python client for etcd
Home-page: http://github.com/jplana/python-etcd
Author: Jose Plana
A python client for Etcd https://github.com/coreos/etcd

Official documentation: http://python-etcd.readthedocs.org/

.. image:: https://travis-ci.org/jplana/python-etcd.png?branch=master
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Installation
------------

Pre-requirements
~~~~~~~~~~~~~~~~

This version of python-etcd will only work correctly with the etcd server version 2.0.x or later. If you are running an older version of etcd, please use python-etcd 0.3.3 or earlier.

This client is known to work with python 2.7 and with python 3.3 or above. It is not tested or expected to work in more outdated versions of python.

From source
~~~~~~~~~~~

.. code:: bash

   $ python setup.py install

Usage
-----

The basic methods of the client have changed compared to previous versions, to reflect the new API structure; however a compatibility layer has been maintained so that you don't necessarily need to rewrite all your existing code.

Create a client object
~~~~~~~~~~~~~~~~~~~~~~

.. code:: python

   import etcd
client = etcd.Client() # this will create a client against etcd server running on localhost on port 4001
client = etcd.Client(port=4002)
client = etcd.Client(host='127.0.0.1', port=4003)
client = etcd.Client(host=('127.0.0.1', 4001), ('127.0.0.1', 4002), ('127.0.0.1', 4003))
client = etcd.Client(host='127.0.0.1', port=4003, allow_redirect=False) # wont let you run sensitive
commands on non-leader machines, default is true
# If you have defined a SRV record for _etcd._tcp.example.com pointing to the clients
client = etcd.Client(srv_domain='example.com', protocol="https")
# create a client against https://api.example.com:443/etcd
client = etcd.Client(host='api.example.com', protocol='https', port=443, version_prefix='/etcd')

Write a key
~~~~~~~~~~~

.. code:: python

    client.write('/nodes/n1', 1)
    # with ttl
    client.write('/nodes/n2', 2, ttl=4)  # sets the ttl to 4 seconds
    client.set('/nodes/n2', 1) # Equivalent, for compatibility reasons.

Read a key
~~~~~~~~~~~

.. code:: python

    client.read('/nodes/n2').value
    client.read('/nodes', recursive = True) #get all the values of a directory, recursively.
    client.get('/nodes/n2').value

    # raises etcd.EtcdKeyNotFound when key not found
    try:
        client.read('/invalid/path')
    except etcd.EtcdKeyNotFound:
        # do something
        print "error"

Delete a key
~~~~~~~~~~~

.. code:: python

    client.delete('/nodes/n1')

Atomic Compare and Swap
~~~~~~~~~~~~~~~~~~~~~~~
.. code:: python

    client.write('/nodes/n2', 2, prevValue = 4) # will set /nodes/n2 's value to 2 only if its previous value was 4
    client.write('/nodes/n2', 2, prevExist = False) # will set /nodes/n2 's value to 2 only if the key did not exist
    client.write('/nodes/n2', 2, prevIndex = 30) # will set /nodes/n2 's value to 2 only if the key was last modified
    client.test_and_set('/nodes/n2', 2, 4) #equivalent to client.write('/nodes/n2', 2, prevValue = 4)

You can also atomically update a result:

.. code:: python

    result = client.read('/foo')
    print(result.value) # bar
    result.value += u'bar'
    updated = client.update(result) # if any other client wrote '/foo' in the meantime this will fail
    print(updated.value) # barbar

Watch a key
~~~~~~~~~~~

.. code:: python

    client.read('/nodes/n1', wait = True) # will wait till the key is changed, and return once its changed
    client.read('/nodes/n1', wait = True, timeout=30) # will wait till the key is changed, and return once its
    client.read('/nodes/n1', wait = True, waitIndex = 10) # get all changes on this key starting from index 10
    client.watch('/nodes/n1') #equivalent to client.read('/nodes/n1', wait = True)
    client.watch('/nodes/n1', index = 10)

Refreshing key TTL
~~~~~~~~~~~~~~~~~~

(Since etcd 2.3.0) Keys in etcd can be refreshed without notifying current watchers.

This can be achieved by setting the refresh to true when updating a TTL.

You cannot update the value of a key when refreshing it.

.. code:: python

    client.write('/nodes/n1', 'value', ttl=30)  # sets the ttl to 30 seconds
    client.refresh('/nodes/n1', ttl=600)  # refresh ttl to 600 seconds, without notifying current watchers

Locking module
~~~~~~~~~~~~~~~
# Initialize the lock object:
# NOTE: this does not acquire a lock yet
client = etcd.Client()
# Or you can custom lock prefix, default is '/_locks/' if you are using HEAD
client = etcd.Client(lock_prefix='/my_etcd_root/_locks')
lock = etcd.Lock(client, 'my_lock_name')

# Use the lock object:
lock.acquire(blocking=True, # will block until the lock is acquired
             lock_ttl=None) # lock will live until we release it
lock.is_acquired  # True
lock.acquire(lock_ttl=60) # renew a lock
lock.release() # release an existing lock
lock.is_acquired  # False

# The lock object may also be used as a context manager:
client = etcd.Client()
with etcd.Lock(client, 'customer1') as my_lock:
    do_stuff()
    my_lock.is_acquired # True
    my_lock.acquire(lock_ttl=60)
    my_lock.is_acquired # False

Get machines in the cluster
~~~~~~~~~~~~~~~~~~~~~~~~~~
.. code:: python

    client.machines

Get leader of the cluster
~~~~~~~~~~~~~~~~~~~~~~~~~
.. code:: python

    client.leader

Generate a sequential key in a directory
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
.. code:: python

    x = client.write("/dir/name", "value", append=True)
    print("generated key: " + x.key)
print("stored value: " + x.value)

List contents of a directory
~~~~~~~~~~~~~~~~~~~~~~~~~~~~
.. code:: python

# stick a couple values in the directory
client.write("/dir/name", "value1", append=True)
client.write("/dir/name", "value2", append=True)

directory = client.get("/dir/name")

# loop through directory children
for result in directory.children:
    print(result.key + ": " + result.value)

# or just get the first child value
print(directory.children.next().value)

Development setup
------------------
To create a buildout,

.. code:: bash

    $ python bootstrap.py
    $ bin/buildout

to test you should have etcd available in your system path:

.. code:: bash

    $ bin/test

to generate documentation,

.. code:: bash

    $ cd docs
    $ make

Release HOWTO
-------------
To make a release
1) Update release date/version in NEWS.txt and setup.py
2) Run 'python setup.py sdist'
3) Test the generated source distribution in dist/
4) Upload to PyPI: 'python setup.py sdist register upload'

News
=====
0.4.5
-----
*Release date: 3-Mar-2017*

* Remove dnspython2/3 requirement
* Change property name setter in lock
* Fixed acl tests
* Added version/cluster_version properties to client
* Fixed in lock when used as context manager
* Fixed improper usage of urllib3 exceptions
* Minor fixes for error classes
* In lock return modifiedIndex to watch changes
* In lock fix context manager exception handling
* Improvements to the documentation
* Remove _base_uri only after refresh from cluster
* Avoid double update of _machines_cache

0.4.4
-----
*Release date: 10-Jan-2017*

* Fix some tests
* Use sys,version_info tuple, instead of named tuple
* Improve & fix documentation
* Fix python3 specific problem when blocking on contented lock
* Add refresh key method
* Add custom lock prefix support

0.4.3
-----
*Release date: 14-Dec-2015*

* Fix check for parameters in case of connection error
* Python 3.5 compatibility and general python3 cleanups
* Added authentication and module for managing ACLs
* Added srv record-based DNS discovery
* Fixed (again) logging of cluster id changes
* Fixed leader lookup
* Properly retry request on exception
* Client: clean up open connections when deleting

0.4.2
-----
*Release date: 8-Oct-2015*

* Fixed lock documentation
* Fixed lock sequences due to etcd 2.2 change
* Better exception management during response processing
* Fixed logging of cluster ID changes
* Fixed subtree results
* Do not check cluster ID if etcd responses don't contain the ID
* Added a cause to EtcdConnectionFailed

0.4.1
-----
*Release date: 1-Aug-2015*

* Added client-side leader election
* Added stats endpoints
* Added logging
* Better exception handling
* Check for cluster ID on each request
* Added etcd.Client.members and fixed etcd.Client.leader
* Removed locking and election etcd support
* Allow the use of etcd proxies with reconnections
* Implement pop: Remove key from etc and return the corresponding value.
* Eternal watcher can be now recursive
* Fix etcd.Client machines
* Do not send parameters with `None` value to etcd
* Support ttl=0 in write.
* Moved pyOpenSSL into test requirements.
* Always set certificate information so redirects from http to https work.

0.3.3
-----
*Release date: 12-Apr-2015*

* Forward leaves_only value in get_subtree() recursive calls
* Fix README prevExists->prevExist
* Added configurable version_prefix
* Added support for recursive watch
* Better error handling support (more detailed exceptions)
* Fixed some unreliable tests
0.3.2
-----

*Release date: 4-Aug-2014*

* Fixed generated documentation version.

0.3.1
-----

*Release date: 4-Aug-2014*

* Added consisten read option
* Fixed timeout parameter in read()
* Added atomic delete parameter support
* Fixed delete behaviour
* Added update method that allows atomic updated on results
* Fixed checks on write()
* Added leaves generator to EtcdResult and get_subtree for recursive fetch
* Added etcd_index to EtcdResult
* Changed eternal -> eternal
* Updated urllib3 & pyOpenSSL libraries
* Several performance fixes
* Better parsing of etcd_index and raft_index
* Removed duplicated tests
* Added several integration and unit tests
* Use etcd v0.3.0 in travis
* Execute test using `python setup.py test` and nose

0.3.0
-----

*Release date: 18-Jan-2014*

* API v2 support
* Python 3.3 compatibility

0.2.1
-----

*Release data: 30-Nov-2013*

* SSL support
* Added support for subdirectories in results.
**Improve test**
**Added support for reconnections, allowing death node tolerance.**

0.2.0

---

*Release date: 30-Sep-2013*

* Allow fetching of multiple keys (sub-nodes)

0.1

---

*Release date: 18-Sep-2013*

* Initial release

Keywords: etcd raft distributed log api client
Platform: UNKNOWN
Classifier: Topic :: System :: Distributed Computing
Classifier: Topic :: Software Development :: Libraries
Classifier: License :: OSI Approved :: MIT License
Classifier: Programming Language :: Python :: 2
Classifier: Programming Language :: Python :: 3
Classifier: Topic :: Database :: Front-Ends

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```python
from setuptools import setup, find_packages
import sys, os

here = os.path.abspath(os.path.dirname(__file__))
README = open(os.path.join(here, 'README.rst')).read()
NEWS = open(os.path.join(here, 'NEWS.txt')).read()

version = '0.4.5'

install_requires = [
    'urllib3>=1.7.1',
    'dnspython>=1.13.0'
]
```

---
test_requires = [
    'mock',
    'nose',
    'pyOpenSSL>=0.14'
]

setup(
    name='python-etcd',
    version=version,
    description="A python client for etcd",
    long_description=README + '

' + NEWS,
    classifiers=[
        "Topic :: System :: Distributed Computing",
        "Topic :: Software Development :: Libraries",
        "License :: OSI Approved :: MIT License",
        "Programming Language :: Python :: 2",
        "Programming Language :: Python :: 3",
        "Topic :: Database :: Front-Ends",
    ],
    keywords='etcd raft distributed log api client',
    author='Jose Plana',
    author_email='jplana@gmail.com',
    url='http://github.com/jplana/python-etcd',
    license='MIT',
    packages=find_packages('src'),
    package_dir = {'': 'src'},
    include_package_data=True,
    zip_safe=False,
    install_requires=install_requires,
    tests_require=test_requires,
    test_suite='nose.collector',
)

Found in path(s):
* /opt/cola/permits/1112217808_1607049972.97/0/python-etcd-0.4.5-1.tar-gz/python-etcd-0.4.5/setup.py

1.877 rabbitmq-server 3.9.12-1.el8
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<one line to give the library's name and a brief idea of what it does.>
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That's all there is to it!

1.880 cpp 8.5.0-4.el8_5.alma

1.880.1 Available under license:

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/opt/cola/permits/1289310759_1652757833.93439/0/cpp-8.5.0-10.el8.alma.x86_64.src.rpm-cosi-expand-archive-QikKTg3i/usr/bin/cpp: binary file matches
/opt/cola/permits/1289310759_1652757833.93439/0/cpp-8.5.0-10.el8.alma.x86_64.src.rpm-cosi-expand-archive-QikKTg3i/usr/libexec/gcc/x86_64-redhat-linux/8/cc1: binary file matches

Found in path(s):
* /bin/grep

1.881 webencodings 0.5.1

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Found in path(s):
* /opt/cola/permits/1110814957_1606854649.94/0/webencodings-0-5-1-1-tar-gz/webencodings-0.5.1/webencodings/x_user_defined.py
* /opt/cola/permits/1110814957_1606854649.94/0/webencodings-0-5-1-1-tar-gz/webencodings-0.5.1/webencodings/tests.py
* /opt/cola/permits/1110814957_1606854649.94/0/webencodings-0-5-1-1-tar-gz/webencodings-0.5.1/webencodings/labels.py
* /opt/cola/permits/1110814957_1606854649.94/0/webencodings-0-5-1-1-tar-gz/webencodings-0.5.1/webencodings/__init__.py

No license file was found, but licenses were detected in source scan.

from setuptools import setup, find_packages
import io
import re

VERSION = re.search("VERSION = '([^']*)',", io.open(path.join(path.dirname(__file__), 'webencodings', '__init__.py'), encoding='utf-8')
`.read().strip().group(1)

LONG_DESCRIPTION = io.open(
    path.join(path.dirname(__file__), 'README.rst'),
    encoding='utf-8'
).read()

setup(
    name='webencodings',
    version=VERSION,
    url='https://github.com/SimonSapin/python-webencodings',
    license='BSD',
    author='Simon Sapin',
    author_email='simon.sapin@exyr.org',
    maintainer='Geoffrey Sneddon',
    maintainer_email='me@gsnedders.com',
    description='Character encoding aliases for legacy web content',
    long_description=LONG_DESCRIPTION,
    classifiers=[
        'Development Status :: 4 - Beta',
        'Intended Audience :: Developers',
        'License :: OSI Approved :: BSD License',
        'Programming Language :: Python',
        'Programming Language :: Python :: 2',
        'Programming Language :: Python :: 2.6',
        'Programming Language :: Python :: 2.7',
        'Programming Language :: Python :: 3',
        'Programming Language :: Python :: 3.3',
        'Programming Language :: Python :: 3.4',
        'Programming Language :: Python :: 3.5',
        'Programming Language :: Python :: 3.6',
        'Programming Language :: Python :: Implementation :: CPython',
        'Programming Language :: Python :: Implementation :: PyPy',
        'Topic :: Internet :: WWW/HTTP',
    ],
    packages=find_packages(),
)

Found in path(s):
* /opt/cola/permits/1110814957_1606854649.94/0/webencodings-0.5.1-1-tar-gz/webencodings-0.5.1/setup.py
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```

webencodings.mklabels

----------------------

---

Open Source Used In BGP TE Controller Version 4.3.0 10753
Regenerate the webencodings.labels module.

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:license: BSD, see LICENSE for details.

```python
import json
try:
    from urllib import urlopen
except ImportError:
    from urllib.request import urlopen

def assert_lower(string):
    assert string == string.lower()
    return string

def generate(url):
    parts = ['"
    webencodings.labels
    ~~~~~~~~~~~~~~~~

    Map encoding labels to their name.

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    # XXX Do not edit!
    # This file is automatically generated by mklabels.py

    LABELS = {
        "
        labels = [
            (repr(assert_lower(label)).lstrip('u'),
             repr(encoding['name']).lstrip('u'))
            for category in json.loads(urlopen(url).read().decode('ascii'))
            for encoding in category['encodings']
            for label in encoding['labels']]
        max_len = max(len(label) for label, name in labels)
        parts.extend(
            ' %s:%s %s
' % (label, ' ' * (max_len - len(label)), name)
            for label, name in labels)
```
parts.append('}
return ".join(parts)

if __name__ == '__main__':
    print(generate('http://encoding.spec.whatwg.org/encodings.json'))

Found in path(s):
* /opt/cola/permits/1110814957_1606854649.94/0/webencodings-0-5-1-1-tar-gz/webencodings-0.5.1/webencodings/mklabels.py
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Metadata-Version: 1.1
Name: webencodings
Version: 0.5.1
Summary: Character encoding aliases for legacy web content
Home-page: https://github.com/SimonSapin/python-webencodings
Author: Geoffrey Sneddon
Author-email: me@gsnedders.com
License: BSD
Description: python-webencodings

This is a Python implementation of the `WHATWG Encoding standard
<http://encoding.spec.whatwg.org/>`

* Latest documentation: http://packages.python.org/webencodings/
* Source code and issue tracker:
  https://github.com/gsnedders/python-webencodings
* PyPI releases: http://pypi.python.org/pypi/webencodings
* License: BSD
* Python 2.6+ and 3.3+

In order to be compatible with legacy web content
when interpreting something like ``Content-Type: text/html; charset=latin1``,
tools need to use a particular set of aliases for encoding labels
as well as some overriding rules.
For example, ``US-ASCII`` and ``iso-8859-1`` on the web are actually
aliases for ``windows-1252``, and an UTF-8 or UTF-16 BOM takes precedence
over any other encoding declaration.
The Encoding standard defines all such details so that implementations do
not have to reverse-engineer each other.

This module has encoding labels and BOM detection,
but the actual implementation for encoders and decoders is Pythons.

Platform: UNKNOWN
Classifier: Development Status :: 4 - Beta
This is a Python implementation of the `WHATWG Encoding standard`_
<http://encoding.spec.whatwg.org/>_

* Latest documentation: http://packages.python.org/webencodings/
* Source code and issue tracker:
  https://github.com/gsnedders/python-webencodings
* PyPI releases: http://pypi.python.org/pypi/webencodings
* License: BSD
* Python 2.6+ and 3.3+

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aliases for `windows-1252`, and an UTF-8 or UTF-16 BOM takes precedence
over any other encoding declaration.
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This module has encoding labels and BOM detection,
but the actual implementation for encoders and decoders is Pythons.
1.882 proto-otlp 0.12.0
1.882.1 Available under license:

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1.883 influxdata-toml 0.0.0-20190415235208-270119a8ce65
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1.884 perl-pathtools 3.74-1.el8
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=head1 NAME

File::Spec::Functions - portably perform operations on file names

=head1 SYNOPSIS

use File::Spec::Functions;
$x = catfile('a','b');

=head1 DESCRIPTION

This module exports convenience functions for all of the class methods
provided by File::Spec.

For a reference of available functions, please consult L<File::Spec::Unix>,
which contains the entire set, and which is inherited by the modules for
other platforms. For further information, please see L<File::Spec::Mac>,
L<File::Spec::OS2>, L<File::Spec::Win32>, or L<File::Spec::VMS>.

=head2 Exports

The following functions are exported by default.

canonpath
catdir
catfile
curdir
rootdir
updir
no_upwards
file_name_is_absolute
path

The following functions are exported only by request.

devnull
tmpdir
splitpath
splitdir
catpath
abs2rel
rel2abs
case_tolerant
All the functions may be imported using the C<:ALL> tag.

=head1 COPYRIGHT

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it under the same terms as Perl itself.

=head1 SEE ALSO

File::Spec, File::Spec::Unix, File::Spec::Mac, File::Spec::OS2,
File::Spec::Win32, File::Spec::VMS, ExtUtils::MakeMaker

=cut

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*/

Found in path(s):
*/opt/ws_local/PERMITS_SQL/1009548107_1591379771.91/0/perl-PathTools-3.74-1.el8.src.rpm-cosi-expand-archive-PySqImf9/PathTools-3.74.tar.gz-cosi-expand-archive-9rwxdSVg/PathTools-3.74/Cwd.xs

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/*

ppport.h -- Perl/Pollution/Portability Version 3.39

Automatically created by Devel::PPPort running under perl 5.027009.

Do NOT edit this file directly! -- Edit PPPort_pm.PL and the includes in parts/inc/ instead.

Use 'perldoc ppport.h' to view the documentation below.

ppport.h - Perl/Pollution/Portability version 3.39

=head1 NAME

=head1 SYNOPSIS

perl ppport.h [options] [source files]

Searches current directory for files if no [source files] are given

--help show short help

--version show version

--patch=file write one patch file with changes
--copy=suffix write changed copies with suffix
--diff=program use diff program and options
--compat-version=version provide compatibility with Perl version
--cplusplus accept C++ comments

--quiet don't output anything except fatal errors
--nodiag don't show diagnostics
--nohints don't show hints
--nochanges don't suggest changes
--nofilter don't filter input files

--strip strip all script and doc functionality
from ppport.h

--list-provided list provided API
--list-unsupported list unsupported API
--api-info=name show Perl API portability information

=head1 COMPATIBILITY

This version of F<ppport.h> is designed to support operation with Perl installations back to 5.003, and has been tested up to 5.20.

=head1 OPTIONS

=head2 --help

Display a brief usage summary.

=head2 --version

Display the version of F<ppport.h>.

=head2 --patch=I<file>

If this option is given, a single patch file will be created if any changes are suggested. This requires a working diff program to be installed on your system.

=head2 --copy=I<suffix>

If this option is given, a copy of each file will be saved with the given suffix that contains the suggested changes. This does not require any external programs. Note that this does not automagically add a dot between the original filename and the suffix. If you want the dot, you have to include it in the option argument.

If neither C<--patch> or C<--copy> are given, the default is to simply print the diffs for each file. This requires either
C<Text::Diff> or a C<diff> program to be installed.

=head2 --diff=I<program>

Manually set the diff program and options to use. The default is to use C<Text::Diff>, when installed, and output unified context diffs.

=head2 --compat-version=I<version>

Tell F<ppport.h> to check for compatibility with the given Perl version. The default is to check for compatibility with Perl version 5.003. You can use this option to reduce the output of F<ppport.h> if you intend to be backward compatible only down to a certain Perl version.

=head2 --cplusplus

Usually, F<ppport.h> will detect C++ style comments and replace them with C style comments for portability reasons. Using this option instructs F<ppport.h> to leave C++ comments untouched.

=head2 --quiet

Be quiet. Don't print anything except fatal errors.

=head2 --nodiag

Don't output any diagnostic messages. Only portability alerts will be printed.

=head2 --nohints

Don't output any hints. Hints often contain useful portability notes. Warnings will still be displayed.

=head2 --nochanges

Don't suggest any changes. Only give diagnostic output and hints unless these are also deactivated.

=head2 --nofilter

Don't filter the list of input files. By default, files not looking like source code (i.e. not *.xs, *.c, *.cc, *.cpp or *.h) are skipped.

=head2 --strip
Strip all script and documentation functionality from F<ppport.h>. This reduces the size of F<ppport.h> dramatically and may be useful if you want to include F<ppport.h> in smaller modules without increasing their distribution size too much.

The stripped F<ppport.h> will have a C<--unstrip> option that allows you to undo the stripping, but only if an appropriate C<Devel::PPPort> module is installed.

=head2 --list-provided

Lists the API elements for which compatibility is provided by F<ppport.h>. Also lists if it must be explicitly requested, if it has dependencies, and if there are hints or warnings for it.

=head2 --list-unsupported

Lists the API elements that are known not to be supported by F<ppport.h> and below which version of Perl they probably won't be available or work.

=head2 --api-info=I<name>

Show portability information for API elements matching I<name>. If I<name> is surrounded by slashes, it is interpreted as a regular expression.

=head1 DESCRIPTION

In order for a Perl extension (XS) module to be as portable as possible across differing versions of Perl itself, certain steps need to be taken.

=item *

Including this header is the first major one. This alone will give you access to a large part of the Perl API that hasn't been available in earlier Perl releases. Use

perl ppport.h --list-provided

to see which API elements are provided by ppport.h.

=item *

You should avoid using deprecated parts of the API. For example, using
global Perl variables without the C<PL_> prefix is deprecated. Also, some API functions used to have a C<perl_> prefix. Using this form is also deprecated. You can safely use the supported API, as F<ppport.h> will provide wrappers for older Perl versions.

=item *

If you use one of a few functions or variables that were not present in earlier versions of Perl, and that can't be provided using a macro, you have to explicitly request support for these functions by adding one or more C<#define>s in your source code before the inclusion of F<ppport.h>.

These functions or variables will be marked C<explicit> in the list shown by C<--list-provided>.

Depending on whether you module has a single or multiple files that use such functions or variables, you want either C<static> or global variants.

For a C<static> function or variable (used only in a single source file), use:

```c
#define NEED_function
#define NEED_variable
```

For a global function or variable (used in multiple source files), use:

```c
#define NEED_function_GLOBAL
#define NEED_variable_GLOBAL
```

Note that you mustn't have more than one global request for the same function or variable in your project.

<table>
<thead>
<tr>
<th>Function / Variable</th>
<th>Static Request</th>
<th>Global Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL_parser</td>
<td>NEED_PL_parser</td>
<td>NEED_PL_parser_GLOBAL</td>
</tr>
<tr>
<td>PL_signals</td>
<td>NEED_PL_signals</td>
<td>NEED_PL_signals_GLOBAL</td>
</tr>
<tr>
<td>SvRX()</td>
<td>NEED_SvRX</td>
<td>NEED_SvRX_GLOBAL</td>
</tr>
<tr>
<td>caller_cx()</td>
<td>NEED_caller_cx</td>
<td>NEED_caller_cx_GLOBAL</td>
</tr>
<tr>
<td>croak_xs_usage()</td>
<td>NEED_croak_xs_usage</td>
<td>NEED_croak_xs_usage_GLOBAL</td>
</tr>
<tr>
<td>die_sv()</td>
<td>NEED_die_sv</td>
<td>NEED_die_sv_GLOBAL</td>
</tr>
<tr>
<td>eval_pv()</td>
<td>NEED_eval_pv</td>
<td>NEED_eval_pv_GLOBAL</td>
</tr>
<tr>
<td>grok_bin()</td>
<td>NEED_grok_bin</td>
<td>NEED_grok_bin_GLOBAL</td>
</tr>
<tr>
<td>grok_hex()</td>
<td>NEED_grok_hex</td>
<td>NEED_grok_hex_GLOBAL</td>
</tr>
<tr>
<td>grok_number()</td>
<td>NEED_grok_number</td>
<td>NEED_grok_number_GLOBAL</td>
</tr>
<tr>
<td>grok_numeric_radix()</td>
<td>NEED_grok_numeric_radix</td>
<td>NEED_grok_numeric_radix_GLOBAL</td>
</tr>
<tr>
<td>grok_oct()</td>
<td>NEED_grok_oct</td>
<td>NEED_grok_oct_GLOBAL</td>
</tr>
</tbody>
</table>
To avoid namespace conflicts, you can change the namespace of the explicitly exported functions / variables using the C<DPPP_NAMESPACE> macro. Just C>#define> the macro before including C<ppport.h>:

```c
#define DPPP_NAMESPACE MyOwnNamespace_
#include "ppport.h"
```

The default namespace is C<DPPP_>.

=back

The good thing is that most of the above can be checked by running F<ppport.h> on your source code. See the next section for details.

=head1 EXAMPLES
To verify whether F<ppport.h> is needed for your module, whether you should make any changes to your code, and whether any special defines should be used, F<ppport.h> can be run as a Perl script to check your source code. Simply say:

    perl ppport.h

The result will usually be a list of patches suggesting changes that should at least be acceptable, if not necessarily the most efficient solution, or a fix for all possible problems.

If you know that your XS module uses features only available in newer Perl releases, if you're aware that it uses C++ comments, and if you want all suggestions as a single patch file, you could use something like this:

    perl ppport.h --compat-version=5.6.0 --cplusplus --patch=test.diff

If you only want your code to be scanned without any suggestions for changes, use:

    perl ppport.h --nochanges

You can specify a different C<diff> program or options, using the C<--diff> option:

    perl ppport.h --diff='diff -C 10'

This would output context diffs with 10 lines of context.

If you want to create patched copies of your files instead, use:

    perl ppport.h --copy=.new

To display portability information for the C<newSVpn> function, use:

    perl ppport.h --api-info=newSVpn

Since the argument to C<--api-info> can be a regular expression, you can use

    perl ppport.h --api-info=/_nomg$/

to display portability information for all C<_nomg> functions or

    perl ppport.h --api-info=/.
to display information for all known API elements.

=head1 BUGS

If this version of `<ppport.h>` is causing failure during
the compilation of this module, please check if newer versions
of either this module or `<Devel::PPPort>` are available on CPAN
before sending a bug report.

If `<ppport.h>` was generated using the latest version of
`<Devel::PPPort>` and is causing failure of this module, please
file a bug report here: L<https://github.com/mhx/Devel-PPPort/issues/>

Please include the following information:

=over 4
=item 1.
The complete output from running "perl -V"
=over
=over 2
=item 2.
This file.
=over
=over 2
=item 3.
The name and version of the module you were trying to build.
=over
=over 2
=item 4.
A full log of the build that failed.
=over
=over 2
=item 5.
Any other information that you think could be relevant.
=over
=over 2
=back

For the latest version of this code, please get the `<Devel::PPPort>`
module from CPAN.

=head1 COPYRIGHT

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=head1 SEE ALSO

See L<Devel::PPPort>.

=cut

use strict;

# Disable broken TRIE-optimization
BEGIN { eval '\${^RE_TRIE_MAXBUF} = -1' if \$] >= 5.009004 && \$] <= 5.009005 }

my $VERSION = 3.39;

my %opt = (quiet => 0, diag => 1, hints => 1, changes => 1, cplusplus => 0, filter => 1, strip => 0, version => 0);

my($ppport) = $0 =~ /\[[\w.]+\]/;
my $LF = '(?:\r\n|\\r\\n)'; # line feed
my $HS = '\[ \t\]';          # horizontal whitespace

# Never use C comments in this file!
my $ccs = '/\*';
my $cce = '\*/';
my $rcce = quotemeta $ccs;
my $rccs = quotemeta $cce;

eval {
require Getopt::Long;
Getopt::Long::GetOptions(%opt, qw(
 help quiet diag! filter! hints! changes! cplusplus strip version
 patch=s copy=s diff=s compat-version=s
 list-provided list-unsupported api-info=s
 )) or usage();
};
if ($@ and grep /^-/, @ARGV) {
    usage() if "$ARGV" =~ /^--?h(?:elp)?$/;
    die "Getopt::Long not found. Please don't use any options.
";
}

if ($opt{version}) {
    print "This is $0 $VERSION.
";
    exit 0;
}

usage() if $opt{help};
strip() if $opt{strip};

if (exists $opt{'compat-version'}) {
    my($r,$v,$s) = eval { parse_version($opt{'compat-version'}) };
    if ($@) {
        die "Invalid version number format: '$opt{'compat-version'}'
";
    }
    die "Only Perl 5 is supported" if $r != 5;
    die "Invalid version number: $opt{'compat-version'}" if $v >= 1000 || $s >= 1000;
    $opt{'compat-version'} = sprintf "%d.%03d%03d", $r, $v, $s;
} else {
    $opt{'compat-version'} = 5;
}

my %API = map { /^\w+/; } qw(
    ASCII_TO_NEED||5.007001|n
    AvFILL|p|5.004050|p
    AvFILL||
    BhkDISABLE||5.024000|
    BhkENABLE||5.024000|
    BhkENTRY_set||5.024000|
    BhkENTRY|||
    BhkFLAGS|||
    CALL_BLOCK_HOOKS|||
    CLASS|||
    CPERLscope|5.005000|p
    CX_CURPAD_SAVE|||
    CX_CURPAD_SAVE|||
    CX_CURPAD_SV|||
)
HeKLEN|5.003070|
HePV|5.004000|
HeSVKEY_force|5.003070|
HeSVKEY_set|5.004000|
HeSVKEY|5.003070|
HeUTF8|5.010001|5.008000|p
HeVAL|5.003070|
HvENAMELEN|5.015004|
HvENAMEUTF8|5.015004|
HvENAME|5.013007|
HvNAMELEN_get|5.009003|p
HvNAMELEN|5.015004|
HvNAMEUTF8|5.015004|
HvNAME_get|5.009003|p
HvNAME| |
INT2PTR|5.006000|p
IN_LOCALE_COMPILETIME|5.007002|p
IN_LOCALE_RUNTIME|5.007002|p
IN_LOCALE|5.007002|p
IN_PERL_COMPILETIME|5.008001|p
IS_NUMBER_GREATER_THAN_UV_MAX|5.007002|p
IS_NUMBER_INFINITY|5.007002|p
IS_NUMBER_IN_UV|5.007002|p
IS_NUMBER_NAN|5.007003|p
IS_NUMBER_NEG|5.007002|p
IS_NUMBER_NOT_INT|5.007002|p
IVSIZE|5.006000|p
IVTYPE|5.006000|p
IVdf|5.006000|p
LEAVE||
LINKLIST|5.013006|
LVRET||
MARK||
MULTICALL|5.024000|
MUTABLE_PTR|5.010001|p
MUTABLE_SV|5.010001|p
MY_CXT_CLONE|5.009002|p
MY_CXT_INIT|5.007003|p
MY_CXT|5.007003|p
MoveD|5.009002|5.004050|p
Move||
NATIVE_TO_NEED|5.007001|n
NOOP|5.005000|p
NUM2PTR|5.006000|p
NVTYPE|5.006000|p
NVef|5.006001|p
NVf|5.006001|p
NVgf|5.006001|p
Newxc[5.009003]\p
Newxz[5.009003]\p
Newx[5.009003]\p
Nullav\n
Nullch\n
Nullcv\n
Nullhv\n
Nullsv\n
OP_CLASS[5.013007]
OP_DESC[5.007003]
OP_NAME[5.007003]
OP_TYPE_IS_OR_WAS[5.019010]
OP_TYPE_IS[5.019007]
ORIGMARK\n
OpHAS_SIBLING[5.021007]\p
OpLASTSIB_set[5.021011]\p
OpMAYBESIB_set[5.021011]\p
OpMORESIB_set[5.021011]\p
OpSIBLING[5.021007]\p
PAD_BASE_SV\n
PAD_CLONE_VARS\n
PAD_COMPNAME_FLAGS\n
PAD_COMPNAME_GEN_set\n
PAD_COMPNAME_GEN\n
PAD_COMPNAME_OURSTASH\n
PAD_COMPNAME_PV\n
PAD_COMPNAME_TYPE\n
PAD_RESTORE_LOCAL\n
PAD_SAVE_LOCAL\n
PAD_SAVE_SETNULLPAD\n
PAD_SETSV\n
PAD_SET_CUR_NOSAVE\n
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if (exists $opt{'list-unsupported'}) {
my $f;
for $f (sort { lc $a cmp lc $b } keys %API) {
next unless $API{$f}{todo};
print "$f ", '.'x(40-length($f)), " ", format_version($API{$f}{todo}), "\n";
}
exit 0;
}
# Scan for possible replacement candidates
my(%replace, %need, %hints, %warnings, %depends);
my $replace = 0;
my($hint, $define, $function);
sub find_api
{
my $code = shift;
$code =~ s{
/ (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
| "[^"\\]*(?:\\.[^"\\]*)*"
| '[^'\\]*(?:\\.[^'\\]*)*' }{}egsx;
grep { exists $API{$_} } $code =~ /(\w+)/mg;
}
while (<DATA>) {
if ($hint) {
my $h = $hint->[0] eq 'Hint' ? \%hints : \%warnings;
if (m{^\s*\*\s(.*?)\s*$}) {
for (@{$hint->[1]}) {
$h->{$_} ||= ''; # suppress warning with older perls
$h->{$_} .= "$1\n";
}
}
else { undef $hint }
}
$hint = [$1, [split /,?\s+/, $2]]
if m{^\s*$rccs\s+(Hint|Warning):\s+(\w+(?:,?\s+\w+)*)\s*$};
if ($define) {
if ($define->[1] =~ /\\$/) {
$define->[1] .= $_;
}
else {
if (exists $API{$define->[0]} && $define->[1] !~ /^DPPP_\(/) {
my @n = find_api($define->[1]);
push @{$depends{$define->[0]}}, @n if @n

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undef $define;
}
$define = [$1, $2] if m{^\s*#\s*define\s+(\w+)(\(|[^)]*\))?\s+\(\.*\)$};

if ($function) {
    if (/$^$/) {  
        if (exists $API{$function->[0]}) {  
            my @n = find_api($function->[1]);  
            push @{$depends{$function->[0]}}, @n if @n
        }  
        undef $function;
    } else {  
        $function->[1] .= $_;
    }
}

$function = [$1, ""] if m{^DPPP_\((my_(\w+))\)\}$;

$replace  = $1 if m{^\s*rcce\s+Replace:\s+\(\.*\)$};
$replace{2} = $1 if m{^\s*rcce\s+\s+\(\.*\)$};
$replace{2} = $1 if m{^\s*rcce\s+\s+\(\.*\)$};

if (m{^\s*rcce\s+\s+\(\.*\)$}) {  
    my @n = find_api($function->[1]);  
    push @{$depends{$function->[0]}}, @n if @n
}

for (values %depends) {  
    my @s;
    $_ = [sort grep !s{$$_}++, @$_];
}

if (exists $opt{'api-info'}) {  
    my $f;
    my $count = 0;
    my $match = $opt{'api-info'} =~ m!^/(.*)/$! ? $1 : "^\Q$opt{'api-info'}\E$";
    for $f (sort { lc $a cmp lc $b } keys %API) {  
        if ($match eq $f) {  
            my $s;
            $s = $f;
            $s = $f;
            $s = $f;
            $s = $f;
        }
    }
}
next unless $f =~ /$match/;
print "\n=== $f ===\n\n";
my $info = 0;
if ($API{$f}{base} || $API{$f}{todo}) {
    my $base = format_version($API{$f}{base} || $API{$f}{todo});
    print "Supported at least starting from perl-$base\n";
    $info++;
}
if ($API{$f}{provided}) {
    my $todo = $API{$f}{todo} ? format_version($API{$f}{todo}) : "5.003";
    print "Support by $ppport provided back to perl-$todo\n";
    print "Support needs to be explicitly requested by NEED_$f\n" if exists $need{$f};
    print "Depends on \n", join('', '@{depends($f).}'), ",\n" if exists $depends{$f};
    print "\nShints\n" if exists $hints{$f};
    print "\nWARNING\n\n" if exists $warnings{$f};
    $info++;
}
print "No portability information available\n" unless $info;
$count++;
}
$count or print "Found no API matching \n";
print "\n";
exit 0;
}

if (exists $opt{'list-provided'}) {
    my $f;
    for $f (sort { lc $a cmp lc $b } keys %API) {
        next unless $API{$f}{provided};
        my @flags;
push @flags, 'explicit' if exists $need{$f};
push @flags, 'depend' if exists $depends{$f};
push @flags, 'hint' if exists $hints{$f};
push @flags, 'warning' if exists $warnings{$f};
        my $flags = @flags ? '['.join(', ', @flags).']' : "";
push @flags, $flags ? ['join(', ', @flags).']' : "";
        print "$f$flags\n";
    }
    exit 0;
}

my @files;
my @srcext = qw( .xs .c .h .cc .cpp -c.inc -xs.inc );
my $srcext = join '|', map { quotemeta $_ } @srcext;
if (@ARGV) {
    my %seen;
    for (@ARGV) {
        if (-e) {
if (-f) {
push @files, $_ unless $seen{$_}++;
}
else { warn "'$_' is not a file.\n" }
}
else {
my @new = grep { -f } glob $_
or warn "'$_' does not exist.\n";
push @files, grep { !$seen{$_}++ } @new;
}
}
}
else {
eval {
require File::Find;
File::Find::find(sub {
$File::Find::name =~ /($srcext)$/i
and push @files, $File::Find::name;
}, '.');
};
if ($@) {
@files = map { glob "*$_" } @srcext;
}
}
if (!@ARGV || $opt{filter}) {
my(@in, @out);
my %xsc = map { /(.*)\.xs$/ ? ("$1.c" => 1, "$1.cc" => 1) : () } @files;
for (@files) {
my $out = exists $xsc{$_} || /\b\Q$ppport\E$/i || !/($srcext)$/i;
push @{ $out ? \@out : \@in }, $_;
}
if (@ARGV && @out) {
warning("Skipping the following files (use --nofilter to avoid this):\n| ", join "\n| ", @out);
}
@files = @in;
}
die "No input files given!\n" unless @files;
my(%files, %global, %revreplace);
%revreplace = reverse %replace;
my $filename;
my $patch_opened = 0;
for $filename (@files) {
unless (open IN, "<$filename") {
warn "Unable to read from $filename: $!\n";

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next;
}

info("Scanning $filename ...");

my $c = do { local $/; <IN> }

close IN;

my %file = (orig => $c, changes => 0);

# Temporarily remove C/XS comments and strings from the code
my @ccom;
$c =~ s{
  ( ^$HS*#$HS*include\b\[^r\n]+\b\(?:\QSppport\E[XSUB\.h]\b\[^r\n]*
   | ^$HS*#$HS*(?:define|elif|if(?:def)?)\b\[^r\n]*
   | ( ^$HS*\#\[^r\n]*
   | "[^\"]*\|\[^\"]*
   | '\[^'\"]*\|\[^'\"]*
   | / (?: \*[^\*]*\*+(?:[^$ccs]\[^*]*\*+)*/ | /[^r\n]*
   )
   )
   defined $2 and push @ccom, $2;
   defined $1 ? $1 : "$ccs$#ccom$cce" }mgsex;

$file{ccom} = \@ccom;
$file{code} = $c;
$file{has_inc_ppport} = $c =~ /^$HS*#$HS*include\[^r\n]+\b\QSppport\Eib/m;

my $func;

for ($func (keys %API)) {
  my $match = $func;
  $match .= "\$revreplace\$func" if exists $revreplace{$func};
  if ($c =~ /^\(?:\bPerl\)?\{$match}\)\b/) {
    $file{uses_replace}{$1}++ if exists $revreplace{$func} &
    & $1 eq $revreplace{$func};
    $file{uses_PlPerl}{$func}++ if $c =~ /Ab\bPerl\$func\b/;
    if (exists $API{$func}{provided}) {
      $file{uses_provided}{$func}++;
      if (!exists $API{$func}{base} || $API{$func}{base} > $opt{'compat-version'}) {
        $file{uses}{$func}++;
        my @deps = rec_depend($func);
        if (@deps) {
          $file{uses_deps}{$func} = \@deps;
          for (@deps) {
            $file{uses}{$_} = 0 unless exists $file{uses}{$_};
          }
        }
      }
    }
  }
  for ($func, @deps) {
    $file{needs}{$_} = 'static' if exists $need{$_};
}
}
}
if (exists $API{$func}{todo} && $API{$func}{todo} > $opt{'compat-version'}) {
if ($c =~ /\b$func\b/) {
$file{uses_todo}{$func}++;
}
}
}
}
while ($c =~ /^$HS*#$HS*define$HS+(NEED_(\w+?)(_GLOBAL)?)\b/mg) {
if (exists $need{$2}) {
$file{defined $3 ? 'needed_global' : 'needed_static'}{$2}++;
}
else { warning("Possibly wrong #define $1 in $filename") }
}
for (qw(uses needs uses_todo needed_global needed_static)) {
for $func (keys %{$file{$_}}) {
push @{$global{$_}{$func}}, $filename;
}
}
$files{$filename} = \%file;
}
# Globally resolve NEED_'s
my $need;
for $need (keys %{$global{needs}}) {
if (@{$global{needs}{$need}} > 1) {
my @targets = @{$global{needs}{$need}};
my @t = grep $files{$_}{needed_global}{$need}, @targets;
@targets = @t if @t;
@t = grep /\.xs$/i, @targets;
@targets = @t if @t;
my $target = shift @targets;
$files{$target}{needs}{$need} = 'global';
for (@{$global{needs}{$need}}) {
$files{$_}{needs}{$need} = 'extern' if $_ ne $target;
}
}
}
for $filename (@files) {
exists $files{$filename} or next;
info("=== Analyzing $filename ===");

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my %file = %{$files{$filename}};
my $func;
my $c = $file{code};
my $warnings = 0;

for $func (sort keys %{$file{uses_Perl}}) {
    if ($API{$func}{varargs}) {
        unless ($API{$func}{nothxarg}) {
            my $changes = ($c =~ s{\b(Perl_$func\s*\(\s*)(?!aTHX_?)(\)|\[\^\s)\]*\)})
                { $1 . ($2 eq ')' ? 'aTHX' : 'aTHX_ ' . $2 }ge);
            if ($changes) {
                warning("Doesn't pass interpreter argument aTHX to Perl_$func");
                $file{changes} += $changes;
            }
        }
    } else {
        warning("Uses Perl_$func instead of $func");
        $file{changes} += ($c =~ s{\bPerl_$func\s*\(\s*aTHX_?\)\s*}{'$func$1'}g);
    }
}

for $func (sort keys %{$file{uses_replace}}) {
    warning("Uses $func instead of $replace{$func}");
    $file{changes} += ($c =~ s/$func/$replace{$func}/g);
}

for $func (sort keys %{$file{uses_provided}}) {
    if ($file{uses}{$func}) {
        if (exists $file{uses_deps}{$func}) {
            diag("Uses $func, which depends on ", join(', ', @{$file{uses_deps}{$func}}));
        } else {
            diag("Uses $func");
        }
        $warnings += hint($func);
    }
}

unless ($opt{quiet}) {
    for $func (sort keys %{$file{uses_todo}}) {
        print "*** WARNING: Uses $func, which may not be portable below perl ",
            format_version($API{$func}{todo}), ", even with "pport\n";
        $warnings++;
    }
}
for $func (sort keys %{$file{needed_static}})) {
    my $message = ";
    if (not exists $file{uses}{$func}) {
        $message = "No need to define NEED_$func if $func is never used";
    } elsif (exists $file{needs}{$func} && $file{needs}{$func} ne 'static') {
        $message = "No need to define NEED_$func when already needed globally";
    } if ($message) {
        diag($message);
        $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_$func\b.*$LF//mg);
    }
}

for $func (sort keys %{$file{needed_global}})) {
    my $message = ";
    if (not exists $global{uses}{$func}) {
        $message = "No need to define NEED_$func\_GLOBAL if $func is never used";
    } elsif (exists $file{needs}{$func}) {
        if ($file{needs}{$func} eq 'extern') {
            $message = "No need to define NEED_$func\_GLOBAL when already needed globally";
        } elsif ($file{needs}{$func} eq 'static') {
            $message = "No need to define NEED_$func\_GLOBAL when only used in this file";
        } }
    if ($message) {
        diag($message);
        $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_$func\_GLOBAL\b.*$LF//mg);
    }
}

$file{needs_inc_ppport} = keys %{$file{uses}};

if ($file{needs_inc_ppport}) {
    my $pp = ";

    for $func (sort keys %{$file{needs}})) {
        my $type = $file{needs}{$func};
        next if $type eq 'extern';
        my $suffix = $type eq 'global' ? '_GLOBAL' : "";
        unless (exists $file{"needed_$type"}{$func}) {
            if ($type eq 'global') {
                diag("Files @ {$global{needs}{$func}} need $func, adding global request");
            } else {
                $message = "No need to define NEED_$func\_GLOBAL if $func is never used";
            }
diag("File needs $func, adding static request");
}
$pp = 
"#define NEED_$func$suffix
";
}
}

if ($pp && ($c =~ s/^(?=$HS*#$HS*define$HS+NEED_\w+)/$pp/m)) {
    $pp = ";
    $file{changes}++;
}

unless ($file{has_inc_ppport}) {
    diag("Needs to include '$ppport'!");
    $pp = qq(#include "$ppport\n"
    )
}

if ($pp) {
    $file{changes} += ($c =~ s/^($HS*#$HS*define$HS+NEED_\w+.*?)^/$1$pp/m)
    || ($c =~ s/^($HS*#$HS*include.*\Q$ppport\E)/$pp/m)
    || ($c =~ s/^($HS*#$HS*include.*XSUB.*\s*?)^/$1$pp/m)
    || ($c =~ s/^/$pp/);
}
}
else {
    if ($file{has_inc_ppport}) {
        diag("No need to include '$ppport'!");
        $file{changes} += ($c =~ s/^$HS*?#$HS*include.*\Q$ppport\E.*?$LF//m);
    }
}

# put back in our C comments
my $ix;
my $cppc = 0;
my @ccom = @{$file{ccom}};
for $ix (0 .. $#ccom) {
    if (!$opt{cplusplus} && $ccom[$ix] =~ s!^//!!) {
        $cppc++;
        $file{changes} += $c =~ s/$rccs$ix$rcce/$ccs$ccom[$ix] $cce/;
    } else {
        $c =~ s/$rccs$ix$rcce/$ccom[$ix]/;
    }
}

if ($cppc) {
    my $s = $cppc != 1 ? 's' : ":
    warning("Uses $cppc C++ style comment$s, which is not portable");
}
my $s = $warnings !== 1 ? 's' : ';
my $warn = $warnings ? ($warnings warning$s) : ';
info("Analysis completed$warn");

if ($file{changes}) {
    if (exists $opt{copy}) {
        my $newfile = "$filename$opt{copy}";
        if (-e $newfile) {
            error("$newfile' already exists, refusing to write copy of '$filename'");
        } else {
            local *F;
            if (open F, ">$newfile") {
                info("Writing copy of '$filename' with changes to '$newfile'");
                print F $c;
                close F;
            } else {
                error("Cannot open '$newfile' for writing: $!");
            }
        }
    } elsif (exists $opt{patch} || $opt{changes}) {
        if (exists $opt{patch}) {
            unless ($patch_opened) {
                if (open PATCH, ">$opt{patch}") {
                    $patch_opened = 1;
                } else {
                    error("Cannot open '$opt{patch}' for writing: $!");
                    delete $opt{patch};
                    $opt{changes} = 1;
                    goto fallback;
                }
            }
            mydiff(*PATCH, $filename, $c);
        } else {
            fallback:
            info("Suggested changes:");
            mydiff(*STDOUT, $filename, $c);
        }
    } else {
        my $s = $file{changes} == 1 ? '' : 's';
        info("$file{changes} potentially required change$s detected");
    }
}
} else {
    info("Looks good");
}

close PATCH if $patch_opened;

exit 0;

sub try_use { eval "use @_;"; return $@ eq "" }

sub mydiff
{
    local *F = shift;
    my($file, $str) = @_; 
    my $diff;

    if (exists $opt{diff}) {
        $diff = run_diff($opt{diff}, $file, $str);
    }

    if (!defined $diff and try_use('Text::Diff')) {
        $diff = Text::Diff::diff($file, $str, { STYLE => 'Unified' });
        $diff = <<HEADER . $diff;
--- $file
+++ $file.patched
HEADER
    }

    if (!defined $diff) {
        $diff = run_diff('diff -u', $file, $str);
    }

    if (!defined $diff) {
        $diff = run_diff('diff', $file, $str);
    }

    if (!defined $diff) {
        error("Cannot generate a diff. Please install Text::Diff or use --copy.");
        return;
    }

    print F $diff;
}

sub run_diff
my($prog, $file, $str) = @_;  
my $tmp = 'dppptemp';  
my $suf = 'aaa';  
my $diff = '';  
local *F;  

while (-e "$tmp.$suf") { $suf++ }  
$tmp = "$tmp.$suf";

if (open F, ">$tmp") {  
  print F $str;  
close F;

  if (open F, "$prog $file $tmp |") {  
    while (<F>) {  
      s/Q$tmpE/$file.patched/;  
      $diff .= $_;  
    }  
    close F;  
    unlink $tmp;  
    return $diff;  
  }

  unlink $tmp;  
}  
else {  
  error("Cannot open '$tmp' for writing: $!");  
}

return undef;  
}

sub rec_depend  
{
  my($func, $seen) = @_;  
  return () unless exists $depends{$func};  
  $seen = %{$seen||{}};  
  return () if $seen->{$func}++;  
  my %s;  
  grep !s{$_}++, map { ($_, rec_depend($_, $seen)) } @{$depends{$func}};  
}

sub parse_version  
{
  my $ver = shift;

  if ($ver =~ /^\d+/\.\d+\.(\d+)$/) {

return ($1, $2, $3);
}
elsif ($ver !~ /^\d+\.[\d_]+$/) {
  die "cannot parse version '$ver\n";
}

$ver =~ s/_//g;
$ver =~ s/$/000000/;

my($r,$v,$s) = $ver =~ /\d+/.\d{3}\d{3}/;

$v = int $v;
$s = int $s;

if ($r < 5 || ($r == 5 && $v < 6)) {
  if ($s % 10) {
    die "cannot parse version '$ver\n";
  }
}

return ($r, $v, $s);

sub format_version
{
  my $ver = shift;

  $ver =~ s/$/000000/;
  my($r,$v,$s) = $ver =~ /\d+/.\d{3}\d{3}/;

  $v = int $v;
  $s = int $s;

  if ($r < 5 || ($r == 5 && $v < 6)) {
    if ($s % 10) {
      die "invalid version '$ver\n";
    }
    $s /= 10;
  }

  $ver = sprintf "%d.\%03d", $r, $v;
  $s > 0 and $ver .= sprintf "\_%02d", $s;

  return $ver;
}

return sprintf "\%d.\%d.\%d", $r, $v, $s;
sub info
{
$opt{quiet} and return;
print @_, "\n";
}

sub diag
{
$opt{quiet} and return;
$opt{diag} and print @_, "\n";
}

sub warning
{
$opt{quiet} and return;
print "*** ", @_, "\n";
}

sub error
{
print "*** ERROR: ", @_, "\n";
}

my %given_hints;
my %given_warnings;
sub hint
{
$opt{quiet} and return;
my $func = shift;
my $rv = 0;
if (exists $warnings{$func} && !$given_warnings{$func}++) {
    my $warn = $warnings{$func};
    $warn =~ s!^!*** !mg;
    print "*** WARNING: $func\n", $warn;
    $rv++;
}
if ($opt{hints} && exists $hints{$func} && !$given_hints{$func}++) {
    my $hint = $hints{$func};
    $hint =~ s/^/   /mg;
    print "   --- hint for $func ---\n", $hint;
}
$rv;
}

sub usage
{
my($usage) = do { local(@ARGV,$/)=($0); <> } =~ /^=head\d$HS+SYNOPSIS.*=$/ms;
my %M = ( 'I' => '*' );

Usage: $usage

See perl doc $0 for details.

ENDUSAGE

exit 2;
}

sub strip
{
    my $self = do { local(@ARGV,$/)=($0); <> }
    my($copy) = $self =~ /^=head\d+\s+COPYRIGHT\s*^(.*?)^=\w+/ms;
    $copy =~ s/^(?=\S+)/    /gms;
    $self =~ s/^$HS+Do NOT edit.*?(?=^-)/$copy/ms;
    $self =~ s/^SKIP.*(?=^__DATA__)SKIP
    if (!@ARGV && $ARGV[0] eq '--unstrip') {
        eval { require Devel::PPPort }
        require Devel::PPPort:
        if (eval $Devel::PPPort::VERSION < $VERSION) {
            die "$0 was originally generated with Devel::PPPort $VERSION\n".
            "Your Devel::PPPort is only version \$Devel::PPPort::VERSION\n"
            "Please install a newer version, or --unstrip will not work.\n"
        }
        Devel::PPPort::WriteFile($0);
        exit 0;
    }
    print <<END;
Sorry, but this is a stripped version of \$0.
To be able to use its original script and doc functionality,
please try to regenerate this file using:

\$^X \$0 --unstrip

END

my($pl, $c) = $self =~ /(.*^__DATA__)(.*)/ms;
$c =~ s{
    / (?: \^[^\*]+\*+(?:[^$ccs][^\*]+\*+)*/ | /[\^\n]*)
| ( "\^[^\"]*\("\^[^\"]*\)*" 
   | ]\^[^\"]*\("\^[^\"]*\)*" 
   | (?\:\^[^\"]*\("\^[^\"]*\)*" 
   | (?\:\^[^\"]*\("\^[^\"]*\)*"

Open Source Used In BGP TE Controller Version 4.3.0  10839
=head1 NAME

File::Spec - portably perform operations on file names

=head1 SYNOPSIS

use File::Spec;

$x = File::Spec->catfile('a', 'b', 'c');

which returns 'a/b/c' under Unix. Or:

use File::Spec::Functions;

$x = catfile('a', 'b', 'c');

=head1 DESCRIPTION

This module is designed to support operations commonly performed on file
specifications (usually called "file names", but not to be confused with the
contents of a file, or Perl's file handles), such as concatenating several
directory and file names into a single path, or determining whether a path
is rooted. It is based on code directly taken from MakeMaker 5.17, code
written by Andreas KE<ouml>nig, Andy Dougherty, Charles Bailey, Ilya
Zakharevich, Paul Schinder, and others.

Since these functions are different for most operating systems, each set of
OS specific routines is available in a separate module, including:
The module appropriate for the current OS is automatically loaded by File::Spec. Since some modules (like VMS) make use of facilities available only under that OS, it may not be possible to load all modules under all operating systems.

Since File::Spec is object oriented, subroutines should not be called directly, as in:

File::Spec::catfile('a','b');

but rather as class methods:

File::Spec->catfile('a','b');

For simple uses, L<File::Spec::Functions> provides convenient functional forms of these methods.

=head1 METHODS
=over 2
=item canonpath
X<canonpath>

No physical check on the filesystem, but a logical cleanup of a path.

$opath = File::Spec->canonpath( $path );

Note that this does *not* collapse F<x/./y> sections into F<y>. This is by design. If F</foo> on your system is a symlink to F</bar/baz>, then F</foo/../quux> is actually F</bar/quux>, not F</quux> as a naive F</../>-removal would give you. If you want to do this kind of processing, you probably want C<Cwd>`s C<realpath()> function to actually traverse the filesystem cleaning up paths like this.

=item catdir
X<catdir>

Concatenate two or more directory names to form a complete path ending with a directory. But remove the trailing slash from the resulting
string, because it doesn't look good, isn't necessary and confuses OS/2. Of course, if this is the root directory, don't cut off the trailing slash :-) 

```perl
$path = File::Spec->catdir( @directories );
```

=item catfile

X<catfile>

Concatenate one or more directory names and a filename to form a complete path ending with a filename

```perl
$path = File::Spec->catfile( @directories, $filename );
```

=item curdir

X<curdir>

Returns a string representation of the current directory.

```perl
$curdir = File::Spec->curdir();
```

=item devnull

X<devnull>

Returns a string representation of the null device.

```perl
$devnull = File::Spec->devnull();
```

=item rootdir

X<rootdir>

Returns a string representation of the root directory.

```perl
$rootdir = File::Spec->rootdir();
```

=item tmpdir

X<tmpdir>

Returns a string representation of the first writable directory from a list of possible temporary directories. Returns the current directory if no writable temporary directories are found. The list of directories checked depends on the platform; e.g. File::Spec::Unix checks C<$ENV{TMPDIR}> (unless taint is on) and F</tmp>.

```perl
$tmpdir = File::Spec->tmpdir();
```

=item updir

X<updir>
Returns a string representation of the parent directory.

    $updir = File::Spec->updir();

=item no_upwards

Given a list of files in a directory (such as from C<readdir()>)
strip out C<'.> and C<'.'>.

B<SECURITY NOTE:> This does NOT filter paths containing C<'.'>, like
C<'././././etc/passwd'>, only literal matches to C<'.> and C<'.'>.

    @paths = File::Spec->no_upwards( readdir $dirhandle );

=item case_tolerant

Returns a true or false value indicating, respectively, that alphabetic
case is not or is significant when comparing file specifications.
Cygwin and Win32 accept an optional drive argument.

    $is_case_tolerant = File::Spec->case_tolerant();

=item file_name_is_absolute

Takes as its argument a path, and returns true if it is an absolute path.

    $is_absolute = File::Spec->file_name_is_absolute( $path );

This does not consult the local filesystem on Unix, Win32, OS/2, or
Mac OS (Classic). It does consult the working environment for VMS
(see L<File::Spec::VMS/file_name_is_absolute>).

=item path

Takes no argument. Returns the environment variable C<PATH> (or the local
platform's equivalent) as a list.

    @PATH = File::Spec->path();

=item join

join is the same as catfile.

=item splitpath


Splits a path in to volume, directory, and filename portions. On systems
with no concept of volume, returns " for volume.

\[
\text{($volume, $directories, $file)} = 
\begin{align*}
\text{File::Spec->splitpath( $path );} \\
\text{File::Spec->splitpath( $path, $no_file );}
\end{align*}
\]

For systems with no syntax differentiating filenames from directories,
assumes that the last file is a path unless C<$no_file> is true or a
trailing separator or F</.> or F</..> is present. On Unix, this means that C<$no_file>
true makes this return ( '', $path, '' ).

The directory portion may or may not be returned with a trailing '/'.

The results can be passed to L</catpath()> to get back a path equivalent to
(usually identical to) the original path.

=item splitdir
X<splitdir> X<split, dir>

The opposite of L</catdir>.

@dirs = File::Spec->splitdir( $directories );

C<$directories> must be only the directory portion of the path on systems
that have the concept of a volume or that have path syntax that differentiates
files from directories.

Unlike just splitting the directories on the separator, empty
directory names (C<"">) can be returned, because these are significant
on some OSes.

=item catpath()

Takes volume, directory and file portions and returns an entire path. Under
Unix, C<$volume> is ignored, and directory and file are concatenated. A '/' is
inserted if need be. On other OSes, C<$volume> is significant.

$full_path = File::Spec->catpath( $volume, $directory, $file );

=item abs2rel
X<abs2rel> X<absolute, path> X<relative, path>

Takes a destination path and an optional base path returns a relative path
from the base path to the destination path:
$rel_path = File::Spec->abs2rel( $path ) ;
$rel_path = File::Spec->abs2rel( $path, $base ) ;

If C<$base> is not present or ", then L<Cwd::cwd()> is used. If C<$base> is relative, then it is converted to absolute form using
L</rel2abs()> . This means that it is taken to be relative to
L<Cwd::cwd()>.

On systems with the concept of volume, if C<$path> and C<$base> appear to be on two different volumes, we will not attempt to resolve the two
paths, and we will instead simply return C<$path> . Note that previous
versions of this module ignored the volume of C<$base>, which resulted in
garbage results part of the time.

On systems that have a grammar that indicates filenames, this ignores the C<$base> filename as well. Otherwise all path components are assumed to be directories.

If C<$path> is relative, it is converted to absolute form using L</rel2abs()>.
This means that it is taken to be relative to L<Cwd::cwd()>.

No checks against the filesystem are made. On VMS, there is
interaction with the working environment, as logicals and
macros are expanded.

Based on code written by Shigio Yamaguchi.

=item rel2abs()
=X<rel2abs> X<absolute, path> X<relative, path>

Converts a relative path to an absolute path.

$abs_path = File::Spec->rel2abs( $path ) ;
$abs_path = File::Spec->rel2abs( $path, $base ) ;

If C<$base> is not present or ", then L<Cwd::cwd()> is used. If C<$base> is relative,
then it is converted to absolute form using L</rel2abs()> . This means that it is
taken to be relative to L<Cwd::cwd()>.

On systems with the concept of volume, if C<$path> and C<$base> appear to be on two different volumes, we will not attempt to resolve the two
paths, and we will instead simply return C<$path> . Note that previous
versions of this module ignored the volume of C<$base>, which resulted in
garbage results part of the time.

On systems that have a grammar that indicates filenames, this ignores the C<$base> filename as well. Otherwise all path components are assumed to be directories.
If C<$path> is absolute, it is cleaned up and returned using L</canonpath>.

No checks against the filesystem are made. On VMS, there is interaction with the working environment, as logicals and macros are expanded.

Based on code written by Shigio Yamaguchi.

=back

For further information, please see L<File::Spec::Unix>, L<File::Spec::Mac>, L<File::Spec::OS2>, L<File::Spec::Win32>, or L<File::Spec::VMS>.

=head1 SEE ALSO

L<File::Spec::Unix>, L<File::Spec::Mac>, L<File::Spec::OS2>, L<File::Spec::Win32>, L<File::Spec::VMS>, L<File::Spec::Functions>, L<ExtUtils::MakeMaker>

=head1 AUTHOR

Currently maintained by Ken Williams C<< <KWILLIAMS@cpan.org>>.
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VMS support by Charles Bailey C<< <bailey@newman.upenn.edu>>.
OS/2 support by Ilya Zakharevich C<< <ilya@math.ohio-state.edu>>.
Mac support by Paul Schinder C<< <schinder@pobox.com>>.
Thomas Wegner C<< <wegner_thomas@yahoo.com>>.
abs2rel() and rel2abs() written by Shigio Yamaguchi C<< <shigio@tamacom.com>>.
modified by Barrie Slaymaker C<< <barries@slaysys.com>>.
splitpath(), splitdir(), catpath() and catdir() by Barrie Slaymaker.

=head1 COPYRIGHT

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=cut

Found in path(s):
---

abstract: 'Tools for working with directory and file names'

author:
- Perl 5 Porters

build_requires:
  ExtUtils::MakeMaker: '0'

configure_requires:
  ExtUtils::MakeMaker: '0'

dynamic_config: 1

generated_by: 'ExtUtils::MakeMaker version 7.24, CPAN::Meta::Converter version 2.150010'

license: perl

meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'

name: PathTools

no_index:
directory:
  - t
  - inc

requires:
  Carp: '0'
  File::Basename: '0'
  Scalar::Util: '0'
  Test::More: '0.88'

resources:
  bugtracker: https://rt.perl.org/rt3/
  homepage: http://dev.perl.org/
  repository: git://perl5.git.perl.org/perl.git
  version: '3.74'

x_serialization_backend: 'CPAN::Meta::YAML version 0.018'

---

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Please submit bug reports and patches to perlbug@perl.org.

=head1 SEE ALSO

L<File::Spec>

cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548107_1591379771.91/0/perl-PathTools-3.74-1.el8.src.rpm-cosi-expand-archive-PySqImf9/PathTools-3.74.tar.gz-cosi-expand-archive-9rwxdSVg/PathTools-3.74/lib/File/Spec/Unix.pm
No license file was found, but licenses were detected in source scan.

=head1 NAME

File::Spec::OS2 - methods for OS/2 file specs

=head1 SYNOPSIS

require File::Spec::OS2; # Done internally by File::Spec if needed

=head1 DESCRIPTION

See L<File::Spec> and L<File::Spec::Unix>.  This package overrides the implementation of these methods, not the semantics.

Amongst the changes made for OS/2 are...

=over 4

=item tmpdir

Modifies the list of places temp directory information is looked for.

    $ENV{TMPDIR}
    $ENV{TEMP}
    $ENV{TMP}
    /tmp
    /

=item splitpath

Volumes can be drive letters or UNC sharenames (\server\share).

=back

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=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548107_1591379771.91/0/perl-PathTools-3.74-1.el8.src.rpm-cosi-expand-archive-PySqlMf9/PathTools-3.74.tar.gz-cosi-expand-archive-9rwxdSVg/PathTools-3.74/lib/File/Spec/OS2.pm
No license file was found, but licenses were detected in source scan.

=back

=head1 AUTHORS

See the authors list in L<File::Spec>. Mac OS support by Paul Schinder <schinder@pobox.com> and Thomas Wegner <wegner_thomas@yahoo.com>.

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=head1 SEE ALSO

See L<File::Spec> and L<File::Spec::Unix>. This package overrides the implementation of these methods, not the semantics.

=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548107_1591379771.91/0/perl-PathTools-3.74-1.el8.src.rpm-cosi-expand-archive-PySqlMf9/PathTools-3.74.tar.gz-cosi-expand-archive-9rwxdSVg/PathTools-3.74/lib/File/Spec/Mac.pm
No license file was found, but licenses were detected in source scan.

=head1 NAME

Cwd - get pathname of current working directory

=head1 SYNOPSIS

use Cwd;
my $dir = getcwd;
use Cwd 'abs_path';
my $abs_path = abs_path($file);

=head1 DESCRIPTION

This module provides functions for determining the pathname of the current working directory. It is recommended that getcwd (or another *cwd() function) be used in I<all> code to ensure portability.

By default, it exports the functions cwd(), getcwd(), fastcwd(), and fastgetcwd() (and, on Win32, getdcwd()) into the caller's namespace.

=head2 getcwd and friends

Each of these functions are called without arguments and return the absolute path of the current working directory.

=over 4
=item getcwd

my $cwd = getcwd();

Returns the current working directory. On error returns C<undef>, with C<$!> set to indicate the error.

Exposes the POSIX function getcwd(3) or re-implements it if it's not available.

=item cwd

my $cwd = cwd();

The cwd() is the most natural form for the current architecture. For most systems it is identical to `pwd` (but without the trailing line terminator).

=item fastcwd

my $cwd = fastcwd();

A more dangerous version of getcwd(), but potentially faster.

It might conceivably chdir() you out of a directory that it can't chdir() you back into. If fastcwd encounters a problem it will return undef but will probably leave you in a different directory. For a measure of extra security, if everything appears to have worked, the
fastcwd() function will check that it leaves you in the same directory that it started in. If it has changed it will C<die> with the message "Unstable directory path, current directory changed unexpectedly". That should never happen.

=item fastgetcwd

my $cwd = fastgetcwd();

The fastgetcwd() function is provided as a synonym for cwd().

=item getdcwd

my $cwd = getdcwd();
my $cwd = getdcwd('C:');

The getdcwd() function is also provided on Win32 to get the current working directory on the specified drive, since Windows maintains a separate current working directory for each drive. If no drive is specified then the current drive is assumed.

This function simply calls the Microsoft C library _getdcwd() function.

=back

=head2 abs_path and friends

These functions are exported only on request. They each take a single argument and return the absolute pathname for it. If no argument is given they'll use the current working directory.

=over 4

=item abs_path

my $abs_path = abs_path($file);

Uses the same algorithm as getcwd(). Symbolic links and relative-path components ("." and ".") are resolved to return the canonical pathname, just like realpath(3). On error returns C<undef>, with C<$!> set to indicate the error.

=item realpath

my $abs_path = realpath($file);

A synonym for abs_path().
my $abs_path = fast_abs_path($file);

A more dangerous, but potentially faster version of abs_path.

If you ask to override your chdir() built-in function,

use Cwd qw(chdir);

then your PWD environment variable will be kept up to date. Note that it will only be kept up to date if all packages which use chdir import it from Cwd.

Since the path separators are different on some operating systems (’/’ on Unix, ’:’ on MacPerl, etc...) we recommend you use the File::Spec modules wherever portability is a concern.

Actually, on Mac OS, the C<getcwd()> and C<fastcwd()> functions are all aliases for the C<cwd()> function, which, on Mac OS, calls `pwd`. Likewise, the C<abs_path()> function is an alias for C<fast_abs_path()>.

Originally by the perl5-porters.

Maintained by Ken Williams <KWILLIAMS@cpan.org>

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Portions of the C code in this library are copyright (c) 1994 by the Regents of the University of California. All rights reserved. The license on this code is compatible with the licensing of the rest of the distribution - please see the source code in F<Cwd.xs> for the details.

=head1 SEE ALSO

L<File::chdir>

cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548107_1591379771.91/0/perl-PathTools-3.74-1.el8.src.rpm-cosi-expand-archive-PySqlImf9/PathTools-3.74.tar.gz-cosi-expand-archive-9rwxdSVg/PathTools-3.74/Cwd.pm
No license file was found, but licenses were detected in source scan.

=back

=head2 Note For File::Spec::Win32 Maintainers

Novell NetWare inherits its File::Spec behaviour from File::Spec::Win32.

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=head1 SEE ALSO

See L<File::Spec> and L<File::Spec::Unix>. This package overrides the implementation of these methods, not the semantics.

cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548107_1591379771.91/0/perl-PathTools-3.74-1.el8.src.rpm-cosi-expand-archive-PySqlImf9/PathTools-3.74.tar.gz-cosi-expand-archive-9rwxdSVg/PathTools-3.74/lib/File/Spec/Win32.pm
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See also L<File::Spec> and L<File::Spec::Unix>. This package overrides the implementation of these methods, not the semantics.

An explanation of VMS file specs can be found at L<http://h71000.www7.hp.com/doc/731FINAL/4506/4506pro_014.html#apps_locatingNamingFiles>.

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Found in path(s):
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o.flebbe@gmx.de

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=head1 SEE ALSO

See L<File::Spec> and L<File::Spec::Unix>. This package overrides the implementation of these methods, not the semantics.

=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548107_1591379771.91/0/perl-PathTools-3.74-1.el8.src.rpm-cosi-expand-archive-PySqlImf9/PathTools-3.74.tar.gz-cosi-expand-archive-9rwxdSVg/PathTools-3.74/lib/File/Spec/Epoc.pm
No license file was found, but licenses were detected in source scan.

License: (GPL+ or Artistic) and BSD

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548107_1591379771.91/0/perl-PathTools-3.74-1.el8.src.rpm-cosi-expand-archive-PySqlImf9/perl-PathTools.spec

1.885 certifi 2018.01.18

1.885.1 Available under license :

This package contains a modified version of ca-bundle.crt:

car-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#
This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:
It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication.
Just configure this file as the SSLCACertificateFile.#

***** BEGIN LICENSE BLOCK *****
This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at http://mozilla.org/MPL/2.0/.

***** END LICENSE BLOCK *****
@(#) $SRCFile: certdata.txt,v $ $Revision: 1.80 $ $Date: 2011/11/03 15:11:58 $
1. Definitions

1.1. Contributor

means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

1.2. Contributor Version

means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor's Contribution.

1.3. Contribution

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gevent/libuv/_coreffi_source.c
gevent/libuv/_coreffi_cdef.c

Originally based on code from https://github.com/veegee/guv

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1.904 perl-constant 1.33-396.el8

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* /opt/ws_local/PERMITS_SQL/1009548089_1591379339.64/0/perl-constant-1.33-396.el8.src.rpm-cosi-expand-archive-m15loNwe/perl-constant.spec

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abstract: 'Perl pragma to declare constants'
author:
- SÃ©bastien Aperghis-Tramoni <sebastien@aperghis.net>
built_requires:
  Test::More: 0
configure_requires:
  Module::Build: 0.2808
dynamic_config: 1
generated_by: 'Module::Build version 0.4003, CPAN::Meta::Converter version 2.120921'
license: perl
meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: 1.4
name: constant
provides:
  constant:
    file: lib/constant.pm
    version: 1.27
resources:
  license: http://dev.perl.org/licenses/
  version: 1.27

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548089_1591379339.64/0/perl-constant-1.33-396.el8.src.rpm-cosi-expand-archive-m15loNwe/constant-1.27.tar.gz-cosi-expand-archive-jvagHUVh/constant-1.27/META.yml
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=head1 NAME
constant - Perl pragma to declare constants

=head1 SYNOPSIS

use constant PI  => 4 * atan2(1, 1);
use constant DEBUG => 0;

print "Pi equals ", PI, "\n" if DEBUG;

use constant {
  SEC  => 0,
  MIN  => 1,
  HOUR => 2,
  MDAY => 3,
  MON  => 4,
  YEAR => 5,
  WDAY => 6,
  YDAY => 7,
use constant WEEKDAYS => qw(
    Sunday Monday Tuesday Wednesday Thursday Friday Saturday
);

print "Today is ", (WEEKDAYS)[ (localtime)[WDAY] ], ",\n";

=head1 DESCRIPTION

This pragma allows you to declare constants at compile-time.

When you declare a constant such as C<PI> using the method shown above, each machine your script runs upon can have as many digits of accuracy as it can use. Also, your program will be easier to read, more likely to be maintained (and maintained correctly), and far less likely to send a space probe to the wrong planet because nobody noticed the one equation in which you wrote C<3.14195>.

When a constant is used in an expression, Perl replaces it with its value at compile time, and may then optimize the expression further. In particular, any code in an C<if (CONSTANT)> block will be optimized away if the constant is false.

=head1 NOTES

As with all C<use> directives, defining a constant happens at compile time. Thus, it's probably not correct to put a constant declaration inside of a conditional statement (like C<if ($foo) {
    use constant ... }}>).

Constants defined using this module cannot be interpolated into strings like variables. However, concatenation works just fine:

    print "Pi equals PI\n";  # WRONG: does not expand "PI"
    print "Pi equals ".PI."\n";  # right

Even though a reference may be declared as a constant, the reference may point to data which may be changed, as this code shows.

    use constant ARRAY => [ 1,2,3,4 ];
    print ARRAY->[1];
    ARRAY->[1] = " be changed";
    print ARRAY->[1];

Dereferencing constant references incorrectly (such as using an array subscript on a constant hash reference, or vice versa) will be trapped at
compile time.

Constants belong to the package they are defined in. To refer to a constant defined in another package, specify the full package name, as in C<Some::Package::CONSTANT>. Constants may be exported by modules, and may also be called as either class or instance methods, that is, as C<< Some::Package->CONSTANT >> or as C<< $obj->CONSTANT >> where C<< $obj >> is an instance of C<Some::Package>. Subclasses may define their own constants to override those in their base class.

The use of all caps for constant names is merely a convention, although it is recommended in order to make constants stand out and to help avoid collisions with other barewords, keywords, and subroutine names. Constant names must begin with a letter or underscore. Names beginning with a double underscore are reserved. Some poor choices for names will generate warnings, if warnings are enabled at compile time.

=head2 List constants

Constants may be lists of more (or less) than one value. A constant with no values evaluates to C<undef> in scalar context. Note that constants with more than one value do I<not> return their last value in scalar context as one might expect. They currently return the number of values, but B<this may change in the future>. Do not use constants with multiple values in scalar context.

B<NOTE:> This implies that the expression defining the value of a constant is evaluated in list context. This may produce surprises:

use constant TIMESTAMP => localtime;       # WRONG!
use constant TIMESTAMP => scalar localtime; # right

The first line above defines C<TIMESTAMP> as a 9-element list, as returned by C<localtime()> in list context. To set it to the string returned by C<localtime()> in scalar context, an explicit C<scalar> keyword is required.

List constants are lists, not arrays. To index or slice them, they must be placed in parentheses.

my @workdays = WEEKDAYS[1 .. 5];       # WRONG!
my @workdays = (WEEKDAYS)[1 .. 5];    # right

=head2 Defining multiple constants at once

Instead of writing multiple C<use constant> statements, you may define multiple constants in a single statement by giving, instead of the
constant name, a reference to a hash where the keys are the names of the constants to be defined. Obviously, all constants defined using this method must have a single value.

```
use constant {
    FOO => "A single value",
    BAR => "This", "won't", "work!",  # Error!
};
```

This is a fundamental limitation of the way hashes are constructed in Perl. The error messages produced when this happens will often be quite cryptic -- in the worst case there may be none at all, and you'll only later find that something is broken.

When defining multiple constants, you cannot use the values of other constants defined in the same declaration. This is because the calling package doesn't know about any constant within that group until the `use` statement is finished.

```
use constant {
    BITMASK => 0xAFBAEBBA8,
    NEGMASK => ~BITMASK,        # Error!
};
```

=head2 Magic constants

Magical values and references can be made into constants at compile time, allowing for way cool stuff like this. (These error numbers aren't totally portable, alas.)

```
use constant E2BIG => ($! = 7);
pórint E2BIG, "n";  # something like "Arg list too long"
pórint 0+E2BIG, "n";  # "7"
```

You can't produce a tied constant by giving a tied scalar as the value. References to tied variables, however, can be used as constants without any problems.

=head1 TECHNICAL NOTES

In the current implementation, scalar constants are actually inlinable subroutines. As of version 5.004 of Perl, the appropriate scalar constant is inserted directly in place of some subroutine calls, thereby saving the overhead of a subroutine call. See L<perlsub/Constant Functions> for details about how and when this happens.

In the rare case in which you need to discover at run time whether a
particular constant has been declared via this module, you may use
this function to examine the hash C<%constant::declared>. If the given
constant name does not include a package name, the current package is
used.
sub declared ($) {
use constant 1.01;
# don't omit this!
my $name = shift;
$name =~ s/^::/main::/;
my $pkg = caller;
my $full_name = $name =~ /::/ ? $name : "${pkg}::$name";
$constant::declared{$full_name};
}
=head1 CAVEATS
In the current version of Perl, list constants are not inlined
and some symbols may be redefined without generating a warning.
It is not possible to have a subroutine or a keyword with the same
name as a constant in the same package. This is probably a Good Thing.
A constant with a name in the list C<STDIN STDOUT STDERR ARGV ARGVOUT
ENV INC SIG> is not allowed anywhere but in package C<main::>, for
technical reasons.
Unlike constants in some languages, these cannot be overridden
on the command line or via environment variables.
You can get into trouble if you use constants in a context which
automatically quotes barewords (as is true for any subroutine call).
For example, you can't say C<$hash{CONSTANT}> because C<CONSTANT> will
be interpreted as a string. Use C<$hash{CONSTANT()}> or
C<$hash{+CONSTANT}> to prevent the bareword quoting mechanism from
kicking in. Similarly, since the C<< => >> operator quotes a bareword
immediately to its left, you have to say C<< CONSTANT() => 'value' >>
(or simply use a comma in place of the big arrow) instead of
C<< CONSTANT => 'value' >>.
=head1 SEE ALSO
L<Readonly> - Facility for creating read-only scalars, arrays, hashes.
L<Attribute::Constant> - Make read-only variables via attribute
L<Scalar::Readonly> - Perl extension to the C<SvREADONLY> scalar flag
L<Hash::Util> - A selection of general-utility hash subroutines (mostly

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to lock/unlock keys and values)

=head1 BUGS

Please report any bugs or feature requests via the perlbug(1) utility.

=head1 AUTHORS

Tom Phoenix, <l>F<rootbeer@redcat.com>E<gt>, with help from many other folks.

Multiple constant declarations at once added by Casey West, <l>F<casey@geeknest.com>E<gt>.

Documentation mostly rewritten by Ilmari Karonen, <l>F<perl@itz.pp.sci.fi>E<gt>.

This program is maintained by the Perl 5 Porters. The CPAN distribution is maintained by Sébastien Aperghis-Tramoni, <l>F<sebastien@aperghis.net>E<gt>.

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=cut

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NAME

    constant - Perl pragma to declare constants

DESCRIPTION

This pragma allows you to declare constants at compile-time.

When a constant is used in an expression, Perl replaces it with its value at compile time, and may then optimize the expression further. In particular, any code in an "if (CONSTANT)" block will be optimized away if the constant is false.
INSTALLATION

To install this module, run the following commands:

perl Makefile.PL
make
make test
make install

Alternatively, to install with Module::Build, you can use the following commands:

perl Build.PL
./Build
./Build test
./Build install

SUPPORT AND DOCUMENTATION

After installing, you can find documentation for this module with the perldoc command.

perldoc constant

You can also look for information at:

Search CPAN
http://search.cpan.org/dist/constant

CPAN Request Tracker:
http://rt.cpan.org/Dist/Display.html?Name=constant

AnnoCPAN, annotated CPAN documentation:
http://annocpan.org/dist/constant

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===========================================================================
Nori Korean Morphological Analyzer - Apache Lucene Integration
===========================================================================

This software includes a binary and/or source version of data from

mecab-ko-dic-2.0.3-20170922

which can be obtained from

https://bitbucket.org/eunjeon/mecab-ko-dic/downloads/mecab-ko-dic-2.0.3-20170922.tar.gz
1.909 gorilla 1.8.0

1.909.1 Available under license:

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1.910 telegraf 1.21.1-0

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/opt/cola/permits/1302206250_1652257888.0273938/0/telegraf-1.21.4-1.x86_64.src.rpm-cosi-expand-archive-5SVv0qQE/usr/bin/telegraf: binary file matches

Found in path(s):
* /bin/grep

No license file was found, but licenses were detected in source scan.

# Telegraf Configuration
#
# Telegraf is entirely plugin driven. All metrics are gathered from the
# declared inputs, and sent to the declared outputs.
#
# Plugins must be declared here to be active.
# To deactivate a plugin, comment out the name and any variables.
#
# Use 'telegraf -config telegraf.conf -test' to see what metrics a config
# file would generate.
#
# Environment variables can be used anywhere in this config file, simply surround
# them with ${}. For strings the variable must be within quotes (ie, "${STR_VAR}"),
# for numbers and booleans they should be plain (ie, ${INT_VAR}, ${BOOL_VAR})

# Global tags can be specified here in key="value" format.
[global_tags]
  dc = "us-east-1" # will tag all metrics with dc=us-east-1
  rack = "1a"
## Environment variables can be used as tags, and throughout the config file
  user = "$USER"

# Configuration for telegraf agent
[agent]
## Default data collection interval for all inputs
  interval = "10s"
## Rounds collection interval to 'interval'
## ie, if interval="10s" then always collect on :00, :10, :20, etc.
  round_interval = true

## Telegraf will send metrics to outputs in batches of at most
## metric_batch_size metrics.
## This controls the size of writes that Telegraf sends to output plugins.
  metric_batch_size = 1000

## Maximum number of unwritten metrics per output. Increasing this value
## allows for longer periods of output downtime without dropping metrics at the
## cost of higher maximum memory usage.
  metric_buffer_limit = 10000

## Collection jitter is used to jitter the collection by a random amount.
## Each plugin will sleep for a random time within jitter before collecting.
## This can be used to avoid many plugins querying things like sysfs at the
## same time, which can have a measurable effect on the system.
  collection_jitter = "0s"

## Default flushing interval for all outputs. Maximum flush_interval will be
## flush_interval + flush_jitter
  flush_interval = "10s"
## Jitter the flush interval by a random amount. This is primarily to avoid large write spikes for users running a large number of telegraf instances.
## ie, a jitter of 5s and interval 10s means flushes will happen every 10-15s
flush_jitter = "0s"

## By default or when set to "0s", precision will be set to the same timestamp order as the collection interval, with the maximum being 1s.
## ie, when interval = "10s", precision will be "1s"
## when interval = "250ms", precision will be "1ms"
## Precision will NOT be used for service inputs. It is up to each individual service input to set the timestamp at the appropriate precision.
## Valid time units are "ns", "us" (or "µs"), "ms", "s".
precision = ""

## Log at debug level.
# debug = false
## Log only error level messages.
# quiet = false

## Log target controls the destination for logs and can be one of "file", "stderr" or, on Windows, "eventlog". When set to "file", the output file is determined by the "logfile" setting.
# logtarget = "file"

## Name of the file to be logged to when using the "file" logtarget. If set to the empty string then logs are written to stderr.
# logfile = ""

## The logfile will be rotated after the time interval specified. When set to 0 no time based rotation is performed. Logs are rotated only when written to, if there is no log activity rotation may be delayed.
# logfile_rotation_interval = "0d"

## The logfile will be rotated when it becomes larger than the specified size. When set to 0 no size based rotation is performed.
# logfile_rotation_max_size = "0MB"

## Maximum number of rotated archives to keep, any older logs are deleted.
## If set to -1, no archives are removed.
# logfile_rotation_max_archives = 5

## Pick a timezone to use when logging or type 'local' for local time.
## Example: America/Chicago
# log_with_timezone = ""

## Override default hostname, if empty use os.Hostname()
hostname = ""
## If set to true, do no set the "host" tag in the telegraf agent.
omit_hostname = false

# Configuration for sending metrics to InfluxDB
[[outputs.influxdb]]
  ## The full HTTP or UDP URL for your InfluxDB instance.
  ## Multiple URLs can be specified for a single cluster, only ONE of the
  ## urls will be written to each interval.
  # urls = ["unix:///var/run/influxdb.sock"]
  # urls = ["udp://127.0.0.1:8089"]
  # urls = ["http://127.0.0.1:8086"]

  ## The target database for metrics; will be created as needed.
  ## For UDP url endpoint database needs to be configured on server side.
  # database = "telegraf"

  ## The value of this tag will be used to determine the database.  If this
  ## tag is not set the 'database' option is used as the default.
  # database_tag = ""

  ## If true, the 'database_tag' will not be included in the written metric.
  # exclude_database_tag = false

  ## If true, no CREATE DATABASE queries will be sent.  Set to true when using
  ## Telegraf with a user without permissions to create databases or when the
  ## database already exists.
  # skip_database_creation = false

  ## Name of existing retention policy to write to.  Empty string writes to
  ## the default retention policy.  Only takes effect when using HTTP.
  # retention_policy = ""

  ## The value of this tag will be used to determine the retention policy.  If this
  ## tag is not set the 'retention_policy' option is used as the default.
  # retention_policy_tag = ""

  ## If true, the 'retention_policy_tag' will not be included in the written metric.
  # exclude_retention_policy_tag = false

  ## Write consistency (clusters only), can be: "any", "one", "quorum", "all".
  ## Only takes effect when using HTTP.
  # write_consistency = "any"
## Timeout for HTTP messages.
# timeout = "5s"

## HTTP Basic Auth
# username = "telegraf"
# password = "metricsmetricsmetricsmetrics"

## HTTP User-Agent
# user_agent = "telegraf"

## UDP payload size is the maximum packet size to send.
# udp_payload = "512B"

## Optional TLS Config for use on HTTP connections.
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## HTTP Proxy override, if unset values the standard proxy environment
## variables are consulted to determine which proxy, if any, should be used.
# http_proxy = "http://corporate.proxy:3128"

## Additional HTTP headers
# http_headers = { "X-Special-Header" = "Special-Value""

## HTTP Content-Encoding for write request body, can be set to "gzip" to
## compress body or "identity" to apply no encoding.
# content_encoding = "gzip"

## When true, Telegraf will output unsigned integers as unsigned values,
## i.e.: "42u". You will need a version of InfluxDB supporting unsigned
## integer values. Enabling this option will result in field type errors if
## existing data has been written.
# influx_uint_support = false

## Configuration for Amon Server to send metrics to.
# [[outputs.amon]]
# ## Amon Server Key
# server_key = "my-server-key" # required.
# #
# ## Amon Instance URL
# amon_instance = "https://youramoninstance" # required
# #
# ## Connection timeout.
# # timeout = "5s"
# Publishes metrics to an AMQP broker
# [{outputs.amqp}]
#
## Broker to publish to.
## This will be selected anytime a connection is established. This can be
## helpful for load balancing when not using a dedicated load balancer.
## brokers = ["amqp://localhost:5672/influxdb"]
#
## Maximum messages to send over a connection. Once this is reached, the
## connection is closed and a new connection is made. This can be helpful for
## load balancing when not using a dedicated load balancer.
## max_messages = 0
#
## Exchange to declare and publish to.
## exchange = "telegraf"
#
## Exchange type; common types are "direct", "fanout", "topic", "header", "x-consistent-hash".
## exchange_type = "topic"
#
## If true, exchange will be passively declared.
## exchange_passive = false
#
## Exchange durability can be either "transient" or "durable".
## exchange_durability = "durable"
#
## Additional exchange arguments.
## exchange_arguments = { }
## exchange_arguments = {"hash_property" = "timestamp"}
#
## Authentication credentials for the PLAIN auth_method.
## username = ""
## password = ""
#
## Auth method. PLAIN and EXTERNAL are supported
## Using EXTERNAL requires enabling the rabbitmq_auth_mechanism_ssl plugin as
## described here: https://www.rabbitmq.com/plugins.html
## auth_method = "PLAIN"
#
## Metric tag to use as a routing key.
## ie, if this tag exists, its value will be used as the routing key
## routing_tag = "host"
#
## Static routing key. Used when no routing_tag is set or as a fallback
# when the tag specified in routing tag is not found.
# routing_key = ""
# routing_key = "telegraf"
#
# Delivery Mode controls if a published message is persistent.
# One of "transient" or "persistent".
# delivery_mode = "transient"
#
# InfluxDB database added as a message header.
# deprecated in 1.7; use the headers option
# database = "telegraf"
#
# InfluxDB retention policy added as a message header
# deprecated in 1.7; use the headers option
# retention_policy = "default"
#
# Static headers added to each published message.
# headers = { }
# headers = {"database" = "telegraf", "retention_policy" = "default"}
#
# Connection timeout. If not provided, will default to 5s. 0s means no
# timeout (not recommended).
# timeout = "5s"
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# If true use batch serialization format instead of line based delimiting.
# Only applies to data formats which are not line based such as JSON.
# Recommended to set to true.
# use_batch_format = false
#
# Content encoding for message payloads, can be set to "gzip" to or
# "identity" to apply no encoding.
#
# Please note that when use_batch_format = false each amqp message contains only
# a single metric, it is recommended to use compression with batch format
# for best results.
# content_encoding = "identity"
#
# Data format to output.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# Send metrics to Azure Application Insights
# [outputs.application_insights]
# ## Instrumentation key of the Application Insights resource.
# instrumentation_key = "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
#
# ## Regions that require endpoint modification https://docs.microsoft.com/en-us/azure/azure-monitor/app/custom-endpoints
# endpoint_url = "https://dc.services.visualstudio.com/v2/track"
#
# ## Timeout for closing (default: 5s).
# timeout = "5s"
#
# ## Enable additional diagnostic logging.
# enable_diagnostic_logging = false
#
# ## Context Tag Sources add Application Insights context tags to a tag value.
# [outputs.application_insights.context_tag_sources]
# "ai.cloud.role" = "kubernetes_container_name"
# "ai.cloud.roleInstance" = "kubernetes_pod_name"
#
# Sends metrics to Azure Data Explorer
# [outputs.azure_data_explorer]
# ## Azure Data Explorer cluster endpoint
# endpoint_url = "https://clustername.australiasoutheast.kusto.windows.net"
#
# ## The Azure Data Explorer database that the metrics will be ingested into.
# ## The plugin will NOT generate this database automatically, it's expected that this database already exists before ingestion.
# database = ""
#
# ## Timeout for Azure Data Explorer operations
# timeout = "20s"
#
# ## Type of metrics grouping used when pushing to Azure Data Explorer.
# ## Default is "TablePerMetric" for one table per different metric.
# metrics_grouping_type = "TablePerMetric"
#
# ## Name of the single table to store all the metrics (Only needed if metrics_grouping_type is "SingleTable").
# table_name = ""
#
## Creates tables and relevant mapping if set to true(default).
## Skips table and mapping creation if set to false, this is useful for running Telegraf with the lowest possible
## permissions i.e. table ingestor role.
# create_tables = true
#
## Send aggregate metrics to Azure Monitor
# [outputs.azure_monitor]
# ## Timeout for HTTP writes.
# # timeout = "20s"
#
## Set the namespace prefix, defaults to "Telegraf/<input-name>".
# # namespace_prefix = "Telegraf"
#
## Azure Monitor doesn't have a string value type, so convert string
## fields to dimensions (a.k.a. tags) if enabled. Azure Monitor allows
## a maximum of 10 dimensions so Telegraf will only send the first 10
## alphanumeric dimensions.
# # strings_as_dimensions = false
#
## Both region and resource_id must be set or be available via the
## Instance Metadata service on Azure Virtual Machines.
# # region = ""
#
## Azure Region to publish metrics against.
## ex: region = "southcentralus"
# # region = ""
#
## The Azure Resource ID against which metric will be logged, e.g.
## ex: resource_id = "/subscriptions/<subscription_id>/resourceGroups/<resource_group>/providers/Microsoft.Compute/virtualMachines/<vm_name>"
# # resource_id = ""
#
## Optionally, if in Azure US Government, China or other sovereign
## cloud environment, set appropriate REST endpoint for receiving
## metrics. (Note: region may be unused in this context)
# # endpoint_url = "https://monitoring.core.usgovcloudapi.net"
#
## Configuration for Google Cloud BigQuery to send entries
# [outputs.bigquery]
## Credentials File
# credentials_file = "/path/to/service/account/key.json"
#
## Google Cloud Platform Project
# project = "my-gcp-project"
# Publish Telegraf metrics to a Google Cloud PubSub topic
# [[outputs.cloud_pubsub]]
# ## Required. Name of Google Cloud Platform (GCP) Project that owns
# ## the given PubSub topic.
# project = "my-project"
#
# ## Required. Name of PubSub topic to publish metrics to.
# topic = "my-topic"
#
# ## Required. Data format to consume.
# ## Each data format has its own unique set of configuration options.
# ## Read more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# ## Optional. Filepath for GCP credentials JSON file to authorize calls to
# ## PubSub APIs. If not set explicitly, Telegraf will attempt to use
# ## Application Default Credentials, which is preferred.
# credentials_file = "path/to/my/creds.json"
#
# ## Optional. If true, will send all metrics per write in one PubSub message.
# send_batched = true
#
# ## The following publish_* parameters specifically configures batching
# ## requests made to the GCP Cloud PubSub API via the PubSub Golang library. Read
# ## more here: https://godoc.org/cloud.google.com/go/pbsub#PublishSettings
#
# ## Optional. Send a request to PubSub (i.e. actually publish a batch)
# when it has this many PubSub messages. If send_batched is true,
# this is ignored and treated as if it were 1.
# publish_count_threshold = 1000
#
# ## Optional. Send a request to PubSub (i.e. actually publish a batch)
# when it has this many PubSub messages. If send_batched is true,
# this is ignored and treated as if it were 1
# publish_byte_threshold = 1000000
#
# Optional. Specifically configures requests made to the PubSub API.
# publish_num_go_routines = 2
#
# Optional. Specifies a timeout for requests to the PubSub API.
# publish_timeout = "30s"
#
# Optional. If true, published PubSub message data will be base64-encoded.
# base64_data = false
#
# Optional. PubSub attributes to add to metrics.
# [outputs.cloud_pubsub.attributes]
# my_attr = "tag_value"

# Configuration for AWS CloudWatch output.
[[outputs.cloudwatch]]
  # Amazon REGION
  region = "us-east-1"
 #
  # Amazon Credentials
  # Credentials are loaded in the following order
  # 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
  # 2) Assumed credentials via STS if role_arn is specified
  # 3) explicit credentials from 'access_key' and 'secret_key'
  # 4) shared profile from 'profile'
  # 5) environment variables
  # 6) shared credentials file
  # 7) EC2 Instance Profile
  # access_key = ""
  # secret_key = ""
  # token = ""
  # role_arn = ""
  # web_identity_token_file = ""
  # role_session_name = ""
  # profile = ""
  # shared_credential_file = ""
 #
  # Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
# default.
  # ex: endpoint_url = "http://localhost:8000"
  # endpoint_url = ""
  #
  # Namespace for the CloudWatch MetricDatums
  # namespace = "InfluxData/Telegraf"
  #
  # If you have a large amount of metrics, you should consider to send statistic
  # values instead of raw metrics which could not only improve performance but
## Configuration for AWS CloudWatchLogs output.

```toml
[[outputs.cloudwatch_logs]]

### The region is the Amazon region that you wish to connect to.
### Examples include but are not limited to:
- us-west-1
- us-west-2
- us-east-1
- ap-southeast-1
- ap-southeast-2

# region = "us-east-1"
```

### Amazon Credentials

### Credentials are loaded in the following order

1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
2) Assumed credentials via STS if role_arn is specified
3) explicit credentials from 'access_key' and 'secret_key'
4) shared profile from 'profile'

5) environment variables
6) shared credentials file
7) EC2 Instance Profile

```toml
#access_key = ""
#secret_key = ""
#token = ""
#role_arn = ""
#web_identity_token_file = ""
#role_session_name = ""
#profile = ""
#shared_credential_file = ""
```

### Endpoint to make request against, the correct endpoint is automatically determined and this option should only be set if you wish to override the default.

```toml
# ex: endpoint_url = "http://localhost:8000"
# endpoint_url = ""
```

### Cloud watch log group. Must be created in AWS cloudwatch logs upfront!

### For example, you can specify the name of the k8s cluster here to group logs from all cluster in one place

```toml
```

## Also save AWS API cost. If enable this flag, this plugin would parse the required CloudWatch statistic fields (count, min, max, and sum) and send them to CloudWatch.

## You could use basicstats aggregator to calculate those fields. If not all statistic fields are available, all fields would still be sent as raw metrics.

```toml
# write_statistics = false
```

## Enable high resolution metrics of 1 second (if not enabled, standard resolution are of 60 seconds precision)

```toml
# high_resolution_metrics = false
```
# log_group = "my-group-name"
#
### Log stream in log group
### Either log group name or reference to metric attribute, from which it can be parsed:
### `tag:<TAG_NAME>` or `field:<FIELD_NAME>`. If log stream is not exist, it will be created.
### Since AWS is not automatically delete logs streams with expired logs entries (i.e. empty log stream)
### you need to put in place appropriate house-keeping
# log_stream = "tag:location"
#
### Source of log data - metric name
### specify the name of the metric, from which the log data should be retrieved.
### I.e., if you are using docker_log plugin to stream logs from container, then
### specify `log_data_metric_name = "docker_log"`
# log_data_metric_name = "docker_log"
#
### Specify from which metric attribute the log data should be retrieved:
### `tag:<TAG_NAME>` or `field:<FIELD_NAME>`.  
### I.e., if you are using docker_log plugin to stream logs from container, then
### specify `log_data_source = "field:message"
# log_data_source = "field:message"

### Configuration for CrateDB to send metrics to.
```yaml
# [outputs.crate]
# A github.com/jackc/pgx/v4 connection string.
# See https://pkg.go.dev/github.com/jackc/pgx/v4#ParseConfig
# url = "postgres://user:password@localhost/schema?sslmode=disable"
# Timeout for all CrateDB queries.
# timeout = "5s"
# Name of the table to store metrics in.
# table = "metrics"
# If true, and the metrics table does not exist, create it automatically.
# table_create = true
# The character(s) to replace any "." in an object key with
# key_separator = "_"
```

### Configuration for DataDog API to send metrics to.
```yaml
# [outputs.datadog]
# Datadog API key
# apikey = "my-secret-key"
# Connection timeout.
# timeout = "5s"
# Write URL override; useful for debugging.
# url = "https://app.datadoghq.com/api/v1/series"
```
## Set http_proxy (telegraf uses the system wide proxy settings if it isn't set)

```bash
# http_proxy_url = "http://localhost:8888"
```

## Send metrics to nowhere at all

```bash
[[outputs.discard]]
# no configuration
```

## Send telegraf metrics to a Dynatrace environment

```bash
[[outputs.dynatrace]]
```

For usage with the Dynatrace OneAgent you can omit any configuration,

- the only requirement is that the OneAgent is running on the same host.
- Only setup environment url and token if you want to monitor a Host without the OneAgent present.

### Your Dynatrace environment URL.

For Dynatrace OneAgent you can leave this empty or set it to "http://127.0.0.1:14499/metrics/ingest" (default)

For Dynatrace SaaS environments the URL scheme is "https://[your-environment-id].live.dynatrace.com/api/v2/metrics/ingest"

For Dynatrace Managed environments the URL scheme is "https://[your-domain]/e/[your-environment-id]/api/v2/metrics/ingest"

```bash
url = ""
```

### Your Dynatrace API token.

Create an API token within your Dynatrace environment, by navigating to Settings > Integration > Dynatrace API

The API token needs data ingest scope permission. When using OneAgent, no API token is required.

```bash
api_token = ""
```

### Optional prefix for metric names (e.g.: "telegraf")

```bash
prefix = "telegraf"
```

### Optional TLS Config

```bash
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
```

### Optional flag for ignoring tls certificate check

```bash
insecure_skip_verify = false
```

### Connection timeout, defaults to "5s" if not set.

```bash
timeout = "5s"
```

### If you want metrics to be treated and reported as delta counters, add the metric names here

```bash
additional_counters = [ ]
```
## Optional dimensions to be added to every metric
## [outputs.dynatrace.default_dimensions]
## default_key = "default value"

## Configuration for Elasticsearch to send metrics to.
## [outputs.elasticsearch]
## The full HTTP endpoint URL for your Elasticsearch instance
## Multiple urls can be specified as part of the same cluster,
## this means that only ONE of the urls will be written to each interval.
## urls = [ "http://node1.es.example.com:9200" ] # required.
## Elasticsearch client timeout, defaults to "5s" if not set.
## timeout = "5s"
## Set to true to ask Elasticsearch a list of all cluster nodes,
## thus it is not necessary to list all nodes in the urls config option.
## enable_sniffer = false
## Set to true to enable gzip compression
## enable_gzip = false
## Set the interval to check if the Elasticsearch nodes are available
## Setting to "0s" will disable the health check (not recommended in production)
## health_check_interval = "10s"
## HTTP basic authentication details
## username = "telegraf"
## password = "mypassword"

## Index Config
## The target index for metrics (Elasticsearch will create if it not exists).
## You can use the date specifiers below to create indexes per time frame.
## The metric timestamp will be used to decide the destination index name
## %Y - year (2016)
## %y - last two digits of year (00..99)
## %m - month (01..12)
## %d - day of month (e.g., 01)
## %H - hour (00..23)
## %V - week of the year (ISO week) (01..53)
## Additionally, you can specify a tag name using the notation {{tag_name}}
## which will be used as part of the index name. If the tag does not exist,
## the default tag value will be used.
## index_name = "telegraf-{{host}}-%Y.%m.%d"
## default_tag_value = "none"
## index_name = "telegraf-%Y.%m.%d" # required.

## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
## insecure_skip_verify = false
## Template Config

- `manage_template = true`
- `template_name = "telegraf"`
- `overwrite_template = false`

### float_handling

- `none`: do not modify field-values (default); will produce an error if NaNs or infs are encountered
- `drop`: drop fields containing NaNs or infs
- `replace`: replace with the value in "float_replacement_value" (default: 0.0)

### Event Hubs output plugin

- `connection_string = "Endpoint=sb://namespace.servicebus.windows.net/;SharedAccessKeyName=RootManageSharedAccessKey;SharedAccessKey=superSecret1234=;EntityPath=hubName"
- `timeout = "30s"
- `data_format = "json"

## Send metrics to command as input over stdin

- `command = ["tee", "-a", "/dev/null"]
- `timeout = "5s"
## Data format to output.
## Each data format has its own unique set of configuration options, read
## more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
## data_format = "influx"

## Run executable as long-running output plugin
## [[outputs.execd]]
## Program to run as daemon
## command = ["my-telegraf-output", "--some-flag", "value"]
##
## Delay before the process is restarted after an unexpected termination
## restart_delay = "10s"
##
## Data format to export.
## Each data format has its own unique set of configuration options, read
## more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
## data_format = "influx"

## Send telegraf metrics to file(s)
## [[outputs.file]]
## Files to write to, "stdout" is a specially handled file.
## files = ["stdout", "/tmp/metrics.out"]
##
## Use batch serialization format instead of line based delimiting. The
## batch format allows for the production of non line based output formats and
## may more efficiently encode metric groups.
## use_batch_format = false
##
## The file will be rotated after the time interval specified. When set
## to 0 no time based rotation is performed.
## rotation_interval = "0d"
##
## The logfile will be rotated when it becomes larger than the specified
## size. When set to 0 no size based rotation is performed.
## rotation_max_size = "0MB"
##
## Maximum number of rotated archives to keep, any older logs are deleted.
## If set to -1, no archives are removed.
## rotation_max_archives = 5
##
## Data format to output.
## Each data format has its own unique set of configuration options, read
## more about them here:
# Configuration for Graphite server to send metrics to
# [[outputs.graphite]]
# ## TCP endpoint for your graphite instance.
# ## If multiple endpoints are configured, output will be load balanced.
# ## Only one of the endpoints will be written to with each iteration.
# servers = ["localhost:2003"]
# ## Prefix metrics name
# prefix = ""
# ## Graphite output template
# ## see https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# template = "host.tags.measurement.field"
#
# ## Enable Graphite tags support
# # graphite_tag_support = false
#
# ## Define how metric names and tags are sanitized; options are "strict", or "compatible"
# # strict - Default method, and backwards compatible with previous version of Telegraf
# # compatible - More relaxed sanitizing when using tags, and compatible with the graphite spec
# # graphite_tag_sanitize_mode = "strict"
#
# ## Character for separating metric name and field for Graphite tags
# # graphite_separator = "." 
#
# ## Graphite templates patterns
# ## 1. Template for cpu
# ## 2. Template for disk*
# ## 3. Default template
# # templates = [
#   # "cpu tags.measurement.host.field",
#   # "disk* measurement.field",
#   # "host.measurement.tags.field"
#   #]
#
# ## timeout in seconds for the write connection to graphite
# timeout = 2
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
# Send telegraf metrics to graylog
# [[outputs.graylog]]
# ## Endpoints for your graylog instances.
# servers = ["udp://127.0.0.1:12201"]
#
# ## Connection timeout.
# timeout = "5s"
#
# ## The field to use as the GELF short_message, if unset the static string
# "telegraf" will be used.
# example: short_message_field = "message"
# short_message_field = ""
#
# According to GELF payload specification, additional fields names must be prefixed
# with an underscore. Previous versions did not prefix custom field 'name' with underscore.
# Set to true for backward compatibility.
# name_field_no_prefix = false
#
# ## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# Send telegraf metrics to GroundWork Monitor
# [[outputs.groundwork]]
# ## URL of your groundwork instance.
# url = "https://groundwork.example.com"
#
# ## Agent uuid for GroundWork API Server.
# agent_id = ""
#
# ## Username and password to access GroundWork API.
# username = ""
# password = ""
#
# ## Default display name for the host with services(metrics).
# default_host = "telegraf"
#
# ## Default service state.
# default_service_state = "SERVICE_OK"
#
# ## The name of the tag that contains the hostname.
# resource_tag = "host"
## Configurable HTTP health check resource based on metrics

### Address and port to listen on.
- `ex: service_address = "http://localhost:8080"
- `service_address = "unix:///var/run/telegraf-health.sock"
- `service_address = "http://:8080"

### The maximum duration for reading the entire request.
- `read_timeout = "5s"

### The maximum duration for writing the entire response.
- `write_timeout = "5s"

### Username and password to accept for HTTP basic authentication.
- `basic_username = "user1"
- `basic_password = "secret"

### Allowed CA certificates for client certificates.
- `tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]

### TLS server certificate and private key.
- `tls_cert = "/etc/telegraf/cert.pem"
- `tls_key = "etc/telegraf/key.pem"

### One or more check sub-tables should be defined, it is also recommended to use metric filtering to limit the metrics that flow into this output.
- `namepass = ["internal_write"]
- `tagpass = [ output = ["influxdb"] ]

### A plugin that can transmit metrics over HTTP
- `url = "http://127.0.0.1:8080/telegraf"
- `timeout = "5s"
# HTTP method, one of: "POST" or "PUT"
# method = "POST"

# HTTP Basic Auth credentials
# username = "username"
# password = "pa$$word"

# OAuth2 Client Credentials Grant
# client_id = "clientid"
# client_secret = "secret"
# token_url = "https://identityprovider/oauth2/v1/token"
# scopes = ["urn:opc:idm:__myscopes__"]

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Optional Cookie authentication
# cookie_auth_url = "https://localhost/authMe"
# cookie_auth_method = "POST"
# cookie_auth_username = "username"
# cookie_auth_password = "pa$$word"
# cookie_auth_body = 
# cookie_auth_renewal not set or set to "0" will auth once and never renew the cookie
# cookie_auth_renewal = "5m"

# Data format to output.
# Each data format has it's own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# Use batch serialization format (default) instead of line based format.
# Batch format is more efficient and should be used unless line based
# format is really needed.
# use_batch_format = true

# HTTP Content-Encoding for write request body, can be set to "gzip" to
# compress body or "identity" to apply no encoding.
# content_encoding = "identity"

# Additional HTTP headers
# [outputs.http.headers]
# Should be set manually to "application/json" for json data_format
# Content-Type = "text/plain; charset=utf-8"
# # Idle (keep-alive) connection timeout.
# # Maximum amount of time before idle connection is closed.
# # Zero means no limit.
# idle_conn_timeout = 0

## Configuration for sending metrics to InfluxDB
# outputs.influxdb_v2]
# The URLs of the InfluxDB cluster nodes.
# Multiple URLs can be specified for a single cluster, only ONE of the
# urls will be written to each interval.
# ex: urls = ["https://us-west-2-1.aws.cloud2.influxdata.com"]
# urls = ["http://127.0.0.1:8086"]
#
# Token for authentication.
# token = ""
#
# Organization is the name of the organization you wish to write to; must exist.
# organization = ""
#
# Destination bucket to write into.
# bucket = ""
#
# The value of this tag will be used to determine the bucket. If this
# tag is not set the 'bucket' option is used as the default.
# bucket_tag = ""
#
# If true, the bucket tag will not be added to the metric.
# exclude_bucket_tag = false
#
# Timeout for HTTP messages.
# timeout = "5s"
#
# Additional HTTP headers
# http_headers = {"X-Special-Header" = "Special-Value"}
#
# HTTP Proxy override, if unset values the standard proxy environment
# variables are consulted to determine which proxy, if any, should be used.
# http_proxy = "http://corporate.proxy:3128"
#
# HTTP User-Agent
# user_agent = "telegraf"
#
# Content-Encoding for write request body, can be set to "gzip" to
# compress body or "identity" to apply no encoding.
# content_encoding = "gzip"
# Configuration for sending metrics to an Instrumental project
[[outputs.instrumental]]
## Project API Token (required)
api_token = "API Token" # required
## Prefix the metrics with a given name
prefix = "" 
## Stats output template (Graphite formatting)
## see https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md#graphite
template = "host.tags.measurement.field"
## Timeout in seconds to connect
timeout = "2s"
## Display Communication to Instrumental
debug = false

# Configuration for the Kafka server to send metrics to
[[outputs.kafka]]
## URLs of kafka brokers
brokers = ["localhost:9092"]
## Kafka topic for producer messages
topic = "telegraf"
## The value of this tag will be used as the topic. If not set the 'topic'
## option is used.
topic_tag = ""
## If true, the 'topic_tag' will be removed from to the metric.
exclude_topic_tag = false
## Optional Client id
client_id = "Telegraf"
## Set the minimal supported Kafka version. Setting this enables the use of new
## Kafka features and APIs. Of particular interest, lz4 compression
## requires at least version 0.10.0.0.
ex: version = "1.1.0"
## Optional topic suffix configuration.
## If the section is omitted, no suffix is used.
## Following topic suffix methods are supported:
## measurement - suffix equals to separator + measurement's name
## tags - suffix equals to separator + specified tags' values
## interleaved with separator
## Suffix equals to "_" + measurement name
## [outputs.kafka.topic_suffix]
## method = "measurement"
## separator = "_"
## Suffix equals to "__" + measurement's "foo" tag value.
## [outputs.kafka.topic_suffix]
## method = "tags"
## keys = ["foo"]
## separator = "__"
## Suffix equals to "_" + measurement's "foo" and "bar" tag values, separated by ".". If there is no such tags,
## their values treated as empty strings.
## [outputs.kafka.topic_suffix]
## method = "tags"
## keys = ["foo", "bar"]
## separator = "_"
## The routing tag specifies a tagkey on the metric whose value is used as
## the message key. The message key is used to determine which partition to
## send the message to. This tag is prefered over the routing_key option.
## routing_tag = "host"
## The routing key is set as the message key and used to determine which
## partition to send the message to. This value is only used when no
## routing_tag is set or as a fallback when the tag specified in routing tag
## is not found.
## If set to "random", a random value will be generated for each message.
## When unset, no message key is added and each message is routed to a random
## partition.
## ex: routing_key = "random"
## routing_key = "telegraf"
## routing_key = ""
## Compression codec

The compression codec represents the various compression codecs recognized by Kafka in messages.

- 0 : None
- 1 : Gzip
- 2 : Snappy
- 3 : LZ4
- 4 : ZSTD

### Compression codec

`compression_codec = 0`

## Idempotent Writes

If enabled, exactly one copy of each message is written.

`idempotent_writes = false`

## RequiredAcks

RequiredAcks is used in Produce Requests to tell the broker how many replica acknowledgements it must see before responding.

- 0 : the producer never waits for an acknowledgement from the broker.
- 1 : the producer gets an acknowledgement after the leader replica has received the data. This option provides better durability as the client waits until the server acknowledges the request as successful (only messages that were written to the now-dead leader but not yet replicated will be lost).
- -1: the producer gets an acknowledgement after all in-sync replicas have received the data. This option provides the best durability, we guarantee that no messages will be lost as long as at least one in sync replica remains.

### RequiredAcks

`required_acks = -1`

## Max Retry

The maximum number of times to retry sending a metric before failing until the next flush.

`max_retry = 3`

## Max Message Bytes

The maximum permitted size of a message. Should be set equal to or smaller than the broker's 'message.max.bytes'.

`max_message_bytes = 1000000`

## TLS Config

Optional TLS Config

- `tls_ca = "/etc/telegraf/ca.pem"
- `tls_cert = "/etc/telegraf/cert.pem"
- `tls_key = "/etc/telegraf/key.pem"

## SASL Config

Optional SASL Config

- `sasl_username = "kafka"
- `sasl_password = "secret"
# Optional SASL:
# one of: OAUTHBEARER, PLAIN, SCRAM-SHA-256, SCRAM-SHA-512, GSSAPI
# (defaults to PLAIN)
# `sasl_mechanism = ""`
#
# used if `sasl_mechanism` is GSSAPI (experimental)
# `sasl_gssapi_service_name = ""`
# One of: KRB5_USER_AUTH and KRB5_KEYTAB_AUTH
# `sasl_gssapi_auth_type = "KRB5_USER_AUTH"
# `sasl_gssapi_kerberos_config_path = "/
# `sasl_gssapiRealm = "realm"
# `sasl_gssapi_keytab_path = ""
# `sasl_gssapi_disable_pafxfast = false`
#
# used if `sasl_mechanism` is OAUTHBEARER (experimental)
# `sasl_access_token = ""`
#
# SASL protocol version. When connecting to Azure EventHub set to 0.
# `sasl_version = 1`
#
# Disable Kafka metadata full fetch
# `metadata_full = false`
#
# Data format to output.
# Each data format has its own unique set of configuration options, read
# more about them here:
# `https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md`
# `data_format = "influx"`

# Configuration for the AWS Kinesis output.
# `[[outputs.kinesis]]`
# Amazon REGION of kinesis endpoint.
# `region = "ap-southeast-2"`
#
# Amazon Credentials
# Credentials are loaded in the following order
# 1) Web identity provider credentials via STS if `role_arn` and `web_identity_token_file` are specified
# 2) Assumed credentials via STS if `role_arn` is specified
# 3) explicit credentials from `access_key` and `secret_key`
# 4) shared profile from `profile`
# 5) environment variables
# 6) shared credentials file
# 7) EC2 Instance Profile
# `access_key = ""`
# `secret_key = ""`
# `token = ""`
# `role_arn = ""`
# #web_identity_token_file = ""
# #role_session_name = ""
# #profile = ""
# #shared_credential_file = ""
#
# # Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
default.
# # ex: endpoint_url = "http://localhost:8000"
# # endpoint_url = ""
#
# # Kinesis StreamName must exist prior to starting telegraf.
# streamname = "StreamName"
# # DEPRECATED: PartitionKey as used for sharding data.
# partitionkey = "PartitionKey"
# # DEPRECATED: If set the partitionKey will be a random UUID on every put.
# # This allows for scaling across multiple shards in a stream.
# # This will cause issues with ordering.
# use_random_partitionkey = false
# # The partition key can be calculated using one of several methods:
# #
# # Use a static value for all writes:
# # [outputs.kinesis.partition]
# # method = "static"
# # key = "howdy"
# #
# # Use a random partition key on each write:
# # [outputs.kinesis.partition]
# # method = "random"
# #
# # Use the measurement name as the partition key:
# # [outputs.kinesis.partition]
# # method = "measurement"
# #
# # Use the value of a tag for all writes, if the tag is not set the empty
default option will be used. When no default, defaults to "telegraf"
# # [outputs.kinesis.partition]
# # method = "tag"
# # key = "host"
# # default = "mykey"
#
# # Data format to output.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
## Configuration for Librato API to send metrics to.

### Librato API Docs

### Librato API user

api_user = "telegraf@influxdb.com" # required.

### Librato API token

api_token = "my-secret-token" # required.

### Debug

debug = false

template = "host"

## Send aggregate metrics to Logz.io

### Logz.io account token

token = "your logz.io token" # required

## Use your listener URL for your Logz.io account region.

url = "https://listener.logz.io:8071"

## Send logs to Loki

### The domain of Loki

domain = "https://loki.domain.tld"

## Endpoint to write api

endpoint = "/loki/api/v1/push"
# ## Connection timeout, defaults to "5s" if not set.
# timeout = "5s"
#
# ## Basic auth credential
# username = "loki"
# password = "pass"
#
# ## Additional HTTP headers
# http_headers = {"X- Scope-OrgID" = "1"}
#
# ## If the request must be gzip encoded
# gzip_request = false
#
# ## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"

# Sends metrics to MongoDB
[[outputs.mongodb]]
# connection string examples for mongodb
# dsn = "mongodb://localhost:27017"
# dsn = "mongodb://mongod1:27017,mongod2:27017,mongod3:27017/admin&replicaSet=myReplSet&w=1"
#
# overrides serverSelectionTimeoutMS in dsn if set
# timeout = "30s"
#
# default authentication, optional
# authentication = "NONE"
#
# for SCRAM-SHA-256 authentication
# authentication = "SCRAM"
# username = "root"
# password = "***"
#
# for x509 certificate authentication
# authentication = "X509"
# tls_ca = "ca.pem"
# tls_key = "client.pem"
# tls_key_pwd = "changeme" # required for encrypted tls_key
# insecure_skip_verify = false
#
# database to store measurements and time series collections
# database = "telegraf"
#
# granularity can be seconds, minutes, or hours.
# configuring this value will be based on your input collection frequency.
## Configuration for MQTT server to send metrics to

```yaml
[outputs.mqtt]

## MQTT Brokers
## The list of brokers should only include the hostname or IP address and the
## port to the broker. This should follow the format 'host:port'. For
## example, "localhost:1883" or "127.0.0.1:8883".
# servers = [{"localhost:1883"]

## MQTT Topic for Producer Messages
## MQTT outputs send metrics to this topic format:
## <topic_prefix>/<hostname>/<pluginname>/ (e.g. prefix/web01.example.com/mem)
# topic_prefix = "telegraf"

## QoS policy for messages
# qos = 2

## Keep Alive
## Defines the maximum length of time that the broker and client may not
## communicate. Defaults to 0 which turns the feature off.
# keep_alive = 0

## username and password to connect MQTT server.
# username = "telegraf"
# password = "metricsmetricsmetricsmetrics"

## client ID
## The unique client id to connect MQTT server. If this parameter is not set
## then a random ID is generated.
# client_id = ""

## Timeout for write operations. default: 5s
# timeout = "5s"
```
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# When true, metrics will be sent in one MQTT message per flush. Otherwise,
# metrics are written one metric per MQTT message.
# batch = false
#
# When true, metric will have RETAIN flag set, making broker cache entries until someone
# actually reads it
# retain = false
#
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# Send telegraf measurements to NATS
# [outputs.nats]
# URLs of NATS servers
# servers = ["nats://localhost:4222"]
#
# Optional client name
# name = ""
#
# Optional credentials
# # username = ""
# password = ""
#
# Optional NATS 2.0 and NATS NGS compatible user credentials
# credentials = "/etc/telegraf/nats.creds"
#
# NATS subject for producer messages
# subject = "telegraf"
#
# Use Transport Layer Security
# secure = false
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # Data format to output.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# # Send metrics to New Relic metrics endpoint
# [[outputs.newrelic]]
# # New Relic Insights API key
# insights_key = "insights api key"
# # Prefix to add to add to metric name for easy identification.
# # metric_prefix = ""
# # Timeout for writes to the New Relic API.
# # timeout = "15s"
# # HTTP Proxy override. If unset use values from the standard
# # proxy environment variables to determine proxy, if any.
# # http_proxy = "http://corporate.proxy:3128"
# # Metric URL override to enable geographic location endpoints.
# # If not set use values from the standard
# # metric_url = "https://metric-api.newrelic.com/metric/v1"

# # Send telegraf measurements to NSQD
# [[outputs.nsq]]
# # Location of nsqd instance listening on TCP
# server = "localhost:4150"
# # NSQ topic for producer messages
# topic = "telegraf"
# # Data format to output.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# # Send OpenTelemetry metrics over gRPC
# [[outputs.opentelemetry]]
# # Override the default (localhost:4317) OpenTelemetry gRPC service
# # address:port
# service_address = "localhost:4317"
#
# Override the default (5s) request timeout
# timeout = "5s"
#
# Optional TLS Config.
#
# Root certificates for verifying server certificates encoded in PEM format.
# tls_ca = "/etc/telegraf/ca.pem"
# The public and private keypairs for the client encoded in PEM format.
# tls_cert = "/etc/telegraf/cert.pem"
# May contain intermediate certificates.
# tls_key = "/etc/telegraf/key.pem"
# Use TLS, but skip TLS chain and host verification.
# insecure_skip_verify = false
# Send the specified TLS server name via SNI.
# tls_server_name = "foo.example.com"
#
# Override the default (gzip) compression used to send data.
# Supports: "gzip", "none"
# compression = "gzip"
#
# Additional OpenTelemetry resource attributes
# [outputs.opentelemetry.attributes]
# "service.name" = "demo"
#
# Additional gRPC request metadata
# [outputs.opentelemetry.headers]
# key1 = "value1"

# Configuration for OpenTSDB server to send metrics to
# [outputs.opentsdb]
# prefix for metrics keys
# prefix = "my.specific.prefix.
#
# DNS name of the OpenTSDB server
# Using "opentsdb.example.com" or "tcp://opentsdb.example.com" will use the
telnet API. "http://opentsdb.example.com" will use the Http API.
# host = "opentsdb.example.com"
#
# Port of the OpenTSDB server
# port = 4242
#
# Number of data points to send to OpenTSDB in Http requests.
# Not used with telnet API.
# http_batch_size = 50
# ## URI Path for Http requests to OpenTSDB.
# ## Used in cases where OpenTSDB is located behind a reverse proxy.
# http_path = "/api/put"
#
# ## Debug true - Prints OpenTSDB communication
# debug = false
#
# ## Separator separates measurement name from field
# separator = "_"

# ## Configuration for the Prometheus client to spawn
# [[outputs.prometheus_client]]
# ## Address to listen on
# listen = ":9273"
#
# ## Metric version controls the mapping from Telegraf metrics into
# ## Prometheus format. When using the prometheus input, use the same value in
# ## both plugins to ensure metrics are round-tripped without modification.
# ##
# ## example: metric_version = 1;
# ## metric_version = 2; recommended version
# metric_version = 1
#
# ## Use HTTP Basic Authentication.
# basic_username = "Foo"
# basic_password = "Bar"
#
# ## If set, the IP Ranges which are allowed to access metrics.
# ip_range = ["192.168.0.0/24", "192.168.1.0/30"]
# ip_range = []
#
# ## Path to publish the metrics on.
# path = "/metrics"
#
# ## Expiration interval for each metric. 0 == no expiration
# expiration_interval = "60s"
#
# ## Collectors to enable, valid entries are "gocollector" and "process".
# If unset, both are enabled.
# collectors_exclude = ["gocollector", "process"]
#
# ## Send string metrics as Prometheus labels.
# Unless set to false all string metrics will be sent as labels.
# string_as_label = true
#
# ## If set, enable TLS with the given certificate.
# tls_cert = "/etc/ssl/telegraf.crt"
# tls_key = "/etc/ssl/telegraf.key"

# Set one or more allowed client CA certificate file names to enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]

# Export metric collection time.
# export_timestamp = false

## Configuration for the Riemann server to send metrics to
[[outputs.riemann]]

# The full TCP or UDP URL of the Riemann server
url = "tcp://localhost:5555"

# Riemann event TTL, floating-point time in seconds.
# Defines how long an event is considered valid for in Riemann
# ttl = 30.0

# Separator to use between measurement and field name in Riemann service name
# This does not have any effect if 'measurement_as_attribute' is set to 'true'
# separator = "/"

# Set measurement name as Riemann attribute 'measurement', instead of prepending it to the Riemann service name
# measurement_as_attribute = false

# Send string metrics as Riemann event states.
# Unless enabled all string metrics will be ignored
# string_as_state = false

# A list of tag keys whose values get sent as Riemann tags.
# If empty, all Telegraf tag values will be sent as tags
# tag_keys = ["telegraf","custom_tag"]

# Additional Riemann tags to send.
# tags = ["telegraf-output"]

# Description for Riemann event
# description_text = "metrics collected from telegraf"

# Riemann client write timeout, defaults to "5s" if not set.
# timeout = "5s"

## Configuration for the Riemann server to send metrics to
[[outputs.riemann_legacy]]

# DEPRECATED: The 'riemann_legacy' plugin is deprecated in version 1.3.0, use 'outputs.riemann' instead (see
# Open Source Used In BGP TE Controller Version 4.3.0


```
## URL of server
url = "localhost:5555"

## transport protocol to use either tcp or udp
transport = "tcp"

## separator to use between input name and field name in Riemann service name
separator = " "
```

```
## Send aggregate metrics to Sensu Monitor
[[outputs.sensu]]

## BACKEND API URL is the Sensu Backend API root URL to send metrics to
## (protocol, host, and port only). The output plugin will automatically
## append the corresponding backend API path
## /api/core/v2/namespaces/:entity_namespace/events/:entity_name/:check_name).

## Agent Events API reference:
## https://docs.sensu.io/sensu-go/latest/api/events/

## AGENT API URL is the Sensu Agent API root URL to send metrics to
## (protocol, host, and port only). The output plugin will automatically
## append the corresponding agent API path (/events).

## Agent API Events API reference:
## https://docs.sensu.io/sensu-go/latest/api/events/

## NOTE: if backend_api_url and agent_api_url and api_key are set, the output
## plugin will use backend_api_url. If backend_api_url and agent_api_url are
## not provided, the output plugin will default to use an agent_api_url of
## http://127.0.0.1:3031

## backend_api_url = "http://127.0.0.1:8080"
## agent_api_url = "http://127.0.0.1:3031"

## API KEY is the Sensu Backend API token

## Generate a new API token via:

## $ sensuctl cluster-role create telegraf --verb create --resource events,entities
## $ sensuctl cluster-role-binding create telegraf --cluster-role telegraf --group telegraf
## $ sensuctl user create telegraf --group telegraf --password REDACTED
## $ sensuctl api-key grant telegraf

## For more information on Sensu RBAC profiles & API tokens, please visit:
## - https://docs.sensu.io/sensu-go/latest/reference/rbac/
## - https://docs.sensu.io/sensu-go/latest/reference/apikeys/

api_key = "${SENSU_API_KEY}"
```

---

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# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # ## Timeout for HTTP message
# # timeout = "5s"
#
# # HTTP Content-Encoding for write request body, can be set to "gzip" to
# compress body or "identity" to apply no encoding.
# # content_encoding = "identity"
#
# # ## Sensu Event details
# ##
# ## Below are the event details to be sent to Sensu. The main portions of the
# ## event are the check, entity, and metrics specifications. For more information
# ## on Sensu events and its components, please visit:
# ## - Events - https://docs.sensu.io/sensu-go/latest/reference/events
# ## - Checks - https://docs.sensu.io/sensu-go/latest/reference/checks
# ## - Entities - https://docs.sensu.io/sensu-go/latest/reference/entities
# ## - Metrics - https://docs.sensu.io/sensu-go/latest/reference/events#metrics
# ##
# ## Check specification
# ## The check name is the name to give the Sensu check associated with the event
# ## created. This maps to check.metadata.name in the event.
# [outputs.sensu.check]
# name = "telegraf"
#
# ## Entity specification
# ## Configure the entity name and namespace, if necessary. This will be part of
# ## the entity.metadata in the event.
# ##
# ## NOTE: if the output plugin is configured to send events to a
# ## backend_api_url and entity_name is not set, the value returned by
# ## os.Hostname() will be used; if the output plugin is configured to send
# ## events to an agent_api_url, entity_name and entity_namespace are not used.
# [outputs.sensu.entity]
# # name = "server-01"
# # namespace = "default"
#
# ## Metrics specification
# ## Configure the tags for the metrics that are sent as part of the Sensu event
# [outputs.sensu.tags]
# # source = "telegraf"
#
# ## Configure the handler(s) for processing the provided metrics
## # [outputs.sensu.metrics]
## #   handlers = ["influxdb","elasticsearch"]

## # Send metrics and events to SignalFx
## [[outputs.signalfx]]
##   ## SignalFx Org Access Token
##   access_token = "my-secret-token"
##   ## The SignalFx realm that your organization resides in
##   signalfx_realm = "us9" # Required if ingest_url is not set
##   ## You can optionally provide a custom ingest url instead of the
##   ## signalfx_realm option above if you are using a gateway or proxy
##   ## instance. This option takes precedent over signalfx_realm.
##   ingest_url = "https://my-custom-ingest/
##   ## Event typed metrics are omitted by default,
##   ## If you require an event typed metric you must specify the
##   ## metric name in the following list.
##   included_event_names = ["plugin.metric_name"]

## # Generic socket writer capable of handling multiple socket types.
## [[outputs.socket_writer]]
##   ## URL to connect to
##   # address = "tcp://127.0.0.1:8094"
##   # address = "tcp://example.com:http"
##   # address = "tcp4://127.0.0.1:8094"
##   # address = "tcp6://127.0.0.1:8094"
##   # address = "tcp6://[2001:db8::1]:8094"
##   # address = "udp://127.0.0.1:8094"
##   # address = "udp4://127.0.0.1:8094"
##   # address = "udp6://127.0.0.1:8094"
##   # address = "unix:///tmp/telegraf.sock"
##   # address = "unixgram:///tmp/telegraf.sock"
##   ## Optional TLS Config
##   # tls_ca = "/etc/telegraf/ca.pem"
##   # tls_cert = "/etc/telegraf/cert.pem"
##   # tls_key = "/etc/telegraf/key.pem"
##   ## Use TLS but skip chain & host verification
##   # insecure_skip_verify = false
##   ## Period between keep alive probes.
##   ## Only applies to TCP sockets.
##   # 0 disables keep alive probes.
##   ## Defaults to the OS configuration.
# keep_alive_period = "5m"

# Content encoding for packet-based connections (i.e. UDP, unixgram).
# Can be set to "gzip" or to "identity" to apply no encoding.
#
# content_encoding = "identity"

# Data format to generate.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

## Send metrics to SQL Database

```
[[outputs.sql]]
```

# Database driver
# Valid options: mssql (Microsoft SQL Server), mysql (MySQL), pgx (Postgres),
# sqlite (SQLite3), snowflake (snowflake.com)
# driver = ""

# Data source name
# The format of the data source name is different for each database driver.
# See the plugin readme for details.
# data_source_name = ""

# Timestamp column name
# timestamp_column = "timestamp"

# Table creation template
# Available template variables:
# {TABLE} - table name as a quoted identifier
# {TABLELITERAL} - table name as a quoted string literal
# {COLUMNS} - column definitions (list of quoted identifiers and types)
# table_template = "CREATE TABLE {TABLE}({COLUMNS})"

# Table existence check template
# Available template variables:
# {TABLE} - tablename as a quoted identifier
# table_exists_template = "SELECT 1 FROM {TABLE} LIMIT 1"

# Initialization SQL
# init_sql = ""

# Metric type to SQL type conversion
# The values on the left are the data types Telegraf has and the values on
# the right are the data types Telegraf will use when sending to a database.
# The database values used must be data types the destination database understands. It is up to the user to ensure that the selected data type is available in the database they are using. Refer to your database documentation for what data types are available and supported.

```
# [outputs.sql.convert]
# integer = "INT"
# real = "DOUBLE"
# text = "TEXT"
# timestamp = "TIMESTAMP"
# defaultvalue = "TEXT"
# unsigned = "UNSIGNED"
```

# Configuration for Google Cloud Stackdriver to send metrics to
# [[outputs.stackdriver]]
# ## GCP Project
# project = "erudite-bloom-151019"
# # ## The namespace for the metric descriptor
# namespace = "telegraf"
# # ## Custom resource type
# # resource_type = "generic_node"
# # ## Additional resource labels
# # [outputs.stackdriver.resource_labels]
# # node_id = "$HOSTNAME"
# # namespace = "myapp"
# # location = "eu-north0"

# A plugin that can transmit metrics to Sumo Logic HTTP Source
# [[outputs.sumologic]]
# ## Unique URL generated for your HTTP Metrics Source.
# ## This is the address to send metrics to.
# # url = "https://events.sumologic.net/receiver/v1/http/<UniqueHTTPCollectorCode>"
# # ## Data format to be used for sending metrics.
# # ## This will set the "Content-Type" header accordingly.
# # ## Currently supported formats:
# # ## * graphite - for Content-Type of application/vnd.sumologic.graphite
# # ## * carbon2 - for Content-Type of application/vnd.sumologic.carbon2
# # ## * prometheus - for Content-Type of application/vnd.sumologic.prometheus
# ## ##
# ## More information can be found at:
# ## https://help.sumologic.com/03Send-Data/Sources/02Sources-for-Hosted-Collectors/HTTP-Source/Upload-Metrics-to-an-HTTP-Source#content-type-headers-for-metrics
# ##
## Configuration for Telegraf

```toml
## When unset, telegraf will by default use the influx serializer which is currently unsupported in HTTP Source.
# data_format = "carbon2"
#
# Timeout used for HTTP request
# timeout = "5s"
#
# Max HTTP request body size in bytes before compression (if applied).
# By default 1MB is recommended.
# NOTE:
# Bear in mind that in some serializer a metric even though serialized to multiple lines cannot be split any further so setting this very low might not work as expected.
# max_request_body_size = 1000000
#
# Additional, Sumo specific options.
# Full list can be found here:
# https://help.sumologic.com/03Send-Data/Sources/02Sources-for-Hosted-Collectors/HTTP-Source/Upload-Metrics-to-an-HTTP-Source#supported-http-headers
#
# Desired source name.
# If you want to override the source name configured for the source.
# source_name = ""
#
# Desired host name.
# If you want to override the source host configured for the source.
# source_host = ""
#
# Desired source category.
# If you want to override the source category configured for the source.
# source_category = ""
#
# Comma-separated key=value list of dimensions to apply to every metric.
# Custom dimensions will allow you to query your metrics at a more granular level.
# dimensions = ""
```

## Configuration for Syslog server to send metrics to

```
[[outputs.syslog]]
## URL to connect to
# ex: address = "tcp://127.0.0.1:8094"
# ex: address = "tcp4://127.0.0.1:8094"
# ex: address = "tcp6://127.0.0.1:8094"
# ex: address = "tcp6://[2001:db8::1]:8094"
# ex: address = "udp://127.0.0.1:8094"
# ex: address = "udp4://127.0.0.1:8094"
# ex: address = "udp6://127.0.0.1:8094"
```
address = "tcp://127.0.0.1:8094"
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
## Period between keep alive probes.
## Only applies to TCP sockets.
## 0 disables keep alive probes.
## Defaults to the OS configuration.
# keep_alive_period = "5m"
#
## The framing technique with which it is expected that messages are
## transported (default = "octet-counting"). Whether the messages come
## using the octect-counting (RFC5425#section-4.3.1, RFC6587#section-3.4.1),
## or the non-transparent framing technique (RFC6587#section-3.4.2). Must
## be one of "octet-counting", "non-transparent".
# framing = "octet-counting"
#
## The trailer to be expected in case of non-transparent framing (default = "LF").
## Must be one of "LF", or "NUL".
# trailer = "LF"
#
## SD-PARAMs settings
## Syslog messages can contain key/value pairs within zero or more
## structured data sections. For each unrecognized metric tag/field a
## SD-PARAMs is created.
#
## Example:
## [[outputs.syslog]]
## sdparam_separator = "_"
## default_sdid = "default@32473"
## sdids = ["foo@123", "bar@456"]
##
## input => xyzzy,x=y foo@123_value=42,bar@456_value2=84,something_else=1
## output (structured data only) => [foo@123 value=42][bar@456 value2=84][default@32473
## something_else=1 x=y]
#
## SD-PARAMs separator between the sdid and tag/field key (default = "_")
# sdparam_separator = "_"
#
## Default sdid used for tags/fields that don't contain a prefix defined in
## the explicit sdids setting below If no default is specified, no SD-PARAMs
## will be used for unrecognized field.
## default_sdid = "default@32473"
# List of explicit prefixes to extract from tag/field keys and use as the SDID, if they match (see above example for more details):
# sdids = ["foo@123", "bar@456"]

# Default severity value. Severity and Facility are used to calculate the message PRI value (RFC5424#section-6.2.1). Used when no metric field with key "severity_code" is defined. If unset, 5 (notice) is the default
# default_severity_code = 5

# Default facility value. Facility and Severity are used to calculate the message PRI value (RFC5424#section-6.2.1). Used when no metric field with key "facility_code" is defined. If unset, 1 (user-level) is the default
# default_facility_code = 1

# Default APP-NAME value (RFC5424#section-6.2.5)
# Used when no metric tag with key "appname" is defined.
# If unset, "Telegraf" is the default
# default_appname = "Telegraf"

## Configuration for Amazon Timestream output.

### Amazon Region
# region = "us-east-1"

### Amazon Credentials
# Credentials are loaded in the following order:
# 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# 2) Assumed credentials via STS if role_arn is specified
# 3) explicit credentials from 'access_key' and 'secret_key'
# 4) shared profile from 'profile'
# 5) environment variables
# 6) shared credentials file
# 7) EC2 Instance Profile
# #access_key = ""
# #secret_key = ""
# #token = ""
# #role_arn = ""
# #web_identity_token_file = ""
# #role_session_name = ""
# #profile = ""
# #shared_credential_file = ""

### Endpoint to make request against, the correct endpoint is automatically determined and this option should only be set if you wish to override the default.
### ex: endpoint_url = "http://localhost:8000"
## Timestream database where the metrics will be inserted.
## The database must exist prior to starting Telegraf.
# database_name = "yourDatabaseNameHere"

## Specifies if the plugin should describe the Timestream database upon starting
## to validate if it has access necessary permissions, connection, etc., as a safety check.
## If the describe operation fails, the plugin will not start
# describe_database_on_start = false

## The mapping mode specifies how Telegraf records are represented in Timestream.
## Valid values are: single-table, multi-table.
## For example, consider the following data in line protocol format:
## weather,location=us-midwest,season=summer temperature=82,humidity=71 1465839830100400200
## airquality,location=us-west no2=5,pm25=16 1465839830100400200
## where weather and airquality are the measurement names, location and season are tags,
## and temperature, humidity, no2, pm25 are fields.
## In multi-table mode:
## - first line will be ingested to table named weather
## - second line will be ingested to table named airquality
## the tags will be represented as dimensions
## - first table (weather) will have two records:
##   - one with measurement name equals to temperature,
##   - another with measurement name equals to humidity
## - second table (airquality) will have two records:
##   - one with measurement name equals to no2,
##   - another with measurement name equals to pm25
## the Timestream tables from the example will look like this:
## TABLE "weather":
##   time | location | season | measure_name | measure_value::bigint
##   2016-06-13 17:43:50 | us-midwest | summer | temperature | 82
##   2016-06-13 17:43:50 | us-midwest | summer | humidity | 71
## TABLE "airquality":
##   time | location | measure_name | measure_value::bigint
##   2016-06-13 17:43:50 | us-west | no2 | 5
##   2016-06-13 17:43:50 | us-west | pm25 | 16
## In single-table mode:
## the data will be ingested to a single table, which name will be valueOf(single_table_name)
## measurement name will stored in dimension named valueOf(single_table_dimension_name_for_telegraf_measurement_name)
## location and season will be represented as dimensions
## temperature, humidity, no2, pm25 will be represented as measurement name
## the Timestream table from the example will look like this:
## Assuming:
## single_table_name = "my_readings"
## single_table_dimension_name_for_telegraf_measurement_name = "namespace"
# # TABLE "my_readings":
# #
# # time | location | season | namespace | measure_name | measure_value::bigint
# # 2016-06-13 17:43:50 | us-midwest | summer | weather | temperature | 82
# # 2016-06-13 17:43:50 | us-midwest | summer | weather | humidity | 71
# # 2016-06-13 17:43:50 | us-west | NULL | airquality | no2 | 5
# # 2016-06-13 17:43:50 | us-west | NULL | airquality | pm25 | 16
# ## In most cases, using multi-table mapping mode is recommended.
# ## However, you can consider using single-table in situations when you have thousands of measurement names.
# mapping_mode = "multi-table"
#
# ## Only valid and required for mapping_mode = "single-table"
# ## Specifies the Timestream table where the metrics will be uploaded.
# single_table_name = "yourTableNameHere"
#
# ## Only valid and required for mapping_mode = "single-table"
# ## Describes what will be the Timestream dimension name for the Telegraf
# single_table_dimension_name_for_telegraf_measurement_name = "namespace"
#
# ## Specifies if the plugin should create the table, if the table do not exist.
# Only valid and required if create_table_if_not_exists = true
# The plugin writes the data without prior checking if the table exists.
# When the table does not exist, the error returned from Timestream will cause
# the plugin to create the table, if this parameter is set to true.
# create_table_if_not_exists = true
#
# ## Only valid and required if create_table_if_not_exists = true
# ## Specifies the Timestream table magnetic store retention period in days.
# Check Timestream documentation for more details.
# create_table_magnetic_store_retention_period_in_days = 365
#
# ## Only valid and required if create_table_if_not_exists = true
# ## Specifies the Timestream table memory store retention period in hours.
# Check Timestream documentation for more details.
# create_table_memory_store_retention_period_in_hours = 24
#
# ## Only valid and optional if create_table_if_not_exists = true
# ## Specifies the Timestream table tags.
# # Check Timestream documentation for more details
# # create_table_tags = { "foo" = "bar", "environment" = "dev" }
#
# ## Specify the maximum number of parallel go routines to ingest/write data
# ## If not specified, defaulted to 1 go routines
# max_write_go_routines = 25
#
# # Write metrics to Warp 10
# [outputs.warp10]
# # Prefix to add to the measurement.
# prefix = "telegraf."
#
# # URL of the Warp 10 server
# warp_url = "http://localhost:8080"
#
# # Write token to access your app on warp 10
# token = "Token"
#
# # Warp 10 query timeout
# # timeout = "15s"
#
# # Print Warp 10 error body
# # print_error_body = false
#
# # Max string error size
# # max_string_error_size = 511
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # Configuration for Wavefront server to send metrics to
# [[outputs.wavefront]]
# # Url for Wavefront Direct Ingestion or using HTTP with Wavefront Proxy
# # If using Wavefront Proxy, also specify port. example: http://proxyserver:2878
# # url = "https://metrics.wavefront.com"
#
# # Authentication Token for Wavefront. Only required if using Direct Ingestion
# # token = "DUMMY_TOKEN"
#
# # DNS name of the wavefront proxy server. Do not use if url is specified
# # host = "wavefront.example.com"
#
# # Port that the Wavefront proxy server listens on. Do not use if url is specified
# # port = 2878
#
# # prefix for metrics keys
# # prefix = "my.specific.prefix."
#
# # whether to use "value" for name of simple fields. default is false
# # simple_fields = false
#
# # character to use between metric and field name. default is . (dot)
# # metric_separator = "."
# Convert metric name paths to use metricSeparator character
# When true will convert all _ (underscore) characters in final metric name. default is true
# convert_paths = true
#
# Use Strict rules to sanitize metric and tag names from invalid characters
# When enabled forward slash (/) and comma (,) will be accepted
# use_strict = false
#
# Use Regex to sanitize metric and tag names from invalid characters
# Regex is more thorough, but significantly slower. default is false
# use_regex = false
#
# point tags to use as the source name for Wavefront (if none found, host will be used)
# source_override = ["hostname", "address", "agent_host", "node_host"]
#
# whether to convert boolean values to numeric values, with false -> 0.0 and true -> 1.0. default is true
# convert_bool = true
#
# Truncate metric tags to a total of 254 characters for the tag name value. Wavefront will reject any
# data point exceeding this limit if not truncated. Defaults to 'false' to provide backwards compatibility.
# truncate_tags = false
#
# Flush the internal buffers after each batch. This effectively bypasses the background sending of metrics
# normally done by the Wavefront SDK. This can be used if you are experiencing buffer overruns. The sending
# of metrics will block for a longer time, but this will be handled gracefully by the internal buffering in
# Telegraf.
# immediate_flush = true
#
# Define a mapping, namespaced by metric prefix, from string values to numeric values
# deprecated in 1.9; use the enum processor plugin
# [[outputs.wavefront.string_to_number.elasticsearch]]
# green = 1.0
# yellow = 0.5
# red = 0.0

# Generic WebSocket output writer.
# [[outputs.websocket]]
# URL is the address to send metrics to. Make sure ws or wss scheme is used.
# url = "ws://127.0.0.1:8080/telegraf"
#
# Timeouts (make sure read_timeout is larger than server ping interval or set to zero).
# connect_timeout = "30s"
# write_timeout = "30s"
# read_timeout = "30s"
#
# Optionally turn on using text data frames (binary by default).
# use_text_frames = false
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Data format to output.
# ## Each data format has it's own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# # data_format = "influx"
#
# ## Additional HTTP Upgrade headers
# # [outputs.websocket.headers]
# #   Authorization = "Bearer <TOKEN>"

## Send aggregated metrics to Yandex.Cloud Monitoring
# [[outputs.yandex_cloud_monitoring]]
# ## Timeout for HTTP writes.
# # timeout = "20s"
#
# ## Yandex.Cloud monitoring API endpoint. Normally should not be changed
# # endpoint_url = "https://monitoring.api.cloud.yandex.net/monitoring/v2/data/write"
#
# ## All user metrics should be sent with "custom" service specified. Normally should not be changed
# # service = "custom"

# PROCESOR PLUGINS

# Attach AWS EC2 metadata to metrics
# [[processors.aws_ec2]]
# ## Instance identity document tags to attach to metrics.
# ## For more information see:
# #
# # Available tags:
# ## * accountId
# ## * architecture
# ## * availabilityZone
# ## * billingProducts
# **imds_tags** = []

# **EC2 instance tags** retrieved with DescribeTags action.
# ## In case tag is empty upon retrieval it's omitted when tagging metrics.
# ## Note that in order for this to work, role attached to EC2 instance or AWS
# ## credentials available from the environment must have a policy attached, that
# ## allows ec2:DescribeTags.
# ##
# ## For more information see:
# ## https://docs.aws.amazon.com/AWSEC2/latest/APIReference/API_DescribeTags.html
# **ec2_tags** = []

# **Timeout for http requests** made by against aws ec2 metadata endpoint.
# **timeout** = "10s"

# **ordered** controls whether or not the metrics need to stay in the same order
# ## this plugin received them in. If false, this plugin will change the order
# ## with requests hitting cached results moving through immediately and not
# ## waiting on slower lookups. This may cause issues for you if you are
# ## depending on the order of metrics staying the same. If so, set this to true.
# ## Keeping the metrics ordered may be slightly slower.
# **ordered** = false

# **max_parallel_calls** is the maximum number of AWS API calls to be in flight
# ## at the same time.
# ## It's probably best to keep this number fairly low.
# **max_parallel_calls** = 10

# ## Clone metrics and apply modifications.
# [[processors.clone]]
# ## All modifications on inputs and aggregators can be overridden:
# # **name_override** = "new_name"
# # **name_prefix** = "new_name_prefix"
# # **name_suffix** = "new_name_suffix"
# #
# # **Tags to be added** (all values must be strings)
# # # [processors.clone.tags]
# # # additional_tag = "tag_value"
# Convert values to another metric value type
# [[[processors.converter]]]
# ### Tags to convert
# ###
# ### The table key determines the target type, and the array of key-values
# ### selecting the keys to convert. The array may contain globs.
# ### <target-type> = [tag-key]...
# [[[processors.converter.tags]]]
#   measurement = []
#   string = []
#   integer = []
#   unsigned = []
#   boolean = []
#   float = []
#
# ### Fields to convert
# ###
# ### The table key determines the target type, and the array of key-values
# ### selecting the keys to convert. The array may contain globs.
# ### <target-type> = [field-key]...
# [[[processors.converter.fields]]]
#   measurement = []
#   tag = []
#   string = []
#   integer = []
#   unsigned = []
#   boolean = []
#   float = []

# Dates measurements, tags, and fields that pass through this filter.
# [[[processors.date]]]
# ### New tag to create
# tag_key = "month"
#
# ### New field to create (cannot set both field_key and tag_key)
# field_key = "month"
#
# ### Date format string, must be a representation of the Go "reference time"
# ### which is "Mon Jan 2 15:04:05 -0700 MST 2006".
# date_format = "Jan"
#
# ### If destination is a field, date format can also be one of
# ### "unix", "unix_ms", "unix_us", or "unix_ns", which will insert an integer field.
# date_format = "unix"
## Offset duration added to the date string when writing the new tag.

```
# date_offset = "0s"
```

## Timezone to use when creating the tag or field using a reference time string. This can be set to one of "UTC", "Local", or to a location name in the IANA Time Zone database.

```
# example: timezone = "America/Los_Angeles"
```

```
# timezone = "UTC"
```

## Filter metrics with repeating field values

```
[[processors.dedup]]
```

### Maximum time to suppress output

```
dedup_interval = "600s"
```

## Defaults sets default value(s) for specified fields that are not set on incoming metrics.

```
[[processors.defaults]]
```

### Ensures a set of fields always exists on your metric(s) with their respective default value.

### For any given field pair (key = default), if it's not set, a field is set on the metric with the specified default.

### A field is considered not set if it is nil on the incoming metric; or it is not nil but its value is an empty string or is a string of one or more spaces.

```
<target-field> = <value>
```

```
[[processors.defaults.fields]]
```

```
field_1 = "bar"
```

```
time_idle = 0
```

```
is_error = true
```

## Map enum values according to given table.

```
[[processors.enum]]
```

```
[[processors.enum.mapping]]
```

### Name of the field to map. Globs accepted.

```
field = "status"
```

### Name of the tag to map. Globs accepted.

```
tag = "status"
```

### Destination tag or field to be used for the mapped value. By default the source tag or field is used, overwriting the original value.

```
dest = "status_code"
```

### Default value to be used for all values not contained in the mapping table. When unset, the unmodified value for the field will be used if no
## match is found.
## default = 0
#
## Table of mappings
[processors.enum.mapping.value_mappings]
  green = 1
  amber = 2
  red = 3

## Run executable as long-running processor plugin
[[processors.execd]]
## Program to run as daemon
### eg: command = ["/path/to/your_program", "arg1", "arg2"]
command = ["cat"]
#
## Delay before the process is restarted after an unexpected termination
restart_delay = "10s"

## Performs file path manipulations on tags and fields
[[processors/filepath]]
### Treat the tag value as a path and convert it to its last element, storing the result in a new tag
#  [[processors/filepath.basename]]
#    tag = "path"
#    dest = "basepath"
#
### Treat the field value as a path and keep all but the last element of path, typically the path's directory
#  [[processors/filepath.dirname]]
#    field = "path"
#
### Treat the tag value as a path, converting it to the shortest path name equivalent
# to path by purely lexical processing
#  [[processors/filepath.clean]]
#    tag = "path"
#
### Treat the tag value as a path, converting it to a relative path that is lexically equivalent to the source path when joined to 'base_path'
#  [[processors/filepath.rel]]
#    tag = "path"
#    base_path = "/var/log"
#
### Treat the tag value as a path, replacing each separator character in path with a '/' character. Has only effect on Windows
## [processors.filepath.toslash]

## tag = "path"

## Add a tag of the network interface name looked up over SNMP by interface number
## [processors.ifname]

## Name of tag holding the interface number
## tag = "ifIndex"

## Name of output tag where service name will be added
## dest = "ifName"

## Name of tag of the SNMP agent to request the interface name from
## agent = "agent"

## Timeout for each request.
## timeout = "5s"

## SNMP version; can be 1, 2, or 3.
## version = 2

## SNMP community string.
## community = "public"

## Number of retries to attempt.
## retries = 3

## The GETBULK max-repetitions parameter.
## max_repetitions = 10

## SNMPv3 authentication and encryption options.

## Security Name.
## sec_name = "myuser"

## Authentication protocol; one of "MD5", "SHA", or "."
## auth_protocol = "MD5"

## Authentication password.
## auth_password = "pass"

## Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".
## sec_level = "authNoPriv"

## Context Name.
## context_name = ""

## Privacy protocol used for encrypted messages; one of "DES", "AES" or "".
## priv_protocol = ""

## Privacy password used for encrypted messages.
## priv_password = ""

## max_parallel_lookups is the maximum number of SNMP requests to
## Make at the same time.

## max_parallel_lookups = 100

## ordered controls whether or not the metrics need to stay in the
## same order this plugin received them in. If false, this plugin
## may change the order when data is cached. If you need metrics to
## stay in order set this to true. Keeping the metrics ordered may
## be slightly slower

# ordered = false

## cache_ttl is the amount of time interface names are cached for a
## given agent. After this period elapses if names are needed they
## will be retrieved again.
# cache_ttl = "8h"

## Apply metric modifications using override semantics.
[[processors.override]]

## All modifications on inputs and aggregators can be overridden:
# name_override = "new_name"
# name_prefix = "new_name_prefix"
# name_suffix = "new_name_suffix"

## Tags to be added (all values must be strings)
[[processors.override.tags]]
# additional_tag = "tag_value"

## Parse a value in a specified field/tag(s) and add the result in a new metric
[[processors.parser]]

## The name of the fields whose value will be parsed.
# parse_fields = []

## If true, incoming metrics are not emitted.
# drop_original = false

## If set to override, emitted metrics will be merged by overriding the
## original metric using the newly parsed metrics.
# merge = "override"

## The dataformat to be read from files
## Each data format has its own unique set of configuration options, read
## more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

## Rotate a single valued metric into a multi field metric
# [processors.pivot]
#
## Tag to use for naming the new field.
## tag_key = "name"
#
## Field to use as the value of the new field.
## value_key = "value"
#
## Given a tag/field of a TCP or UDP port number, add a tag/field of the service name looked up in the system services file
#
## Name of tag holding the port number
## tag = "port"
## Or name of the field holding the port number
## field = "port"
#
## Name of output tag or field (depending on the source) where service name will be added
## dest = "service"
#
## Default tcp or udp
## default_protocol = "tcp"
#
## Tag containing the protocol (tcp or udp, case-insensitive)
## protocol_tag = "proto"
#
## Field containing the protocol (tcp or udp, case-insensitive)
## protocol_field = "proto"
#
## Print all metrics that pass through this filter.
# [processors.printer]
#
## Transforms tag and field values as well as measurement, tag and field names with regex pattern
# [processors.regex]
## Tag and field conversions defined in a separate sub-tables
# [processors.regex.tags]
## Tag to change
## key = "resp_code"
## Regular expression to match on a tag value
## pattern = "^\d\d\d$"
## Matches of the pattern will be replaced with this string. Use $\{1\}$ notation to use the text of the first submatch.
## replacement = "$\{1\}xx"
#
## [processors.regex.fields]
## Field to change
## key = "request"
## All the power of the Go regular expressions available here

For example, named subgroups

```
pattern = "^/api(?P<method>/[\w/]+)\S*"
replacement = "${method}"
```

If result_key is present, a new field will be created instead of changing existing field

```
result_key = "method"
```

Multiple conversions may be applied for one field sequentially

### Let's extract one more value

```
[[processors.regex.fields]]
key = "request"
pattern = ".*category=(\w+).*"
replacement = "${1}"
result_key = "search_category"
```

### Rename metric fields

```
[[processors.regex.field_rename]]
pattern = "^search_(\w+)d$"
replacement = "${1}"
```

If the new field name already exists, you can either "overwrite" the existing one with the value of the renamed field OR you can "keep" both the existing and source field.

```
result_key = "keep"
```

### Rename metric tags

```
[[processors.regex.tag_rename]]
pattern = "^search_(\w+)d$"
replacement = "${1}"
```

If the new tag name already exists, you can either "overwrite" the existing one with the value of the renamed tag OR you can "keep" both the existing and source tag.

```
result_key = "keep"
```

### Rename metrics

```
[[processors.regex.metric_rename]]
pattern = "^search_(\w+)d$"
replacement = "${1}"
```

If the new metric name already exists, you can either "overwrite" the existing one with the value of the renamed metric OR you can "keep" both the existing and source metric.

```
result_key = "keep"
```
## Rename measurements, tags, and fields that pass through this filter.
## ![processors.rename]]

## ReverseDNS does a reverse lookup on IP addresses to retrieve the DNS name
## ![processors.reverse_dns]]
## For optimal performance, you may want to limit which metrics are passed to this
## processor. eg:
## namepass = ["my_metric_*"]
##
## cache_ttl is how long the dns entries should stay cached for.
## generally longer is better, but if you expect a large number of diverse lookups
## you'll want to consider memory use.
## cache_ttl = "24h"
##
## lookup_timeout is how long should you wait for a single dns request to respond.
## this is also the maximum acceptable latency for a metric travelling through
## the reverse_dns processor. After lookup_timeout is exceeded, a metric will
## be passed on unaltered.
## multiple simultaneous resolution requests for the same IP will only make a
## single rDNS request, and they will all wait for the answer for this long.
## lookup_timeout = "3s"
##
## max_parallel_lookups is the maximum number of dns requests to be in flight
## at the same time. Requesting hitting cached values do not count against this
## total, and neither do multiple requests for the same IP.
## It's probably best to keep this number fairly low.
## max_parallel_lookups = 10
##
## ordered controls whether or not the metrics need to stay in the same order
## this plugin received them in. If false, this plugin will change the order
## with requests hitting cached results moving through immediately and not
## waiting on slower lookups. This may cause issues for you if you are
## depending on the order of metrics staying the same. If so, set this to true.
## keeping the metrics ordered may be slightly slower.
## ordered = false
##
## ![processors.reverse_dns.lookup]]
## get the ip from the field "source_ip", and put the result in the field "source_name"
## field = "source_ip"
## dest = "source_name"
##
## ![processors.reverse_dns.lookup]]
## get the ip from the tag "destination_ip", and put the result in the tag
## tag = "destination_ip"
## dest = "destination_name"
# Add the S2 Cell ID as a tag based on latitude and longitude fields
# [[processors.s2geo]]
# ## The name of the lat and lon fields containing WGS-84 latitude and
# ## longitude in decimal degrees.
# # lat_field = "lat"
# # lon_field = "lon"
# # New tag to create
# # tag_key = "s2_cell_id"
# # Cell level (see https://s2geometry.io/resources/s2cell_statistics.html)
# # cell_level = 9

# Process metrics using a Starlark script
# [[processors.starlark]]
# ## The Starlark source can be set as a string in this configuration file, or
# ## by referencing a file containing the script. Only one source or script
# ## should be set at once.
# ##
# ## Source of the Starlark script.
# # source = ""
# # def apply(metric):
# #   return metric
# # ""
# # File containing a Starlark script.
# # script = "/usr/local/bin/myscript.star"
# # The constants of the Starlark script.
# # [[processors.starlark.constants]]
# #   max_size = 10
# #   threshold = 0.75
# #   default_name = "Julia"
# #   debug_mode = true

# Perform string processing on tags, fields, and measurements
# [[processors.strings]]
# ## Convert a tag value to uppercase
# # [[processors.strings.uppercase]]
# # tag = "method"
### Convert a field value to lowercase and store in a new field
```bash
# # [[processors.strings.lowercase]]
# # field = "uri_stem"
# # dest = "uri_stem_normalised"
```

### Convert a field value to titlecase
```bash
# # [[processors.strings.titlecase]]
# # field = "status"
```

### Trim leading and trailing whitespace using the default cutset
```bash
# # [[processors.strings.trim]]
# # field = "message"
```

### Trim leading characters in cutset
```bash
# # [[processors.strings.trim_left]]
# # field = "message"
# # cutset = "\t"
```

### Trim trailing characters in cutset
```bash
# # [[processors.strings.trim_right]]
# # field = "message"
# # cutset = "\r\n"
```

### Trim the given prefix from the field
```bash
# # [[processors.strings.trim_prefix]]
# # field = "my_value"
# # prefix = "my_"
```

### Trim the given suffix from the field
```bash
# # [[processors.strings.trim_suffix]]
# # field = "read_count"
# # suffix = "_count"
```

### Replace all non-overlapping instances of old with new
```bash
# # [[processors.strings.replace]]
# # measurement = "*"
# # old = ":"
# # new = "_"
```

### Trims strings based on width
```bash
# # [[processors.strings.left]]
# # field = "message"
# # width = 10
```

### Decode a base64 encoded utf-8 string
```bash
# # [[processors.strings.base64decode]]
# # field = "message"
```
```toml
# Sanitize a string to ensure it is a valid utf-8 string
# Each run of invalid UTF-8 byte sequences is replaced by the replacement string, which may be empty
#
[
  processors.strings.valid_utf8
]
  field = "message"
  replacement = ""

# Restricts the number of tags that can pass through this filter and chooses which tags to preserve when over the limit.
[
  processors.tag_limit
]

## Maximum number of tags to preserve
limit = 10

## List of tags to preferentially preserve
keep = ["foo", "bar", "baz"]

# Uses a Go template to create a new tag
[
  processors.template
]

## Tag to set with the output of the template.
tag = "topic"

## Go template used to create the tag value. In order to ease TOML
## escaping requirements, you may wish to use single quotes around the
## template string.
template = '{.Tag "hostname" }.{.Tag "level" }'

# Print all metrics that pass through this filter.
[
  processors.topk
]

## How many seconds between aggregations
period = 10

## How many top metrics to return
k = 10

## Over which tags should the aggregation be done. Globs can be specified, in
## which case any tag matching the glob will aggregated over. If set to an
## empty list no aggregation over tags is done
group_by = ["*"]

## Over which fields are the top k are calculated
fields = ["value"]

## What aggregation to use. Options: sum, mean, min, max
aggregation = "mean"

## Instead of the top k largest metrics, return the bottom k lowest metrics
```
# bottomk = false
#
# The plugin assigns each metric a GroupBy tag generated from its name and
# tags. If this setting is different than "" the plugin will add a
# tag (which name will be the value of this setting) to each metric with
# the value of the calculated GroupBy tag. Useful for debugging
# add_groupby_tag = ""
#
# These settings provide a way to know the position of each metric in
# the top k. The 'add_rank_field' setting allows to specify for which
# fields the position is required. If the list is non empty, then a field
# will be added to each and every metric for each string present in this
# setting. This field will contain the ranking of the group that
# the metric belonged to when aggregated over that field.
# The name of the field will be set to the name of the aggregation field,
# suffixed with the string '_topk_rank'
# add_rank_fields = []
#
# These settings provide a way to know what values the plugin is generating
# when aggregating metrics. The 'add_aggregate_field' setting allows to
# specify for which fields the final aggregation value is required. If the
# list is non empty, then a field will be added to each every metric for
# each field present in this setting. This field will contain
# the computed aggregation for the group that the metric belonged to when
# aggregated over that field.
# The name of the field will be set to the name of the aggregation field,
# suffixed with the string '_topk_aggregate'
# add_aggregate_fields = []

# Rotate multi field metric into several single field metrics
# processors.unpivot]
# Tag to use for the name.
# tag_key = "name"
# Field to use for the name of the value.
# value_key = "value"

# Keep the aggregate basicstats of each metric passing through.
# aggregators.basicstats]
# The period on which to flush & clear the aggregator.
# period = "30s"
# # If true, the original metric will be dropped by the aggregator and will not get sent to the output plugins.
# drop_original = false
#
# # Configures which basic stats to push as fields
# stats = ["count", "min", "max", "mean", "stdev", "s2", "sum"]

# Calculates a derivative for every field.
# [[[aggregators.derivative]]]
# The period in which to flush the aggregator.
# period = "30s"
#
# If true, the original metric will be dropped by the aggregator and will not get sent to the output plugins.
# drop_original = false
#
# This aggregator will estimate a derivative for each field, which is contained in both the first and last metric of the aggregation interval. Without further configuration the derivative will be calculated with respect to the time difference between these two measurements in seconds.
# The formula applied is for every field:
# value_last - value_first
time_difference_in_seconds
# The resulting derivative will be named *fieldname_rate*. The suffix ".rate" can be configured by the *suffix* parameter. When using a derivation variable you can include its name for more clarity.
# suffix = ".rate"
#
# As an abstraction the derivative can be calculated not only by the time difference but by the difference of a field, which is contained in the measurement. This field is assumed to be monotonously increasing. This feature is used by specifying a *variable*.
# Make sure the specified variable is not filtered and exists in the metrics passed to this aggregator!
# variable = ""
#
# When using a field as the derivation parameter the name of that field will be used for the resulting derivative, e.g. *fieldname_by_parameter*.
#
# Note, that the calculation is based on the actual timestamp of the measurements. When there is only one measurement during that period, the measurement will be rolled over to the next period. The maximum number of such roll-overs can be configured with a default of 10.
# max_roll_over = 10
## Report the final metric of a series
```
[[aggregators.final]]
```
### The period on which to flush & clear the aggregator.
```
period = "30s"
```
### If true, the original metric will be dropped by the aggregator and will not get sent to the output plugins.
```
drop_original = false
```
### The time that a series is not updated until considering it final.
```
series_timeout = "5m"
```

## Create aggregate histograms.
```
[[aggregators.histogram]]
```
### The period in which to flush the aggregator.
```
period = "30s"
```
### If true, the original metric will be dropped by the aggregator and will not get sent to the output plugins.
```
drop_original = false
```
### If true, the histogram will be reset on flush instead of accumulating the results.
```
reset = false
```
### Whether bucket values should be accumulated. If set to false, "gt" tag will be added. Defaults to true.
```
cumulative = true
```
### Example config that aggregates all fields of the metric.
```
[[aggregators.histogram.config]]
```
### Right borders of buckets (with +Inf implicitly added).
```
buckets = [0.0, 15.6, 34.5, 49.1, 71.5, 80.5, 94.5, 100.0]
```
### The name of metric.
```
measurement_name = "cpu"
```
### Example config that aggregates only specific fields of the metric.
```
[[aggregators.histogram.config]]
```
### Right borders of buckets (with +Inf implicitly added).
```
buckets = [0.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0]
```
### The name of metric.
```
measurement_name = "diskio"
```
### The concrete fields of metric
```
fields = ["io_time", "read_time", "write_time"]
```
## Merge metrics into multifield metrics by series key
# [aggregators.merge]
# ## If true, the original metric will be dropped by the aggregator and will not get sent to the output plugins.
# drop_original = true

## Keep the aggregate min/max of each metric passing through.
# [aggregators.minmax]
# ## General Aggregator Arguments:
# ## The period on which to flush & clear the aggregator.
# period = "30s"
# ## If true, the original metric will be dropped by the aggregator and will not get sent to the output plugins.
# drop_original = false

## Keep the aggregate quantiles of each metric passing through.
# [aggregators.quantile]
# ## General Aggregator Arguments:
# ## The period on which to flush & clear the aggregator.
# period = "30s"
# ## If true, the original metric will be dropped by the aggregator and will not get sent to the output plugins.
# drop_original = false
# ## Quantiles to output in the range [0,1]
# # quantiles = [0.25, 0.5, 0.75]
# # ## Type of aggregation algorithm
# ## Supported are:
# ## "t-digest" -- approximation using centroids, can cope with large number of samples
# ## "exact R7" -- exact computation also used by Excel or NumPy (Hyndman & Fan 1996 R7)
# ## "exact R8" -- exact computation (Hyndman & Fan 1996 R8)
# ## NOTE: Do not use "exact" algorithms with large number of samples to not impair performance or memory consumption!
# # algorithm = "t-digest"
# # Compression for approximation (t-digest). The value needs to be greater or equal to 1.0. Smaller values will result in more performance but less accuracy.
# # compression = 100.0

## Aggregate metrics using a Starlark script
# [aggregators.starlark]
# The Starlark source can be set as a string in this configuration file, or
# by referencing a file containing the script. Only one source or script
# should be set at once.
#
# Source of the Starlark script.

source = ''
state = {}

# def add(metric):
#   state['last'] = metric
#
# def push():
#   return state.get('last')
#
# def reset():
#   state.clear()
#
#
# File containing a Starlark script.
# # script = '/usr/local/bin/myscript.star'
#
# The constants of the Starlark script.
# # [aggregators.starlark.constants]
# #   max_size = 10
# #   threshold = 0.75
# #   default_name = "Julia"
# #   debug_mode = true

# Count the occurrence of values in fields.
# [[aggregators.valuecounter]]
# # General Aggregator Arguments:
# # The period on which to flush & clear the aggregator.
# # period = "30s"
# # If true, the original metric will be dropped by the
# # aggregator and will not get sent to the output plugins.
# # drop_original = false
# # The fields for which the values will be counted
# # fields = []

# Read metrics about cpu usage
[[inputs.cpu]]
## Whether to report per-cpu stats or not
percpu = true

## Whether to report total system cpu stats or not
totalcpu = true

## If true, collect raw CPU time metrics
collect_cpu_time = false

## If true, compute and report the sum of all non-idle CPU states
report_active = false

# Read metrics about disk usage by mount point
[[inputs.disk]]

## By default stats will be gathered for all mount points.
## Set mount_points will restrict the stats to only the specified mount points.
# mount_points = ["/"]

## Ignore mount points by filesystem type.
ignore_fs = ["tmpfs", "devtmpfs", "devfs", "iso9660", "overlay", "aufs", "squashfs"]

# Read metrics about disk IO by device
[[inputs.diskio]]

## By default, telegraf will gather stats for all devices including
## disk partitions.
## Setting devices will restrict the stats to the specified devices.
# devices = ["sda", "sdb", "vd*"]

## Uncomment the following line if you need disk serial numbers.
# skip_serial_number = false

# On systems which support it, device metadata can be added in the form of
## tags.
## Currently only Linux is supported via udev properties. You can view
## available properties for a device by running:
## 'udevadm info -q property -n /dev/sda'
## Note: Most, but not all, udev properties can be accessed this way. Properties
## that are currently inaccessible include DEVTYPE, DEVNAME, and DEVPATH.
# device_tags = ["ID_FS_TYPE", "ID_FS_USAGE"]

## Using the same metadata source as device_tags, you can also customize the
## name of the device via templates.
## The 'name_templates' parameter is a list of templates to try and apply to
## the device. The template may contain variables in the form of 'SPROPERTY' or
## '${PROPERTY}'. The first template which does not contain any variables not
## present for the device is used as the device name tag.
## The typical use case is for LVM volumes, to get the VG/LV name instead of
## the near-meaningless DM-0 name.
# name_templates = ["$ID_FS_LABEL","$DM_VG_NAME/$DM_LV_NAME"]
# Get kernel statistics from /proc/stat
[[inputs.kernel]]
# no configuration

# Read metrics about memory usage
[[inputs.mem]]
# no configuration

# Get the number of processes and group them by status
[[inputs.processes]]
# no configuration

# Read metrics about swap memory usage
[[inputs.swap]]
# no configuration

# Read metrics about system load & uptime
[[inputs.system]]
### Uncomment to remove deprecated metrics.
# fielddrop = ["uptime_format"]

## # Gather ActiveMQ metrics
## [[inputs.activemq]]
## # ActiveMQ WebConsole URL
## # url = "http://127.0.0.1:8161"
## #
## # # Required ActiveMQ Endpoint
## # # deprecated in 1.11; use the url option
## # # server = "127.0.0.1"
## # # port = 8161
## #
## # # Credentials for basic HTTP authentication
## # # username = "admin"
## # # password = "admin"
## #
## # # Required ActiveMQ webadmin root path
## # # webadmin = "admin"
## #
## # # Maximum time to receive response.
## # # response_timeout = "5s"
## #
## # # Optional TLS Config
## Read stats from aerospike server(s)

```yaml
[[inputs.aerospike]]

## Aerospike servers to connect to (with port)
## This plugin will query all namespaces the aerospike server has configured and get stats for them.
servers = ["localhost:3000"]

## Optional TLS Config
enable_tls = false

tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"

## If false, skip chain & host verification
insecure_skip_verify = true

## Feature Options
Add namespace variable to limit the namespaces executed on
Leave blank to do all
disable_query_namespaces = true # default false
namespaces = ["namespace1", "namespace2"]

## Enable set level telemetry
query_sets = true # default: false
Add namespace set combinations to limit sets executed on
Leave blank to do all sets
sets = ["namespace1/set1", "namespace1/set2", "namespace3"]

## Histograms
enable_ttl_histogram = true # default: false
enable_object_size_linear_histogram = true # default: false

# by default, aerospike produces a 100 bucket histogram
# this is not great for most graphing tools, this will allow
# the ability to squash this to a smaller number of buckets
# To have a balanced histogram, the number of buckets chosen
# should divide evenly into 100.
um_histogram_buckets = 100 # default: 10
```
## Query statistics from AMD Graphics cards using rocsmi binary
# [[inputs.amd_rocsmi]]
# Optional: path to rocsmi binary, defaults to $PATH via exec.LookPath
# bin_path = "/opt/rocsm/bin/rocsmi"
#
# Optional: timeout for GPU polling
# timeout = "5s"

## Read Apache status information (mod_status)
# [[inputs.apache]]
# An array of URLs to gather from, must be directed at the machine
# readable version of the mod_status page including the auto query string.
# Default is "http://localhost/server-status?auto".
# urls = ["http://localhost/server-status?auto"]
#
# Credentials for basic HTTP authentication.
# username = "myuser"
# password = "mypassword"
#
# Maximum time to receive response.
# response_timeout = "5s"
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecureSkipVerify = false

## Monitor APC UPSes connected to apcupsd
# [[inputs.apcupsd]]
# A list of running apcupsd server to connect to.
# If not provided will default to tcp://127.0.0.1:3551
# servers = ["tcp://127.0.0.1:3551"]
#
# Timeout for dialing server.
# timeout = "5s"

## Gather metrics from Apache Aurora schedulers
# [[inputs.aurora]]
# Schedulers are the base addresses of your Aurora Schedulers
# schedulers = ["http://127.0.0.1:8081"]
#
# Set of role types to collect metrics from.
The scheduler roles are checked each interval by contacting the scheduler nodes; zookeeper is not contacted.

roles = \["leader", "follower"]

Timeout is the max time for total network operations.

timeout = "5s"

Username and password are sent using HTTP Basic Auth.

username = "username"

password = "pa$$word"

Optional TLS Config

tls_ca = "/etc/telegraf/ca.pem"

tls_cert = "/etc/telegraf/cert.pem"

tls_key = "/etc/telegraf/key.pem"

Use TLS but skip chain & host verification

insecure_skip_verify = false

Gather Azure Storage Queue metrics

account_name = "mystorageaccount"

account_key = "storageaccountaccesskey"

Set to false to disable peeking age of oldest message (executes faster)

peek_oldest_message_age = true

Read metrics of bcache from stats_total and dirty_data

bcachePath = "/sys/fs/bcache"

By default, Telegraf gather stats for all bcache devices

Setting devices will restrict the stats to the specified bcache devices.

Collects Beanstalkd server and tubes stats

server = "localhost:11300"
# # List of tubes to gather stats about.
# # If no tubes specified then data gathered for each tube on server reported by list-tubes command
# tubes = ["notifications"]

## Read metrics exposed by Beat
# [[inputs.beat]]
# # An URL from which to read Beat-formatted JSON
# # Default is "http://127.0.0.1:5066".
# url = "http://127.0.0.1:5066"
#
# # Enable collection of the listed stats
# # An empty list means collect all. Available options are currently
# # "beat", "libbeat", "system" and "filebeat".
# # include = ["beat", "libbeat", "filebeat"]
#
# # HTTP method
# # method = "GET"
#
# # Optional HTTP headers
# # headers = {
# #   "X-Special-Header" = "Special-Value"
# # }
#
# # Override HTTP "Host" header
# # host_header = "logstash.example.com"
#
# # Timeout for HTTP requests
# # timeout = "5s"
#
# # Optional HTTP Basic Auth credentials
# # username = "username"
# # password = "pa$$word"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Read BIND nameserver XML statistics
# [[inputs.bind]]
# # An array of BIND XML statistics URI to gather stats.
# # Default is "http://localhost:8053/xml/v3".
# # urls = ["http://localhost:8053/xml/v3"]
# # gather_memory_contexts = false
# # gather_views = false
## Timeout for http requests made by bind nameserver
# # timeout = "4s"

## Collect bond interface status, slaves statuses and failures count
# [[inputs.bond]]
# ### Sets 'proc' directory path
# ### If not specified, then default is /proc
# # host_proc = "/proc"
#
# ### By default, telegraf gather stats for all bond interfaces
# ### Setting interfaces will restrict the stats to the specified
# ### bond interfaces.
# # bond_interfaces = ["bond0"]

## Collect Kafka topics and consumers status from Burrow HTTP API.
# [[inputs.burrow]]
# ### Burrow API endpoints in format "schema://host:port".
# ### Default is "http://localhost:8000".
# # servers = ["http://localhost:8000"]
#
# ### Override Burrow API prefix.
# ### Useful when Burrow is behind reverse-proxy.
# # api_prefix = "/v3/kafka"
#
# ### Maximum time to receive response.
# # response_timeout = "5s"
#
# ### Limit per-server concurrent connections.
# ### Useful in case of large number of topics or consumer groups.
# # concurrent_connections = 20
#
# ### Filter clusters, default is no filtering.
# ### Values can be specified as glob patterns.
# # clusters_include = []
# # clusters_exclude = []
#
# ### Filter consumer groups, default is no filtering.
# ### Values can be specified as glob patterns.
# # groups_include = []
# # groups_exclude = []
#
# ### Filter topics, default is no filtering.
# ### Values can be specified as glob patterns.
# # topics_include = []
# # topics_exclude = []
# # Credentials for basic HTTP authentication.
# # username = 
# # password = 
#
# # Optional SSL config
# # ssl_ca = "/etc/telegraf/ca.pem"
# # ssl_cert = "/etc/telegraf/cert.pem"
# # ssl_key = "/etc/telegraf/key.pem"
# # insecure_skip_verify = false
#
# # Collects performance metrics from the MON, OSD, MDS and RGW nodes in a Ceph storage cluster.
# [[inputs.ceph]]
# # This is the recommended interval to poll. Too frequent and you will lose
# # data points due to timeouts during rebalancing and recovery
# # interval = '1m'
#
# # All configuration values are optional, defaults are shown below
#
# # location of ceph binary
# # ceph_binary = "/usr/bin/ceph"
#
# # directory in which to look for socket files
# # socket_dir = "/var/run/ceph"
#
# # prefix of MON and OSD socket files, used to determine socket type
# # mon_prefix = "ceph-mon"
# # osd_prefix = "ceph-osd"
# # mds_prefix = "ceph-mds"
# # rgw_prefix = "ceph-client"
#
# # suffix used to identify socket files
# # socket_suffix = "asok"
#
# # Ceph user to authenticate as, ceph will search for the corresponding keyring
# # e.g. client.admin.keyring in /etc/ceph, or the explicit path defined in the
# # client section of ceph.conf for example:
# #
# # [client.telegraf]
# # # keyring = /etc/ceph/client.telegraf.keyring
# #
# # Consult the ceph documentation for more detail on keyring generation.
# # ceph_user = "client.admin"
#
# # Ceph configuration to use to locate the cluster
# # ceph_config = "/etc/ceph/ceph.conf"
# # Whether to gather statistics via the admin socket
# gather_admin_socket_stats = true
#
# # Whether to gather statistics via ceph commands, requires ceph_user and ceph_config
# # to be specified
# gather_cluster_stats = false

# # Read specific statistics per cgroup
# [[inputs.cgroup]]
# # Directories in which to look for files, globs are supported.
# # Consider restricting paths to the set of cgroups you really
# # want to monitor if you have a large number of cgroups, to avoid
# # any cardinality issues.
# # paths = [
# #   "/sys/fs/cgroup/memory",
# #   "/sys/fs/cgroup/memory/child1",
# #   "/sys/fs/cgroup/memory/child2/*",
# #   
# #]
# # cgroup stat fields, as file names, globs are supported.
# # these file names are appended to each path from above.
# # files = ["memory.*usage*", "memory.limit_in_bytes"]

# # Get standard chrony metrics, requires chronyc executable.
# [[inputs.chrony]]
# # If true, chronyc tries to perform a DNS lookup for the time server.
# # dns_lookup = false

# # Pull Metric Statistics from Amazon CloudWatch
# [[inputs.cloudwatch]]
# # Amazon Region
# # region = "us-east-1"
#
# # Amazon Credentials
# # Credentials are loaded in the following order
# # 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# # 2) Assumed credentials via STS if role_arn is specified
# # 3) explicit credentials from 'access_key' and 'secret_key'
# # 4) shared profile from 'profile'
# # 5) environment variables
# # 6) shared credentials file
# # 7) EC2 Instance Profile
# # access_key = ""
# # secret_key = ""
# # token = ""
# # role_arn = ""
# # web_identity_token_file = ""
# # role_session_name = ""
# # profile = ""
# # shared_credential_file = ""
#
# ## Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
default.
# ## ex: endpoint_url = "http://localhost:8000"
# # endpoint_url = ""
#
# ## Set http_proxy (telegraf uses the system wide proxy settings if it's is not set)
# # http_proxy_url = "http://localhost:8888"
#
# # The minimum period for Cloudwatch metrics is 1 minute (60s). However not all
# # metrics are made available to the 1 minute period. Some are collected at
# # 3 minute, 5 minute, or larger intervals. See https://aws.amazon.com/cloudwatch/faqs/#monitoring.
# # Note that if a period is configured that is smaller than the minimum for a
# # particular metric, that metric will not be returned by the Cloudwatch API
# # and will not be collected by Telegraf.
# #
# ## Requested CloudWatch aggregation Period (required - must be a multiple of 60s)
# # period = "5m"
#
# ## Collection Delay (required - must account for metrics availability via CloudWatch API)
# # delay = "5m"
#
# ## Recommended: use metric ‘interval’ that is a multiple of ‘period’ to avoid
# # gaps or overlap in pulled data
# # interval = "5m"
#
# ## Recommended if "delay" and "period" are both within 3 hours of request time. Invalid values will be ignored.
# ## Recently Active feature will only poll for CloudWatch ListMetrics values that occurred within the last 3
# # Hours.
# ## If enabled, it will reduce total API usage of the CloudWatch ListMetrics API and require less memory to
# # retain.
# ## Do not enable if "period" or "delay" is longer than 3 hours, as it will not return data more than 3 hours old.
# ## See https://docs.aws.amazon.com/AmazonCloudWatch/latest/APIReference/API_ListMetrics.html
# # recently_active = "PT3H"
#
# ## Configure the TTL for the internal cache of metrics.
# # cache_ttl = "1h"
#
# ## Metric Statistic Namespaces (required)
# # namespaces = ["AWS/ELB"]
# # A single metric statistic namespace that will be appended to namespaces on startup
# # namespace = "AWS/ELB"
# Maximum requests per second. Note that the global default AWS rate limit is
# 50 reqs/sec, so if you define multiple namespaces, these should add up to a
# maximum of 50.
# See http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/cloudwatch_limits.html
# ratelimit = 25
#
# Timeout for http requests made by the cloudwatch client.
# timeout = "5s"
#
# Namespace-wide statistic filters. These allow fewer queries to be made to
# cloudwatch.
# statistic_include = [ "average", "sum", "minimum", "maximum", sample_count" ]
# statistic_exclude = []
#
# Metrics to Pull
# Refreshes Namespace available metrics every 1h
# names = ["Latency", "RequestCount"]
#
# Statistic filters for Metric. These allow for retrieving specific
# statistics for an individual metric.
# statistic_include = [ "average", "sum", "minimum", "maximum", sample_count" ]
# statistic_exclude = []
#
# Dimension filters for Metric. All dimensions defined for the metric names
# must be specified in order to retrieve the metric statistics.
# "value" has wildcard / 'glob' matching support such as 'p-*'.
# name = "LoadBalancerName"
# value = "p-example"

# Collects conntrack stats from the configured directories and files.
# The following defaults would work with multiple versions of conntrack.
# Note the nf_ and ip_ filename prefixes are mutually exclusive across
# kernel versions, as are the directory locations.
#
# Superset of filenames to look for within the conntrack dirs.
# Missing files will be ignored.
# files = ["ip_conntrack_count","ip_conntrack_max",
#        "nf_conntrack_count","nf_conntrack_max"]
#
# Directories to search within for the conntrack files above.
# Missing directories will be ignored.
# dirs = ["/proc/sys/net/ipv4/netfilter","/proc/sys/net/netfilter"]
## Gather health check statuses from services registered in Consul

```
# [inputs.consul]

# Consul server address
# address = "localhost:8500"
#
# URI scheme for the Consul server, one of "http", "https"
# scheme = "http"
#
# Metric version controls the mapping from Consul metrics into
# Telegraf metrics.
#
# example: metric_version = 1; deprecated in 1.15
# metric_version = 2; recommended version
# metric_version = 1
#
# ACL token used in every request
# token = ""
#
# HTTP Basic Authentication username and password.
# username = ""
# password = ""
#
# Data center to query the health checks from
# datacenter = ""
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# insecure_skip_verify = true
#
# Consul checks' tag splitting
# When tags are formatted like "key:value" with ":" as a delimiter then
# they will be split and reported as proper key:value in Telegraf
# tag_delimiter = ":"
```

## Read per-node and per-bucket metrics from Couchbase

```
# [inputs.couchbase]

# specify servers via a url matching:
# [protocol://][password]@address[:port]
# e.g.
# http://couchbase-0.example.com/
# http://admin:secret@couchbase-0.example.com:8091/
#
# If no servers are specified, then localhost is used as the host.
```
# If no protocol is specified, HTTP is used.
# If no port is specified, 8091 is used.
# servers = ["http://localhost:8091"]
#
# Filter bucket fields to include only here.
# bucket_stats_included = ["quota_percent_used", "ops_per_sec", "disk_fetches", "item_count", "disk_used", "data_used", "mem_used"]
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification (defaults to false)
# insecure_skip_verify = false

## Read CouchDB Stats from one or more servers
[[inputs.couchdb]]
## Works with CouchDB stats endpoints out of the box
## Multiple Hosts from which to read CouchDB stats:
# hosts = ["http://localhost:8086/_stats"]
#
## Use HTTP Basic Authentication.
# basic_username = "telegraf"
# basic_password = "p@ssw0rd"

## Fetch metrics from a CSGO SRCDS
[[inputs.csgo]]
## Specify servers using the following format:
## servers = [
##    ["ip1:port1", "rcon_password1"],
##    ["ip2:port2", "rcon_password2"],
## ]
#
## If no servers are specified, no data will be collected
# servers = []

## Input plugin for DC/OS metrics
[[inputs.dcos]]
## The DC/OS cluster URL.
cluster_url = "https://dcos-ee-master-1"
#
## The ID of the service account.
# service_account_id = "telegraf"
## The private key file for the service account.
# service_account_private_key = "/etc/telegraf/telegraf-sa-key.pem"
#
# ## Path containing login token. If set, will read on every gather.
# token_file = "/home/dcos/.dcos/token"
#
# ## In all filter options if both include and exclude are empty all items
# ## will be collected. Arrays may contain gob patterns.
# ##
# ## Node IDs to collect metrics from. If a node is excluded, no metrics will
# ## be collected for its containers or apps.
# node_include = []
# node_exclude = []
# ## Container IDs to collect container metrics from.
# container_include = []
# container_exclude = []
# ## Container IDs to collect app metrics from.
# app_include = []
# app_exclude = []
#
# ## Maximum concurrent connections to the cluster.
# max_connections = 10
# ## Maximum time to receive a response from cluster.
# response_timeout = "20s"
#
# ## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# ## If false, skip chain & host verification
# insecure_skip_verify = true
#
# ## Recommended filtering to reduce series cardinality.
# [inputs.dcos.tagdrop]
# path = ["/var/lib/mesos/slave/slaves/*"]

# Read metrics from one or many disque servers
[inputs.disque]
# An array of URI to gather stats about. Specify an ip or hostname
# with optional port and password.
# ie disque://localhost, disque://10.10.3.33:18832, 10.0.0.1:10000, etc.
# If no servers are specified, then localhost is used as the host.
# servers = ["localhost"]

# Provide a native collection for dmsetup based statistics for dm-cache
[inputs.dmcache]
# Whether to report per-device stats or not
# per_device = true

## Query given DNS server and gives statistics
# [[inputs.dns_query]]
# ### servers to query
# servers = ["8.8.8.8"]
#
# ### Network is the network protocol name.
# network = "udp"
#
# ### Domains or subdomains to query.
# domains = ["."]
#
# ### Query record type.
# Possible values: A, AAAA, CNAME, MX, NS, PTR, TXT, SOA, SPF, SRV.
# record_type = "A"
#
# ### Dns server port.
# port = 53
#
# ### Query timeout in seconds.
# timeout = 2

## Read metrics about docker containers
# [[inputs.docker]]
# ### Docker Endpoint
# To use TCP, set endpoint = "tcp://[ip]:[port]"
# To use environment variables (ie, docker-machine), set endpoint = "ENV"
# endpoint = "unix:///var/run/docker.sock"
#
# ### Set to true to collect Swarm metrics(desired_replicas, running_replicas)
# gather_services = false
#
# ### Only collect metrics for these containers, collect all if empty
# container_names = []
#
# ### Set the source tag for the metrics to the container ID hostname, eg first 12 chars
# source_tag = false
#
# ### Containers to include and exclude. Globs accepted.
# Note that an empty array for both will include all containers
# container_name_include = []
# container_name_exclude = []
#
# ### Container states to include and exclude. Globs accepted.
# When empty only containers in the "running" state will be captured.
## container_state_include

- "created"
- "restarting"
- "running"
- "removing"
- "paused"
- "exited"
- "dead"

## container_state_exclude

- "created"
- "restarting"
- "running"
- "removing"
- "paused"
- "exited"
- "dead"

## container_state_include

- []

## container_state_exclude

- []

### Timeout for docker list, info, and stats commands

#### timeout = "5s"

### Whether to report for each container per-device blkio (8:0, 8:1...), network (eth0, eth1, ...) and cpu (cpu0, cpu1, ...) stats or not.

### Usage of this setting is discouraged since it will be deprecated in favor of 'perdevice_include'.

### Default value is 'true' for backwards compatibility, please set it to 'false' so that 'perdevice_include' setting is honored.

#### perdevice = true

### Specifies for which classes a per-device metric should be issued

#### Possible values are 'cpu' (cpu0, cpu1, ...), 'blkio' (8:0, 8:1, ...) and 'network' (eth0, eth1, ...)

### Please note that this setting has no effect if 'perdevice' is set to 'true'

#### perdevice_include = ['cpu']

### Whether to report for each container total blkio and network stats or not.

### Usage of this setting is discouraged since it will be deprecated in favor of 'total_include'.

### Default value is 'false' for backwards compatibility, please set it to 'true' so that 'total_include' setting is honored.

#### total = false

### Specifies for which classes a total metric should be issued. Total is an aggregated of the 'perdevice' values.

#### Possible values are 'cpu', 'blkio' and 'network'

#### Total 'cpu' is reported directly by Docker daemon, and 'network' and 'blkio' totals are aggregated by this plugin.

### Please note that this setting has no effect if 'total' is set to 'false'

#### total_include = ['cpu', 'blkio', 'network']

### Which environment variables should we use as a tag

#### tag_env = ['JAVA_HOME', 'HEAP_SIZE']

### docker labels to include and exclude as tags. Globs accepted.

#### docker_label_include = []

#### docker_label_exclude = []

### Optional TLS Config

#### tls_ca = "/etc/telegraf/ca.pem"

#### tls_cert = "/etc/telegraf/cert.pem"

#### tls_key = "/etc/telegraf/key.pem"

### Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Read statistics from one or many dovecot servers
# [[] inputs.dovecot[]]
# ## specify dovecot servers via an address:port list
# ## e.g.
# ## localhost:24242
# ##
# ## If no servers are specified, then localhost is used as the host.
# servers = ["localhost:24242"]
#
# ## Type is one of "user", "domain", "ip", or "global"
# type = "global"
#
# ## Wildcard matches like ".com". An empty string "" is same as "*"
# ## If type = "ip" filters should be <IP/network>
# filters = ["]"

# Reads metrics from DPDK applications using v2 telemetry interface.
# [[] inputs.dpdk[]]
# ## Path to DPDK telemetry socket. This shall point to v2 version of DPDK telemetry interface.
# # socket_path = "/var/run/dpdk/rte/dpdk_telemetry.v2"
#
# ## Duration that defines how long the connected socket client will wait for a response before terminating connection.
# ## This includes both writing to and reading from socket. Since it's local socket access
# ## to a fast packet processing application, the timeout should be sufficient for most users.
# ## Setting the value to 0 disables the timeout (not recommended)
# # socket_access_timeout = "200ms"
#
# ## Enables telemetry data collection for selected device types.
# ## Adding "ethdev" enables collection of telemetry from DPDK NICs (stats, xstats, link_status).
# ## Adding "rawdev" enables collection of telemetry from DPDK Raw Devices (xstats).
# # device_types = ["ethdev"]
#
# ## List of custom, application-specific telemetry commands to query
# ## The list of available commands depend on the application deployed. Applications can register their own commands
# ## via telemetry library API http://doc.dpdk.org/guides/prog_guide/telemetry_lib.html#registering-commands
# ## For e.g. L3 Forwarding with Power Management Sample Application this could be:
# # additional_commands = ["/l3fwd-power/stats"]
# # # additional_commands = []
#
# ## Allows turning off collecting data for individual "ethdev" commands.
# ## Remove "/ethdev/link_status" from list to start getting link status metrics.
# [inputs.dpdk.ethdev]
# exclude_commands = ["/ethdev/link_status"]
#
# ## When running multiple instances of the plugin it's recommended to add a unique tag to each instance to identify
# ## metrics exposed by an instance of DPDK application. This is useful when multiple DPDK apps run on a single host.
# ## [inputs.dpdk.tags]
# ## dpdk_instance = "my-fwd-app"

## Read metrics about docker containers from Fargate/ECS v2, v3 meta endpoints.
# [[inputs.ecs]]
# ## ECS metadata url.
# ## Metadata v2 API is used if set explicitly. Otherwise, v3 metadata endpoint API is used if available.
# ## endpoint_url = ""
#
# ## Containers to include and exclude. Globs accepted.
# ## Note that an empty array for both will include all containers
# # container_name_include = []
# # container_name_exclude = []
#
# ## Container states to include and exclude. Globs accepted.
# ## When empty only containers in the "RUNNING" state will be captured.
# ## Possible values are "NONE", "PULLED", "CREATED", "RUNNING",
# ## "RESOURCES_PROVISIONED", "STOPPED".
# # container_status_include = []
# # container_status_exclude = []
#
# ## ecs labels to include and exclude as tags. Globs accepted.
# ## Note that an empty array for both will include all labels as tags
# # ecs_label_include = [ "com.amazonaws.ecs.*" ]
# # ecs_label_exclude = []
#
# ## Timeout for queries.
# # timeout = "5s"

## Read stats from one or more Elasticsearch servers or clusters
# [[inputs.elasticsearch]]
# ## specify a list of one or more Elasticsearch servers
# ## you can add username and password to your url to use basic authentication:
# # servers = ["http://user:pass@localhost:9200"]
# servers = ["http://localhost:9200"]
#
# ## Timeout for HTTP requests to the elastic search server(s)
# # http_timeout = "5s"
# ## When local is true (the default), the node will read only its own stats.
# ## Set local to false when you want to read the node stats from all nodes
# ## of the cluster.
# local = true
#
# ## Set cluster_health to true when you want to also obtain cluster health stats
# cluster_health = false
#
# ## Adjust cluster_health_level when you want to also obtain detailed health stats
# ## The options are
# - indices (default)
# - cluster
# cluster_health_level = "indices"
#
# ## Set cluster_stats to true when you want to also obtain cluster stats.
# cluster_stats = false
#
# ## Only gather cluster_stats from the master node. To work this require local = true
# cluster_stats_only_from_master = true
#
# ## Indices to collect; can be one or more indices names or _all
# ## Use of wildcards is allowed. Use a wildcard at the end to retrieve index names that end with a changing value,
# like a date.
# indices_include = ["_all"]
#
# ## One of "shards", "cluster", "indices"
# indices_level = "shards"
#
# ## node_stats is a list of sub-stats that you want to have gathered. Valid options
# are "indices", "os", "process", "jvm", "thread_pool", "fs", "transport", "http",
# "breaker". Per default, all stats are gathered.
# node_stats = ["jvm", "http"]
#
# ## HTTP Basic Authentication username and password.
# username = ""
# password = ""
#
# ## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# ## Sets the number of most recent indices to return for indices that are configured with a date-stamped suffix.
# ## Each 'indices_include' entry ending with a wildcard (*) or glob matching pattern will group together all
# indices that match it, and sort them
# ## by the date or number after the wildcard. Metrics then are gathered for only the 'num_most_recent_indices'
amount of most recent indices.
#  # num_most_recent_indices = 0

## Derive metrics from aggregating Elasticsearch query results

### The full HTTP endpoint URL for your Elasticsearch instance

### Multiple urls can be specified as part of the same cluster,

### this means that only ONE of the urls will be written to each interval.

### Elasticsearch client timeout, defaults to "5s".

### Set to true to ask Elasticsearch a list of all cluster nodes,

### thus it is not necessary to list all nodes in the urls config option

### Set the interval to check if the Elasticsearch nodes are available

### This option is only used if enable_sniffer is also set (0s to disable it)

### HTTP basic authentication details (eg. when using x-pack)

### Optional TLS Config

### Elasticsearch indexes to query (accept wildcards).

### The date/time field in the Elasticsearch index (mandatory).

### If the field used for the date/time field in Elasticsearch is also using

### a custom date/time format it may be required to provide the format to

### correctly parse the field.

### If using one of the built in elasticsearch formats this is not required.
# date_field_custom_format = ""
#
# Time window to query (eg. "1m" to query documents from last minute).
# Normally should be set to same as collection interval
# query_period = "1m"
#
# Lucene query to filter results
# filter_query = "*"
#
# Fields to aggregate values (must be numeric fields)
# metric_fields = ["metric"]
#
# Aggregation function to use on the metric fields
# Must be set if 'metric_fields' is set
# Valid values are: avg, sum, min, max, sum
# metric_function = "avg"
#
# Fields to be used as tags
# Must be text, non-analyzed fields. Metric aggregations are performed per tag
# tags = ["field.keyword", "field2.keyword"]
#
# Set to true to not ignore documents when the tag(s) above are missing
# include_missing_tag = false
#
# String value of the tag when the tag does not exist
# Used when include_missing_tag is true
# missing_tag_value = "null"

# Returns ethtool statistics for given interfaces
[[inputs.ethtool]]
# List of interfaces to pull metrics for
# interface_include = ["eth0"]
#
# List of interfaces to ignore when pulling metrics.
# interface_exclude = ["eth1"]
#
# Some drivers declare statistics with extra whitespace, different spacing,
# and mix cases. This list, when enabled, can be used to clean the keys.
# Here are the current possible normalizations:
# * snakecase: converts fooBarBaz to foo_bar_baz
# * trim: removes leading and trailing whitespace
# * lower: changes all capitalized letters to lowercase
# * underscore: replaces spaces with underscores
# normalize_keys = ["snakecase", "trim", "lower", "underscore"]

# Read metrics from one or more commands that can output to stdout
# [[inputs.exec]]
# ## Commands array
# commands = [
#   "/tmp/test.sh",
#   "/usr/bin/mycollector --foo=bar",
#   "/tmp/collect_*_sh"
# ]
#
# ## Timeout for each command to complete.
# timeout = "5s"
#
# ## measurement name suffix (for separating different commands)
# name_suffix = "_mycollector"
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

## Read metrics from fail2ban.
# [[inputs.fail2ban]]
# ## Use sudo to run fail2ban-client
# use_sudo = false

## Read devices value(s) from a Fibaro controller
# [[inputs.fibaro]]
# ## Required Fibaro controller address/hostname.
# ## Note: at the time of writing this plugin, Fibaro only implemented http - no https available
# url = "http://<controller>:80"
#
# ## Required credentials to access the API (http://<controller>/api/<component>)
# username = "<username>"
# password = "<password>"
#
# ## Amount of time allowed to complete the HTTP request
# timeout = "5s"

## Parse a complete file each interval
# [[inputs.file]]
# ## Files to parse each interval. Accept standard unix glob matching rules,
# ## as well as ** to match recursive files and directories.
# files = ["/tmp/metrics.out"]

---

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# Count files in a directory
# [[inputs.filecount]]
#   ## Directory to gather stats about.
#   ## deprecated in 1.9; use the directories option
#   # directory = "/var/cache/apt/archives"
#
#   ## Directories to gather stats about.
#   ## This accept standard unit glob matching rules, but with the addition of
#   ## ** as a "super asterisk". ie:
#   ## /var/log/**  -> recursively find all directories in /var/log and count files in each directories
#   ## /var/log/**/*  -> find all directories with a parent dir in /var/log and count files in each directories
#   ## /var/log  -> count all files in /var/log and all of its subdirectories
#   directories = ["/var/cache/apt/archives"]
#
#   ## Only count files that match the name pattern. Defaults to ".*".
#   name = "*.deb"
#   
#   ## Count files in subdirectories. Defaults to true.
#   recursive = false
#   
#   ## Only count regular files. Defaults to true.
#   regular_only = true
#   
#   ## Follow all symlinks while walking the directory tree. Defaults to false.
#   follow_symlinks = false
# Only count files that are at least this size. If size is a negative number, only count files that are smaller than the absolute value of size. Acceptable units are B, KiB, MiB, KB, ...
# Without quotes and units, interpreted as size in bytes.
# size = "0B"
#
# Only count files that have not been touched for at least this duration. If mtime is negative, only count files that have been touched in this duration. Defaults to "0s".
# mtime = "0s"

## Read stats about given file(s)
[[inputs.filestat]]
## Files to gather stats about.
## These accept standard unix glob matching rules, but with the addition of ** as a "super asterisk". ie:
## "/var/log/**.log" -> recursively find all .log files in /var/log
## "/var/log/*/log" -> find all .log files with a parent dir in /var/log
## "/var/log/apache.log" -> just tail the apache log file
## See https://github.com/gobwas/glob for more examples
##
## files = ["/var/log/**.log"]
#
## If true, read the entire file and calculate an md5 checksum.
## md5 = false

## Read real time temps from fireboard.io servers
[[inputs.fireboard]]
## Specify auth token for your account
## auth_token = "invalidAuthToken"
## You can override the fireboard server URL if necessary
## url = https://fireboard.io/api/v1/devices.json
## You can set a different http_timeout if you need to
## You should set a string using an number and time indicator
## for example "12s" for 12 seconds.
## http_timeout = "4s"

## Read metrics exposed by fluentd in_monitor plugin
[[inputs.fluentd]]
## This plugin reads information exposed by fluentd (using /api/plugins.json endpoint).
##
## Endpoint:
## - only one URI is allowed
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# # - https is not supported
# endpoint = "http://localhost:24220/api/plugins.json"
#
# ## Define which plugins have to be excluded (based on "type" field - e.g. monitor_agent)
# exclude = [
# "monitor_agent",
# "dummy",
# ]

## Gather repository information from GitHub hosted repositories.
# [[inputs.github]]
# ## List of repositories to monitor.
# repositories = [
# "influxdata/telegraf",
# "influxdata/influxdb"
# ]

## Github API access token. Unauthenticated requests are limited to 60 per hour.
# # access_token = ""
#
## Github API enterprise url. Github Enterprise accounts must specify their base url.
# # enterprise_base_url = ""
#
## Timeout for HTTP requests.
# # http_timeout = "5s"
#
## List of additional fields to query.
# ## NOTE: Getting those fields might involve issuing additional API-calls, so please
# ## make sure you do not exceed the rate-limit of GitHub.
# ##
## Available fields are:
# ## - pull-requests-- number of open and closed pull requests (2 API-calls per repository)
# # # additional_fields = []

## Read flattened metrics from one or more GrayLog HTTP endpoints
# [[inputs.graylog]]
# ## API endpoint, currently supported API:
#
# ## - multiple (e.g. http://<host>:9000/api/system/metrics/multiple)
# ## - namespace (e.g. http://<host>:9000/api/system/metrics/namespace/{namespace})
#
## For namespace endpoint, the metrics array will be ignored for that call.
## Endpoint can contain namespace and multiple type calls.
#
## Please check http://[graylog-server-ip]:9000/api/api-browser for full list
# ## of endpoints
servers = [  "http://[graylog-server-ip]:9000/api/system/metrics/multiple",  ]  

## Metrics list
## List of metrics can be found on Graylog webservice documentation.
## Or by hitting the web service api at:
## http://[graylog-host]:9000/api/system/metrics
metrics = [  "jvm.cl.loaded",  "jvm.memory.pools.Metaspace.committed"  ]

## Username and password
username = ""
password = ""

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Read metrics of haproxy, via socket or csv stats page
[[inputs.haproxy]]
### An array of address to gather stats about. Specify an ip on hostname
### with optional port. ie localhost, 10.10.3.33:1936, etc.
### Make sure you specify the complete path to the stats endpoint
### including the protocol, ie http://10.10.3.33:1936/haproxy?stats
### If no servers are specified, then default to 127.0.0.1:1936/haproxy?stats
### Credentials for basic HTTP authentication
# username = "admin"
# password = "admin"
### You can also use local socket with standard wildcard globbing.
### Server address not starting with 'http' will be treated as a possible
### socket, so both examples below are valid.
# servers = ["socket:/run/haproxy/admin.sock", "/run/haproxy/*.sock"]
### By default, some of the fields are renamed from what haproxy calls them.
### Setting this option to true results in the plugin keeping the original
### field names.
# keep_field_names = false
## Optional TLS Config

`# tls_ca = "/etc/telegraf/ca.pem"`
`# tls_cert = "/etc/telegraf/cert.pem"`
`# tls_key = "/etc/telegraf/key.pem"

## Use TLS but skip chain & host verification
`# insecure_skip_verify = false`

### Monitor disks' temperatures using hddtemp

```
[[inputs.hddtemp]]
# By default, telegraf gathers temps data from all disks detected by the
# hddtemp.
```

### Only collect temps from the selected disks.

```
# A * as the device name will return the temperature values of all disks.
```

```
# address = "127.0.0.1:7634"
# devices = ["sda", "*"]
```

### Read formatted metrics from one or more HTTP endpoints

```
[[inputs.http]]
# One or more URLs from which to read formatted metrics
urls = [
  "http://localhost/metrics"
]
```

### HTTP method

```
# method = "GET"
```

### Optional HTTP headers

```
# headers = {
  "X-Special-Header": "Special-Value"
}
```

### Optional file with Bearer token

```
# file content is added as an Authorization header
# bearer_token = "/path/to/file"
```

### Optional HTTP Basic Auth Credentials

```
# username = "username"
# password = "pa$$word"
```

### HTTP entity-body to send with POST/PUT requests.

```
# body = ""
```

### HTTP Content-Encoding for write request body, can be set to "gzip" to

```
# compress body or "identity" to apply no encoding.
```

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# # content_encoding = "identity"
#
# ## HTTP Proxy support
# # http_proxy_url = ""
#
# ## OAuth2 Client Credentials Grant
# # client_id = "clientid"
# # client_secret = "secret"
# # token_url = "https://identityprovider/oauth2/v1/token"
# # scopes = ["urn:opc:idm:__myscopes__"]
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Optional Cookie authentication
# # cookie_auth_url = "https://localhost/authMe"
# # cookie_auth_method = "POST"
# # cookie_auth_username = "username"
# # cookie_auth_password = "pa$$word"
# # cookie_auth_body = '{"username": "user", "password": "pa$$word", "authenticate": "me"}'
# ## cookie_auth_renewal not set or set to "0" will auth once and never renew the cookie
# # cookie_auth_renewal = "5m"
#
# ## Amount of time allowed to complete the HTTP request
# # timeout = "5s"
#
# ## List of success status codes
# # success_status_codes = [200]
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"

# ## HTTP/HTTPS request given an address a method and a timeout
# [[inputs.http_response]]
# ## Deprecated in 1.12, use 'urls'
# ## Server address (default http://localhost)
# # address = "http://localhost"
#
# ## List of urls to query.
# # urls = ["http://localhost"]
# Set http_proxy (telegraf uses the system wide proxy settings if it's not set)
# http_proxy = "http://localhost:8888"
#
# Set response_timeout (default 5 seconds)
# response_timeout = "5s"
#
# HTTP Request Method
# method = "GET"
#
# Whether to follow redirects from the server (defaults to false)
# follow_redirects = false
#
# Optional file with Bearer token
# file content is added as an Authorization header
# bearer_token = "/path/to/file"
#
# Optional HTTP Basic Auth Credentials
# username = "username"
# password = "pa$$word"
#
# Optional HTTP Request Body
# body = ""
# {fake:'data'}
# ""
#
# Optional name of the field that will contain the body of the response.
# By default it is set to an empty String indicating that the body's content won't be added
# response_body_field = ""
#
# Maximum allowed HTTP response body size in bytes.
# 0 means to use the default of 32MiB.
# If the response body size exceeds this limit a "body_read_error" will be raised
# response_body_max_size = "32MiB"
#
# Optional substring or regex match in body of the response (case sensitive)
# response_string_match = "\"service_status\": \"up\""
# response_string_match = "ok"
# response_string_match = "\._status\?.?:\"up\""
#
# Expected response status code.
# The status code of the response is compared to this value. If they match, the field
# "response_status_code_match" will be 1, otherwise it will be 0. If the
# expected status code is 0, the check is disabled and the field won't be added.
# response_status_code = 0
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## HTTP Request Headers (all values must be strings)
# # [inputs.http_response.headers]
# # Host = "github.com"
#
# ## Optional setting to map response http headers into tags
# ## If the http header is not present on the request, no corresponding tag will be added
# ## If multiple instances of the http header are present, only the first value will be used
# # http_header_tags = { "HTTP_HEADER" = "TAG_NAME" }
#
# ## Interface to use when dialing an address
# # interface = "eth0"

# # Read flattened metrics from one or more JSON HTTP endpoints
# [[inputs.httpjson]]
# ## DEPRECATED: The 'httpjson' plugin is deprecated in version 1.6.0, use 'inputs.http' instead.
# ## NOTE This plugin only reads numerical measurements, strings and booleans
# ## will be ignored.
#
# ## Name for the service being polled. Will be appended to the name of the
# ## measurement e.g. httpjson_webserver_stats
#
# ## Deprecated (1.3.0): Use name_override, name_suffix, name_prefix instead.
# # name = "webserver_stats"
#
# ## URL of each server in the service's cluster
# # servers = [
# # "http://localhost:9999/stats/",
# # "http://localhost:9998/stats/",
# # ]
# ## Set response_timeout (default 5 seconds)
# # response_timeout = "5s"
#
# ## HTTP method to use: GET or POST (case-sensitive)
# # method = "GET"
#
# ## List of tag names to extract from top-level of JSON server response
# # tag_keys = [
# # "my_tag_1",
# # "my_tag_2"
# # ]
#
# ## Optional TLS Config
# TLS configuration

# Use TLS but skip chain & host verification
# insecure_skip_verify = false

## HTTP parameters (all values must be strings).
## For "GET" requests, data will be included in the query.
## For "POST" requests, data will be included in the request body as "x-www-form-urlencoded".

## HTTP Headers (all values must be strings)

## Icinga2 status

## InfiniBand

## Read InfluxDB-formatted JSON metrics from one or more HTTP endpoints
# [inputs.influxdb]
# ## Works with InfluxDB debug endpoints out of the box,
# ## but other services can use this format too.
# ## See the influxdb plugin's README for more details.
# # Multiple URLs from which to read InfluxDB-formatted JSON
# # Default is "http://localhost:8086/debug/vars".
# urls = [
#   "http://localhost:8086/debug/vars"
# ]
#
# ## Username and password to send using HTTP Basic Authentication.
# # username = 
# # password = 
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
# #
# # ## http request & header timeout
# # timeout = "5s"

# # Intel PowerStat plugin enables monitoring of platform metrics (power, TDP) and Core metrics like temperature, power and utilization.
# [inputs.intel_powerstat]
# ## All global metrics are always collected by Intel PowerStat plugin.
# ## User can choose which per-CPU metrics are monitored by the plugin in cpu_metrics array.
# ## Empty array means no per-CPU specific metrics will be collected by the plugin - in this case only platform level
# ## telemetry will be exposed by Intel PowerStat plugin.
# ## Supported options:
# ## "cpu_frequency", "cpu_busy_frequency", "cpu_temperature", "cpu_c1_state_residency", "cpu_c6_state_residency", "cpu_busy_cycles"
# # # cpu_metrics = []

# # Collect statistics about itself
# [inputs.internal]
# ## If true, collect telegraf memory stats.
# # collect_memstats = true

# # Monitors internet speed using speedtest.net service
# [inputs.internet_speed]
## Sets if runs file download test
## Default: false
# enable_file_download = false

This plugin gathers interrupts data from /proc/interrupts and /proc/softirqs.

[[inputs.interrupts]]
## When set to true, cpu metrics are tagged with the cpu. Otherwise cpu is
## stored as a field.
##
## The default is false for backwards compatibility, and will be changed to
## true in a future version. It is recommended to set to true on new
## deployments.
# cpu_as_tag = false

## To filter which IRQs to collect, make use of tagpass / tagdrop, i.e.
[[inputs.interrupts.tagdrop]]
irq = [ "NET_RX", "TASKLET" ]

Read metrics from the bare metal servers via IPMI

[[inputs.ipmi_sensor]]
## optionally specify the path to the ipmitool executable
# path = "/usr/bin/ipmitool"
##
## Setting 'use_sudo' to true will make use of sudo to run ipmitool.
## Sudo must be configured to allow the telegraf user to run ipmitool
## without a password.
# use_sudo = false
##
## optionally force session privilege level. Can be CALLBACK, USER, OPERATOR, ADMINISTRATOR
# privilege = "ADMINISTRATOR"
##
## optionally specify one or more servers via a url matching
## [username[:password]@[protocol][address]]
## e.g.
# root:passwd@lan(127.0.0.1)
##
## if no servers are specified, local machine sensor stats will be queried
##
## servers = ["USERID:PASSW0RD@lan(192.168.1.1)"
##
## Recommended: use metric 'interval' that is a multiple of 'timeout' to avoid
## gaps or overlap in pulled data
# interval = "30s"
##
## Timeout for the ipmitool command to complete
# timeout = "20s"
## Schema Version: (Optional, defaults to version 1)

```
metric_version = 2
```

## Optionally provide the hex key for the IMPI connection.

```
# hex_key = ""
```

## If ipmitool should use a cache

```
# use_cache = false
```

## Path to the ipmitools cache file (defaults to OS temp dir)

```
# cache_path = ""
```

### Gather packets and bytes counters from Linux ipsets

```
[inputs.ipset]
# By default, we only show sets which have already matched at least 1 packet.
# set include_unmatched_sets = true to gather them all.
# include_unmatched_sets = false
# Adjust your sudo settings appropriately if using this option ("sudo ipset save")
# use_sudo = false
# The default timeout of 1s for ipset execution can be overridden here:
# timeout = "1s"
```

### Gather packets and bytes throughput from iptables

```
[inputs.iptables]
# iptables require root access on most systems.
# Setting 'use_sudo' to true will make use of sudo to run iptables.
# Users must configure sudo to allow telegraf user to run iptables with no password.
# iptables can be restricted to only list command "iptables -nvL".
# use_sudo = false
# Setting 'use_lock' to true runs iptables with the ",-w" option.
# Adjust your sudo settings appropriately if using this option ("iptables -w 5 -nvL")
# use_lock = false
# Define an alternate executable, such as "ip6tables". Default is "iptables".
# binary = "ip6tables"
# defines the table to monitor:
# table = "filter"
# defines the chains to monitor.
# NOTE: iptables rules without a comment will not be monitored.
# Read the plugin documentation for more information.
# chains = [ "INPUT" ]
```
## Collect virtual and real server stats from Linux IPVS
# [[inputs.ipvs]]
# # no configuration

## Read jobs and cluster metrics from Jenkins instances
# [[inputs.jenkins]]
# ## The Jenkins URL in the format "schema://host:port"
# url = "http://my-jenkins-instance:8080"
# # username = "admin"
# # password = "admin"
#
# ## Set response_timeout
# response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use SSL but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Optional Max Job Build Age filter
# # Default 1 hour, ignore builds older than max_build_age
# # max_build_age = "1h"
#
# ## Optional Sub Job Depth filter
# Jenkins can have unlimited layer of sub jobs
# ## This config will limit the layers of pulling, default value 0 means
# ## unlimited pulling until no more sub jobs
# # max_subjob_depth = 0
#
# ## Optional Sub Job Per Layer
# ## In workflow-multibranch-plugin, each branch will be created as a sub job.
# ## This config will limit to call only the lasted branches in each layer,
# ## empty will use default value 10
# # max_subjob_per_layer = 10
#
# ## Jobs to include or exclude from gathering
# ## When using both lists, job_exclude has priority.
# ## Wildcards are supported: [ "jobA/*", "jobB/subjob1/*" ]
# # job_include = [ "*" ]
# # job_exclude = [ ]
#
# ## Nodes to include or exclude from gathering
# ## When using both lists, node_exclude has priority.
# # node_include = [ "*" ]
# # node_exclude = [ ]
#
# ## Worker pool for jenkins plugin only
# ## Empty this field will use default value 5
# # max_connections = 5

## Read JMX metrics through Jolokia
[[inputs.jolokia]]
### DEPRECATED: The 'jolokia' plugin is deprecated in version 1.5.0, use 'inputs.jolokia2' instead.
### DEPRECATED: the jolokia plugin has been deprecated in favor of the
# jolokia2 plugin
# # see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/jolokia2
#
# ## This is the context root used to compose the jolokia url
# ## NOTE that Jolokia requires a trailing slash at the end of the context root
# ## NOTE that your jolokia security policy must allow for POST requests.
# context = "/jolokia/"
#
# ## This specifies the mode used
# # mode = "proxy"
##
# ## When in proxy mode this section is used to specify further
# ## proxy address configurations.
# ## Remember to change host address to fit your environment.
# # [inputs.jolokia.proxy]
# # host = "127.0.0.1"
# # port = "8080"
#
# ## Optional http timeouts
# ##
# ## response_header_timeout, if non-zero, specifies the amount of time to wait
# ## for a server's response headers after fully writing the request.
# # response_header_timeout = "3s"
# ##
# ## client_timeout specifies a time limit for requests made by this client.
# ## Includes connection time, any redirects, and reading the response body.
# # client_timeout = "4s"
#
# ## Attribute delimiter
# ##
# ## When multiple attributes are returned for a single
# ## [inputs.jolokia.metrics], the field name is a concatenation of the metric
# ## name, and the attribute name, separated by the given delimiter.
# # delimiter = "_"
#
# ## List of servers exposing jolokia read service
# [[inputs.jolokia.servers]]
# name = "as-server-01"
# host = "127.0.0.1"
# port = "8080"
# username = "myuser"
# password = "mypassword"
#
# List of metrics collected on above servers
# Each metric consists in a name, a jmx path and either
# a pass or drop slice attribute.
# This collect all heap memory usage metrics.
## Each metric consists in a name, a jmx path and either
## a pass or drop slice attribute.
# [[inputs.jolokia.metrics]]
# name = "heap_memory_usage"
# mbean = "java.lang:type=Memory"
# attribute = "HeapMemoryUsage"
#
# This collect thread counts metrics.
# [[inputs.jolokia.metrics]]
# name = "thread_count"
# mbean = "java.lang:type=Threading"
# attribute = "TotalStartedThreadCount,ThreadCount,DaemonThreadCount,PeakThreadCount"
#
# This collect number of class loaded/unloaded counts metrics.
# [[inputs.jolokia.metrics]]
# name = "class_count"
# mbean = "java.lang:type=ClassLoading"
# attribute = "LoadedClassCount,UnloadedClassCount,TotalLoadedClassCount"
#

## Read JMX metrics from a Jolokia REST agent endpoint
# [[inputs.jolokia2_agent]]
# default_tag_prefix = ""
# default_field_prefix = ""
# default_field_separator = "."
#
# Add agents URLs to query
# urls = ["http://localhost:8080/jolokia"]
# username = ""
# password = ""
# response_timeout = "5s"
#
# Optional TLS config
# tls_ca = "/var/private/ca.pem"
# tls_cert = "/var/private/client.pem"
# tls_key = "/var/private/client-key.pem"
# insecure_skip_verify = false
#
# Add metrics to read
# [[inputs.jolokia2_agent.metric]]
# name = "java_runtime"
# mbean = "java.lang:type=Runtime"
# paths = ["Uptime"]

## Read JMX metrics from a Jolokia REST proxy endpoint
# [[inputs.jolokia2_proxy]]
# # default_tag_prefix  = ""
# # default_field_prefix = ""
# # default_field_separator = "."
#
# ## Proxy agent
# url = "http://localhost:8080/jolokia"
# # username = ""
# # password = ""
# # response_timeout = "5s"
#
# ## Optional TLS config
# # tls_ca   = "/var/private/ca.pem"
# # tls_cert = "/var/private/client.pem"
# # tls_key  = "/var/private/client-key.pem"
# # insecure_skip_verify = false
#
# ## Add proxy targets to query
# # default_target_username = ""
# # default_target_password = ""
# [[inputs.jolokia2_proxy.target]]
# url = "service:jmx:rmi:///jndi/rmi://targethost:9999/jmxrmi"
# # username = ""
# # password = ""
#
# ## Add metrics to read
# [[inputs.jolokia2_proxy.metric]]
# name = "java_runtime"
# mbean = "java.lang:type=Runtime"
# paths = ["Uptime"]

## Read Kapacitor-formatted JSON metrics from one or more HTTP endpoints
# [[inputs.kapacitor]]
# ## Multiple URLs from which to read Kapacitor-formatted JSON
# ## Default is "http://localhost:9092/kapacitor/v1/debug/vars".
# urls = ["http://localhost:9092/kapacitor/v1/debug/vars"
# ]
#
# ## Time limit for http requests
# timeout = "5s"
# # # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # Get kernel statistics from /proc/vmstat
# [[inputs.kernel_vmstat]]
# # no configuration

# # Read status information from one or more Kibana servers
# [[inputs.kibana]]
# # Specify a list of one or more Kibana servers
# servers = ["http://localhost:5601"]
# # # Timeout for HTTP requests
# timeout = "5s"
# # # HTTP Basic Auth credentials
# # username = "username"
# # password = "pa$$word"
# # # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # Read metrics from the Kubernetes api
# [[inputs.kube_inventory]]
# # URL for the Kubernetes API
# url = "https://127.0.0.1"
# # Namespace to use. Set to "" to use all namespaces.
# namespace = "default"
# # # Use bearer token for authorization. ('bearer_token' takes priority)
# # If both of these are empty, we'll use the default serviceaccount:
# # # at: /run/secrets/kubernetes.io/serviceaccount/token
# # bearer_token = "/path/to/bearer/token"
# # OR
# # bearer_token_string = "abc_123"
Set response_timeout (default 5 seconds)
response_timeout = "5s"

Optional Resources to exclude from gathering
Leave them with blank with try to gather everything available.
Values can be - "daemonsets", deployments", "endpoints", "ingress", "nodes",
"persistentvolumes", "persistentvolumeclaims", "pods", "services", "statefulsets"
resource_exclude = [ "deployments", "nodes", "statefulsets" ]

Optional Resources to include when gathering
Overrides resource_exclude if both set.
resource_include = [ "deployments", "nodes", "statefulsets" ]

selectors to include and exclude as tags. Globs accepted.
Note that an empty array for both will include all selectors as tags
selector_exclude overrides selector_include if both set.
selector_include = []
selector_exclude = ["*"]

Optional TLS Config
tls_ca = "/path/to/cafile"
tls_cert = "/path/to/certfile"
tls_key = "/path/to/keyfile"
tls_server_name = "kubernetes.example.com"
Use TLS but skip chain & host verification
insecure_skip_verify = false

Read metrics from the kubernetes kubelet api
inputs.kubernetes[]
URL for the kubelet
url = "http://127.0.0.1:10255"

Use bearer token for authorization. ('bearer_token' takes priority)
If both of these are empty, we'll use the default serviceaccount:
at: /run/secrets/kubernetes.io/serviceaccount/token
bearer_token = "/path/to/bearer/token"
OR
bearer_token_string = "abc_123"

Pod labels to be added as tags. An empty array for both include and
exclude will include all labels.
label_include = []
label_exclude = ["*"]

Set response_timeout (default 5 seconds)
response_timeout = "5s"
## Optional TLS Config
# tls_ca = /path/to/cafile
# tls_cert = /path/to/certfile
# tls_key = /path/to/keyfile
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Read metrics from a LeoFS Server via SNMP
# [[inputs.leofs]]
## An array of URLs of the form:
##   host [ "":"" port]
# servers = ["127.0.0.1:4020"]

## Provides Linux sysctl fs metrics
# [[inputs.linux_sysctl_fs]]
## no configuration

## Read metrics exposed by Logstash
# [[inputs.logstash]]
## The URL of the exposed Logstash API endpoint.
# url = "http://127.0.0.1:9600"
## Use Logstash 5 single pipeline API, set to true when monitoring
## Logstash 5.
## single_pipeline = false
## Enable optional collection components. Can contain
## "pipelines", "process", and "jvm".
## collect = ["pipelines", "process", "jvm"]
## Timeout for HTTP requests.
## timeout = "5s"
## Optional HTTP Basic Auth credentials.
## username = "username"
## password = "pa$$word"
## Optional TLS Config.
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification.
## insecure_skip_verify = false
## Optional HTTP headers.
# [inputs.logstash.headers]
# "X-Special-Header" = "Special-Value"

## Read metrics from local Lustre service on OST, MDS
[[inputs.lustre2]]
## An array of /proc globs to search for Lustre stats
## If not specified, the default will work on Lustre 2.5.x
##
## ost_procfiles = []
## "/proc/fs/lustre/obdfilter/*/stats",
## "/proc/fs/lustre/osd-ldiskfs/*/stats",
## "/proc/fs/lustre/obdfilter/*/job_stats",
## ]
## mds_procfiles = []
## "/proc/fs/lustre/mdt/*/md_stats",
## "/proc/fs/lustre/mdt/*/job_stats",
## ]

## Read metrics about LVM physical volumes, volume groups, logical volumes.
[[inputs.lvm]]
## Use sudo to run LVM commands
use_sudo = false

## Gathers metrics from the /3.0/reports MailChimp API
[[inputs.mailchimp]]
## MailChimp API key
## get from https://admin.mailchimp.com/account/api/
api_key = "" # required
## Reports for campaigns sent more than days_old ago will not be collected.
## 0 means collect all.
days_old = 0
## Campaign ID to get, if empty gets all campaigns, this option overrides days_old
campaign_id = ""

## Retrieves information on a specific host in a MarkLogic Cluster
[[inputs.marklogic]]
## Base URL of the MarkLogic HTTP Server.
url = "http://localhost:8002"
## List of specific hostnames to retrieve information. At least (1) required.
hosts = ["hostname1", "hostname2"]
# ## Using HTTP Basic Authentication. Management API requires 'manage-user' role privileges
# # username = "myuser"
# # password = "mypassword"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Read metrics from one or many mcrouter servers
# [[inputs.mcrouter]]
# ## An array of address to gather stats about. Specify an ip or hostname
# ## with port. ie tcp://localhost:11211, tcp://10.0.0.1:11211, etc.
# servers = ["tcp://localhost:11211", "unix:///var/run/mcrouter.sock"]
#
# ## Timeout for metric collections from all servers. Minimum timeout is "1s".
# # timeout = "5s"
#
# ## Get md array statistics from /proc/mdstat
# [[inputs.mdstat]]
# ## Sets file path
# ## If not specified, then default is /proc/mdstat
# # file_name = "/proc/mdstat"
#
# ## Read metrics from one or many memcached servers
# [[inputs.memcached]]
# ## An array of address to gather stats about. Specify an ip on hostname
# ## with optional port. ie localhost, 10.0.0.1:11211, etc.
# # servers = ["localhost:11211"]
# # unix_sockets = ["/var/run/memcached.sock"]
#
# ## Telegraf plugin for gathering metrics from N Mesos masters
# [[inputs.mesos]]
# ## Timeout, in ms.
# # timeout = 100
#
# ## A list of Mesos masters.
# # masters = ["http://localhost:5050"]
#
# ## Master metrics groups to be collected, by default, all enabled.
# # master_collections = ["resources"]

# "master",
# "system",
# "agents",
# "frameworks",
# "framework_offers",
# "tasks",
# "messages",
# "evqueue",
# "registrar",
# "allocator",
# ]

# ## A list of Mesos slaves, default is []
# # slaves = []
#
# ## Slave metrics groups to be collected, by default, all enabled.
# # slave_collections = [
# #   "resources",
# #   "agent",
# #   "system",
# #   "executors",
# #   "tasks",
# #   "messages",
# # ]
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# ## Collects scores from a Minecraft server's scoreboard using the RCON protocol
# [[inputs.minecraft]]
# ## Address of the Minecraft server.
# # server = "localhost"
#
# ## Server RCON Port.
# # port = "25575"
#
# ## Server RCON Password.
# # password = ""
#
# ## Uncomment to remove deprecated metric components.
# # tagdrop = ["server"]
## Connection Configuration

## The plugin supports connections to PLCs via MODBUS/TCP, RTU over TCP, ASCII over TCP or via serial line communication in binary (RTU) or readable (ASCII) encoding

## Device name

name = "Device"

## Slave ID - addresses a MODBUS device on the bus

## Range: 0 - 255 [0 = broadcast; 248 - 255 = reserved]

slave_id = 1

## Timeout for each request

timeout = "1s"

## Maximum number of retries and the time to wait between retries

## when a slave-device is busy.

# busy_retries = 0
# busy_retries_wait = "100ms"

## TCP - connect via Modbus/TCP

controller = "tcp://localhost:502"

## Serial (RS485; RS232)

# controller = "file:///dev/ttyUSB0"
# baud_rate = 9600
# data_bits = 8
# parity = "N"
# stop_bits = 1
# transmission_mode = "RTU"

## Trace the connection to the modbus device as debug messages

## Note: You have to enable telegraf's debug mode to see those messages!

download_connection = false

## For Modbus over TCP you can choose between "TCP", "RTUoverTCP" and "ASCIIoverTCP"

## default behaviour is "TCP" if the controller is TCP

## For Serial you can choose between "RTU" and "ASCII"

## transmission_mode = "RTU"

## Measurements

##

## Digital Variables, Discrete Inputs and Coils

## measurement - the (optional) measurement name, defaults to "modbus"

## name - the variable name
# Address - variable address

## Discrete Inputs

- `name = "start", address = [0]`
- `name = "stop", address = [1]`
- `name = "reset", address = [2]`
- `name = "emergency_stop", address = [3]`

## Coils

- `name = "motor1_run", address = [0]`
- `name = "motor1_jog", address = [1]`
- `name = "motor1_stop", address = [2]`

## Analog Variables, Input Registers and Holding Registers

### Measurement

- `name = "modbus`
- `name = "motor1_run", address = [0]`
- `name = "motor1_jog", address = [1]`
- `name = "motor1_stop", address = [2]`

#### Holding Registers

- `name = "power_factor", byte_order = "AB", data_type = "FIXED", scale=0.01, address = [8]`
- `name = "voltage", byte_order = "AB", data_type = "FIXED", scale=0.1, address = [0]`
- `name = "energy", byte_order = "ABCD", data_type = "FIXED", scale=0.001, address = [5,6]`
- `name = "current", byte_order = "ABCD", data_type = "FIXED", scale=0.001, address = [1,2]`
- `name = "frequency", byte_order = "AB", data_type = "UFIXED", scale=0.1, address = [7]`
- `name = "power", byte_order = "ABCD", data_type = "UFIXED", scale=0.1, address = [3,4]`

#### Input Registers

- `name = "tank_level", byte_order = "AB", data_type = "INT16", scale=1.0, address = [0]`
- `name = "tank_ph", byte_order = "AB", data_type = "INT16", scale=1.0, address = [1]`
- `name = "pump1_speed", byte_order = "ABCD", data_type = "INT32", scale=1.0, address = [3,4]`

### Enable workarounds required by some devices to work correctly

- `inputs.modbus.workarounds`
- `pause_between_requests = "0ms"`
- `Close the connection after every gather cycle. Usually the plugin closes the connection after a certain idle-timeout, however, if you query a device with limited simultaneous connectivity (e.g. serial devices)
## from multiple instances you might want to only stay connected during gather and disconnect afterwards.
## close_connection_after_gather = false

### Read metrics from one or many MongoDB servers
### [[inputs.mongodb]]
### An array of URLs of the form:
### "mongodb://" [user ":" pass ":"@] host [:] port
### For example:
### mongodb://user:auth_key@10.10.3.30:27017,
### mongodb://10.10.3.33:18832,
### servers = ["mongodb://127.0.0.1:27017?connect=direct"]
### When true, collect cluster status
### May have an impact on performance.
### gather_cluster_status = true
### When true, collect per database stats
### gather_perdb_stats = false
### When true, collect per collection stats
### gather_col_stats = false
### When true, collect usage statistics for each collection
### (insert, update, queries, remove, getmore, commands etc...).
### gather_top_stat = false
### List of db where collections stats are collected
### If empty, all db are concerned
### col_stats_dbs = ["local"]
### Optional TLS Config
### tls_ca = "/etc/telegraf/ca.pem"
### tls_cert = "/etc/telegraf/cert.pem"
### tls_key = "/etc/telegraf/key.pem"
### Use TLS but skip chain & host verification
### insecure_skip_verify = false

### Read metrics and status information about processes managed by Monit
### [[inputs.monit]]
### Monit HTTPD address
### address = "http://127.0.0.1:2812"
### Username and Password for Monit
### username = ""
### password = ""
# Amount of time allowed to complete the HTTP request
# timeout = "5s"
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Aggregates the contents of multiple files into a single point
# [[inputs.multifile]]
# Base directory where telegraf will look for files.
# Omit this option to use absolute paths.
# base_dir = "/sys/bus/i2c/devices/1-0076/iio:device0"
#
# If true, Telegraf discard all data when a single file can't be read.
# Else, Telegraf omits the field generated from this file.
# fail_early = true
#
# Files to parse each interval.
# [[inputs.multifile.file]]
# file = "in_pressure_input"
# dest = "pressure"
# conversion = "float"
# [[inputs.multifile.file]]
# file = "in_temp_input"
# dest = "temperature"
# conversion = "float(3)"
# [[inputs.multifile.file]]
# file = "in_humidityrelative_input"
# dest = "humidityrelative"
# conversion = "float(3)"

# Read metrics from one or many mysql servers
# [[inputs.mysql]]
# specify servers via a url matching:
# [username[:password]@[protocol](address)]/[?tls=[true|false|skip-verify|custom]]
# see https://github.com/go-sql-driver/mysql#dsn-data-source-name
# e.g.
# servers = ["user:passwd@tcp(127.0.0.1:3306)/?tls=false"]
# servers = ["user@tcp(127.0.0.1:3306)/?tls=false"]
# 
# If no servers are specified, then localhost is used as the host.
# servers = ["tcp(127.0.0.1:3306)/"]
# Selects the metric output format.
# This option exists to maintain backwards compatibility, if you have existing metrics do not set or change this value until you are ready to migrate to the new format.
# If you do not have existing metrics from this plugin set to the latest version.

# Telegraf >=1.6: metric_version = 2
# <1.6: metric_version = 1 (or unset)
# metric_version = 2

# if the list is empty, then metrics are gathered from all database tables
# table_schema_databases = []

# gather metrics from INFORMATION_SCHEMA.TABLES for databases provided above list
# gather_table_schema = false

# gather thread state counts from INFORMATION_SCHEMA.PROCESSLIST
# gather_process_list = false

# gather user statistics from INFORMATION_SCHEMA.USER_STATISTICS
# gather_user_statistics = false

# gather auto_increment columns and max values from information schema
# gather_info_schema_auto_inc = false

# gather metrics from INFORMATION_SCHEMA.INNODB_METRICS
# gather_innodb_metrics = false

# gather metrics from SHOW SLAVE STATUS command output
# gather_slave_status = false

# gather metrics from all channels from SHOW SLAVE STATUS command output
# gather_all_slave_channels = false

# use MariaDB dialect for all channels SHOW SLAVE STATUS
# mariadb_dialect = false

# gather metrics from SHOW BINARY LOGS command output
# gather_binary_logs = false

# gather metrics from PERFORMANCE_SCHEMA.GLOBAL_VARIABLES
# gather_global_variables = true

# gather metrics from PERFORMANCE_SCHEMA.TABLE_IO_WAITS_SUMMARY_BY_TABLE
# gather_table_io_waits = false
#
# gather_table_lock_waits = false
#
# gather_index_io_waits = false
#
# gather_event_waits = false
#
# gather_file_events_stats = false
#
# gather_perf_events_statements = false
#
# perf_events_statements_digest_text_limit = 120
# perf_events_statements_limit = 250
# perf_events_statements_time_limit = 86400
#
# gather_perf_sum_per_acc_per_event = false
#
# example: interval_slow = "30m"
# interval_slow = ""
#
# Optional TLS Config (will be used if tls=custom parameter specified in server uri)
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Provides metrics about the state of a NATS server
# [[inputs.nats]]
# The address of the monitoring endpoint of the NATS server
# server = "http://localhost:8222"
#
# Maximum time to receive response
## Neptune Apex data collector

### The Neptune Apex plugin reads the publicly available status.xml data from a local Apex.

### Measurements will be logged under "apex".

### The base URL of the local Apex(es). If you specify more than one server, they will be differentiated by the "source" tag.

```yaml
servers = [
  "http://apex.local",
]`

### The response_timeout specifies how long to wait for a reply from the Apex.

```yaml
# response_timeout = "5s"
```

## Read metrics about network interface usage

### By default, telegraf gathers stats from any up interface (excluding loopback)

### Setting interfaces will tell it to gather these explicit interfaces, regardless of status.

```yaml
# interfaces = ["eth0"]
```

### On linux systems telegraf also collects protocol stats.

### Setting ignore_protocol_stats to true will skip reporting of protocol metrics.

```yaml
# ignore_protocol_stats = false
```

## Collect response time of a TCP or UDP connection

### Protocol, must be "tcp" or "udp"

### NOTE: because the "udp" protocol does not respond to requests, it requires a send/expect string pair (see below).

```yaml
# protocol = "tcp"
# address = "localhost:80"
```

### Set timeout

```yaml
# timeout = "1s"
```

### Set read timeout (only used if expecting a response)

```yaml
# read_timeout = "1s"
```
## The following options are required for UDP checks. For TCP, they are optional. The plugin will send the given string to the server and then expect to receive the given 'expect' string back.

- **string sent to the server**
  - `send = "ssh"`
- **expected string in answer**
  - `expect = "ssh"`

## Uncomment to remove deprecated fields
- `fielddrop = ["result_type", "string_found"]`

### Read TCP metrics such as established, time wait and sockets counts.
- `[[inputs.netstat]]`
- `# no configuration`

### Read per-mount NFS client metrics from `/proc/self/mountstats`
- `[[inputs.nfsclient]]`
- `## Read more low-level metrics (optional, defaults to false)`
- `## fullstat = false`

### List of mounts to explicitly include or exclude (optional)
- `## The pattern (Go regexp) is matched against the mount point (not the device being mounted). If include_mounts is set, all mounts are ignored unless present in the list. If a mount is listed in both include_mounts and exclude_mounts, it is excluded. Go regexp patterns can be used.`
- `## List of operations to include or exclude from collecting. This applies only when fullstat=true. Symantics are similar to {include,exclude}_mounts:
- `## the default is to collect everything; when include_operations is set, only those OPs are collected; when exclude_operations is set, all are collected except those listed. If include and exclude are set, the OP is excluded.`
- `## See /proc/self/mountstats for a list of valid operations; note that NFSv3 and NFSv4 have different lists. While it is not possible to have different include/exclude lists for NFSv3/4, unused elements in the list should be okay. It is possible to have different lists for different mountpoints: use multiple [[input.nfsclient]] stanzas, with their own lists. See "include_mounts" above, and be careful of duplicate metrics.
- `## Read Nginx's basic status information (ngx_http_stub_status_module)`
- `[[inputs.nginx]]`
## An array of Nginx stub_status URI to gather stats.

```
urls = ["http://localhost/server_status"]
```

## Optional TLS Config

```
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.cer"
tls_key = "/etc/telegraf/key.key"
```

## Use TLS but skip chain & host verification

```
insecure_skip_verify = false
```

## HTTP response timeout (default: 5s)

```
response_timeout = "5s"
```

## Read Nginx Plus' full status information (ngx_http_status_module)

```
[[inputs.nginx_plus]]
```

## An array of ngx_http_status_module or status URI to gather stats.

```
urls = ["http://localhost/status"]
```

## HTTP response timeout (default: 5s)

```
response_timeout = "5s"
```

## Optional TLS Config

```
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
```

## Use TLS but skip chain & host verification

```
insecure_skip_verify = false
```

## Read Nginx Plus Api documentation

```
[[inputs.nginx_plus_api]]
```

## An array of API URI to gather stats.

```
urls = ["http://localhost/api"]
```

## Nginx API version, default: 3

```
api_version = 3
```

## HTTP response timeout (default: 5s)

```
response_timeout = "5s"
```

## Optional TLS Config

```
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
```

## Use TLS but skip chain & host verification

```
insecure_skip_verify = false
```
## Read Nginx virtual host traffic status module information (nginx-module-sts)

```
# [inputs.nginx_sts]
#   ## An array of ngx_http_status_module or status URI to gather stats.
#   urls = ["http://localhost/status"]
#
#   ## HTTP response timeout (default: 5s)
#   response_timeout = "5s"
#
#   ## Optional TLS Config
#   # tls_ca = "/etc/telegraf/ca.pem"
#   # tls_cert = "/etc/telegraf/cert.pem"
#   # tls_key = "/etc/telegraf/key.pem"
#   ## Use TLS but skip chain & host verification
#   insecure_skip_verify = false
```

## Read nginx_upstream_check module status information

(https://github.com/yaoweibin/nginx_upstream_check_module)

```
# [inputs.nginx_upstream_check]
#   ## An URL where Nginx Upstream check module is enabled
#   ## It should be set to return a JSON formatted response
#   url = "http://127.0.0.1/status?format=json"
#
#   ## HTTP method
#   method = "GET"
#
#   ## Optional HTTP headers
#   headers = ["X-Special-Header" = "Special-Value"]
#
#   ## Override HTTP "Host" header
#   host_header = "check.example.com"
#
#   ## Timeout for HTTP requests
#   timeout = "5s"
#
#   ## Optional HTTP Basic Auth credentials
#   username = "username"
#   password = "pa$$word"
#
#   ## Optional TLS Config
#   tls_ca = "/etc/telegraf/ca.pem"
#   tls_cert = "/etc/telegraf/cert.pem"
#   tls_key = "/etc/telegraf/key.pem"
#   ## Use TLS but skip chain & host verification
#   insecure_skip_verify = false
```
# # Read Nginx virtual host traffic status module information (nginx-module-vts)
# [[][inputs.nginx_vts]]
# ## An array of ngx_http_status_module or status URI to gather stats.
# urls = ["http://localhost/status"]
#
# ## HTTP response timeout (default: 5s)
# response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# # A plugin to collect stats from the NSD authoritative DNS name server
# [[][inputs.nsd]]
# ## Address of server to connect to, optionally ':port'. Defaults to the
# ## address in the nsd config file.
# server = "127.0.0.1:8953"
#
# ## If running as a restricted user you can prepend sudo for additional access:
# use_sudo = false
#
# ## The default location of the nsd-control binary can be overridden with:
# binary = "/usr/sbin/nsd-control"
#
# ## The default location of the nsd config file can be overridden with:
# config_file = "/etc/nsd/nsd.conf"
#
# ## The default timeout of 1s can be overridden with:
# timeout = "1s"
#
# # Read NSQ topic and channel statistics.
# [[][inputs.nsq]]
# ## An array of NSQD HTTP API endpoints
# endpoints = ["http://localhost:4151"]
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
## Collect kernel snmp counters and network interface statistics

```yaml
[[inputs.nstat]]
# file paths for proc files. If empty default paths will be used:
# /proc/net/netstat, /proc/net/snmp, /proc/net/snmp6
# These can also be overridden with env variables, see README.
# proc_net_netstat = "/proc/net/netstat"
# proc_net_snmp = "/proc/net/snmp"
# proc_net_snmp6 = "/proc/net/snmp6"
# dump metrics with 0 values too
# dump_zeros = true
```

## Get standard NTP query metrics, requires ntpq executable.

```yaml
[[inputs.ntpq]]
# If false, set the -n ntpq flag. Can reduce metric gather time.
# dns_lookup = true
```

## Pulls statistics from nvidia GPUs attached to the host

```yaml
[[inputs.nvidia_smi]]
# Optional: path to nvidia-smi binary, defaults "/usr/bin/nvidia-smi"
# We will first try to locate the nvidia-smi binary with the explicitly specified value (or default value).
# if it is not found, we will try to locate it on PATH(exec.LookPath), if it is still not found, an error will be returned
# bin_path = "/usr/bin/nvidia-smi"
#
# Optional: timeout for GPU polling
# timeout = "5s"
```

## Retrieve data from OPCUA devices

```yaml
[[inputs.opcua]]
# Metric name
# name = "opcua"
#
# OPC UA Endpoint URL
# endpoint = "opc.tcp://localhost:4840"
#
# Maximum time allowed to establish a connect to the endpoint.
# connect_timeout = "10s"
#
# Maximum time allowed for a request over the established connection.
# request_timeout = "5s"
#
# Security policy, one of "None", "Basic128Rsa15", "Basic256",
# "Basic256Sha256", or "auto"
# security_policy = "auto"
# ```
# ## Security mode, one of "None", "Sign", "SignAndEncrypt", or "auto"
# # security_mode = "auto"
# 
# ## Path to cert.pem. Required when security mode or policy isn't "None".
# # If cert path is not supplied, self-signed cert and key will be generated.
# # certificate = "/etc/telegraf/cert.pem"
# 
# ## Path to private key.pem. Required when security mode or policy isn't "None".
# # If key path is not supplied, self-signed cert and key will be generated.
# # private_key = "/etc/telegraf/key.pem"
# 
# ## Authentication Method, one of "Certificate", "UserName", or "Anonymous". To
# ## authenticate using a specific ID, select 'Certificate' or 'UserName'
# # auth_method = "Anonymous"
# 
# ## Username. Required for auth_method = "UserName"
# # username = ""
# 
# ## Password. Required for auth_method = "UserName"
# # password = ""
# 
# ## Option to select the metric timestamp to use. Valid options are:
# # "gather" -- uses the time of receiving the data in telegraf
# # "server" -- uses the timestamp provided by the server
# # "source" -- uses the timestamp provided by the source
# # timestamp = "gather"
# 
# ## Node ID configuration
# # name              - field name to use in the output
# # namespace         - OPC UA namespace of the node (integer value 0 thru 3)
# # identifier_type   - OPC UA ID type (s=string, i=numeric, g=guid, b=opaque)
# # identifier        - OPC UA ID (tag as shown in opcua browser)
# # Example:
# # {name="ProductUri", namespace="0", identifier_type="i", identifier="2262"}
# # nodes = [
# # {name="", namespace="", identifier_type="", identifier=""},
# # {name="", namespace="", identifier_type="", identifier=""}
# # ]
# 
# ## Node Group
# # Sets defaults for OPC UA namespace and ID type so they aren't required in
# # every node. A group can also have a metric name that overrides the main
# # plugin metric name.
# #
# # Multiple node groups are allowed
# # ![inputs.opcua.group]]
# 
# ## Group Metric name. Overrides the top level name. If unset, the
# # top level name is used.
# # name =
# #
# ## Group default namespace. If a node in the group doesn't set its
# ## namespace, this is used.
# # namespace =
# #
# ## Group default identifier type. If a node in the group doesn't set its
# ## namespace, this is used.
# # identifier_type =
# #
# ## Node ID Configuration. Array of nodes with the same settings as above.
# # nodes = [
#   # {name='', namespace='', identifier_type='', identifier=''},
#   # {name='', namespace='', identifier_type='', identifier=''},
#   #]

## OpenLDAP cn=Monitor plugin
[[inputs.openldap]]
# host = "localhost"
# port = 389
#
# # ldaps, starttls, or no encryption. default is an empty string, disabling all encryption.
# # note that port will likely need to be changed to 636 for ldaps
# # valid options: "" | "starttls" | "ldaps"
# tls = ""
#
# # skip peer certificate verification. Default is false.
# insecure_skip_verify = false
#
# # Path to PEM-encoded Root certificate to use to verify server certificate
# tls_ca = "/etc/ssl/certs.pem"
#
# # dn/password to bind with. If bind_dn is empty, an anonymous bind is performed.
# bind_dn = ""
# bind_password = ""
#
# # Reverse metric names so they sort more naturally. Recommended.
# # This defaults to false if unset, but is set to true when generating a new config
# reverse_metric_names = true

## Get standard NTP query metrics from OpenNTPD.
[[inputs.openntpd]]
# ## Run ntpctl binary with sudo.
# # use_sudo = false
#
# ## Location of the ntpctl binary.
# # binary = "/usr/sbin/ntpctl"
#
# ## Maximum time the ntpctl binary is allowed to run.
# # timeout = "5ms"

# # A plugin to collect stats from Opensmtpd - a validating, recursive, and caching DNS resolver
# [[inputs.opensmtpd]]
# ## If running as a restricted user you can prepend sudo for additional access:
# # use_sudo = false
#
# ## The default location of the smtpctl binary can be overridden with:
# # binary = "/usr/sbin/smtpctl"
#
# ## The default timeout of 1000ms can be overridden with (in milliseconds):
# # timeout = 1000

# # Collects performance metrics from OpenStack services
# [[inputs.openstack]]
# ## The recommended interval to poll is '30m'
#
# ## The identity endpoint to authenticate against and get the service catalog from.
# # authentication_endpoint = "https://my.openstack.cloud:5000"
#
# ## The domain to authenticate against when using a V3 identity endpoint.
# # domain = "default"
#
# ## The project to authenticate as.
# # project = "admin"
#
# ## User authentication credentials. Must have admin rights.
# # username = "admin"
# # password = "password"
#
# ## Available services are:
# # "agents", "aggregates", "flavors", "hypervisors", "networks", "nova_services",
# # "ports", "projects", "servers", "services", "stacks", "storage_pools", "subnets", "volumes"
# # enabled_services = ["services", "projects", "hypervisors", "flavors", "networks", "volumes"]
#
# ## Collect Server Diagnostics
# # server_diagnostics = false
#
# ## output secrets (such as adminPass(for server) and UserID(for volume)).
# # output_secrets = false
#
# ## Amount of time allowed to complete the HTTP(s) request.
# # timeout = "5s"
# # HTTP Proxy support
# # http_proxy_url = ""
#
# ## Optional TLS Config
# # tls_ca = /path/to/cafile
# # tls_cert = /path/to/certfile
# # tls_key = /path/to/keyfile
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Options for tags received from Openstack
# # tag_prefix = "openstack_tag_"
# # tag_value = "true"
#
# ## Timestamp format for timestamp data received from Openstack.
# # If false format is unix nanoseconds.
# # human_readable_timestamps = false
#
# ## Measure Openstack call duration
# # measure_openstack_requests = false

## Read current weather and forecasts data from openweathermap.org
## OpenWeatherMap API key.
app_id = "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"

## City ID's to collect weather data from.
city_id = ["5391959"]

## Language of the description field. Can be one of "ar", "bg",
## "ca", "cz", "de", "el", "en", "fa", "fi", "fr", "gl", "hr", "hu",
## "it", "ja", "kr", "la", "lt", "mk", "nl", "pl", "pt", "ro", "ru",
## "se", "sk", "sl", "es", "tr", "ua", "vi", "zh_cn", "zh_tw"
# lang = "en"

## APIs to fetch; can contain "weather" or "forecast".
# fetch = ["weather", "forecast"]

## OpenWeatherMap base URL
# base_url = "https://api.openweathermap.org/"

## Timeout for HTTP response.
# response_timeout = "5s"

## Preferred unit system for temperature and wind speed. Can be one of
## "metric", "imperial", or "standard".
## Read metrics of passenger using passenger-status

```yaml
[[inputs.passenger]]
```

### Path of passenger-status.

### Plugin gather metric via parsing XML output of passenger-status

### More information about the tool:


### If no path is specified, then the plugin simply execute passenger-status

- Hopefully it can be found in your PATH

- Command = "passenger-status -v --show=xml"

## Gather counters from PF

```yaml
[[inputs.pf]]
```

### PF require root access on most systems.

### Setting `use_sudo` to true will make use of sudo to run pfctl.

### Users must configure sudo to allow telegraf user to run pfctl with no password.

- `pfctl` can be restricted to only list command "pfctl -s info".

- `use_sudo` = false

## Read metrics of phpfpm, via HTTP status page or socket

```yaml
[[inputs.phpfpm]]
```

### An array of addresses to gather stats about. Specify an ip or hostname

### with optional port and path

### Plugin can be configured in three modes (either can be used):

- **http**: the URL must start with http:// or https://, ie:

  - "http://localhost/status"

  - "http://192.168.130.1/status?full"

- **unixsocket**: path to fpm socket, ie:

  - "/var/run/php5-fpm.sock"

  - or using a custom fpm status path:

  - "/var/run/php5-fpm.sock:fpm-custom-status-path"

- **fcgi**: the URL must start with fcgi:// or cgi://, and port must be present, ie:

  - "fcgi://10.0.0.12:9000/status"

  - "cgi://10.0.10.12:9001/status"
## Example of multiple gathering from local socket and remote host

urls = ["http://192.168.1.20/status", "/tmp/fpm.sock"]
urls = ["http://localhost/status"]

## Duration allowed to complete HTTP requests.
# timeout = "5s"

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

### # Ping given url(s) and return statistics
### [[inputs.ping]]
# ## Hosts to send ping packets to.
# urls = ["example.org"]
#
# ## Method used for sending pings, can be either "exec" or "native". When set
# ## to "exec" the systems ping command will be executed. When set to "native"
# ## the plugin will send pings directly.
# ##
# ## While the default is "exec" for backwards compatibility, new deployments
# ## are encouraged to use the "native" method for improved compatibility and
# ## performance.
# # method = "exec"
##
# ## Number of ping packets to send per interval. Corresponds to the "-c"
# ## option of the ping command.
# # count = 1
##
# ## Time to wait between sending ping packets in seconds. Operates like the
# ## "-i" option of the ping command.
# # ping_interval = 1.0
##
# ## If set, the time to wait for a ping response in seconds. Operates like
# ## the "-W" option of the ping command.
# # timeout = 1.0
##
# ## If set, the total ping deadline, in seconds. Operates like the -w option
# ## of the ping command.
# # deadline = 10
##
# ## Interface or source address to send ping from. Operates like the -I or -S
# ## option of the ping command.
# # interface = ""
# Percentiles to calculate. This only works with the native method.
# percentiles = [50, 95, 99]
#
# Specify the ping executable binary.
# binary = "ping"
#
# Arguments for ping command. When arguments is not empty, the command from
# the binary option will be used and other options (ping_interval, timeout,
# etc) will be ignored.
# arguments = ["-c", "3"]
#
# Use only IPv6 addresses when resolving a hostname.
# ipv6 = false
#
# Number of data bytes to be sent. Corresponds to the "-s"
# option of the ping command. This only works with the native method.
# size = 56

# Measure postfix queue statistics
[[inputs.postfix]]
# Postfix queue directory. If not provided, telegraf will try to use
# 'postconf -h queue_directory' to determine it.
# queue_directory = "/var/spool/postfix"

# Read metrics from one or many PowerDNS servers
[[inputs.powerdns]]
# An array of sockets to gather stats about.
# Specify a path to unix socket.
# unix_sockets = ["/var/run/pdns.controlsocket"]

# Read metrics from one or many PowerDNS Recursor servers
[[inputs.powerdns_recursor]]
# Path to the Recursor control socket.
# unix_sockets = ["/var/run/pdns_recursor.controlsocket"]
#
# Directory to create receive socket. This default is likely not writable,
# please reference the full plugin documentation for a recommended setup.
# socket_dir = "/var/run/"
# Socket permissions for the receive socket.
# socket_mode = "0666"

# Monitor process cpu and memory usage
[[inputs.procstat]]
# PID file to monitor process
# pid_file = "/var/run/nginx.pid"
# executable name (ie, pgrep <exe>)
# exe = "nginx"
# pattern as argument for pgrep (ie, pgrep -f <pattern>)
# pattern = "nginx"
# user as argument for pgrep (ie, pgrep -u <user>)
# user = "nginx"
# Systemd unit name, supports globs when include_systemd_children is set to true
# systemd_unit = "nginx.service"
# include_systemd_children = false
# CGroup name or path, supports globs
# cgroup = "systemd/system.slice/nginx.service"
#
# Windows service name
# win_service = ""
#
# override for process_name
# This is optional; default is sourced from /proc/<pid>/status
# process_name = "bar"
#
# Field name prefix
# prefix = ""
#
# When true add the full cmdline as a tag.
# cmdline_tag = false
#
# Mode to use when calculating CPU usage. Can be one of 'solaris' or 'irix'.
# mode = "irix"
#
# Add the PID as a tag instead of as a field. When collecting multiple
# processes with otherwise matching tags this setting should be enabled to
# ensure each process has a unique identity.
#
# Enabling this option may result in a large number of series, especially
# when processes have a short lifetime.
# pid_tag = false
#
# Method to use when finding process IDs. Can be one of 'pgrep', or
# 'native'. The pgrep finder calls the pgrep executable in the PATH while
# the native finder performs the search directly in a manor dependent on the
# platform. Default is 'pgrep'
# pid_finder = "pgrep"

# Provides metrics from Proxmox nodes (Proxmox Virtual Environment > 6.2).
# [[inputs.proxmox]]
# API connection configuration. The API token was introduced in Proxmox v6.2. Required permissions for user
and token: PVEAuditor role on /
# base_url = "https://localhost:8006/api2/json"
# api_token = "USER@REALM!TOKENID=UUID"
# ## Node name, defaults to OS hostname
# # node_name = ""
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# # HTTP response timeout (default: 5s)
# response_timeout = "5s"

## Reads last_run_summary.yaml file and converts to measurements
# [[inputs.puppetagent]]
# ## Location of puppet last run summary file
# location = "/var/lib/puppet/state/last_run_summary.yaml"

## Reads metrics from RabbitMQ servers via the Management Plugin
# [[inputs.rabbitmq]]
# ## Management Plugin url. (default: http://localhost:15672)
# # url = "http://localhost:15672"
# ## Tag added to rabbitmq_overview series; deprecated: use tags
# # name = "rmq-server-1"
# ## Credentials
# # username = "guest"
# # password = "guest"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# ## Optional request timeouts
# ##
# ## ResponseHeaderTimeout, if non-zero, specifies the amount of time to wait
# ## for a server's response headers after fully writing the request.
# # header_timeout = "3s"
# ##
# ## client_timeout specifies a time limit for requests made by this client.
# ## Includes connection time, any redirects, and reading the response body.
# # client_timeout = "4s"
#
# ### A list of nodes to gather as the rabbitmq_node measurement. If not
# ### specified, metrics for all nodes are gathered.
# # nodes = ["rabbit@node1", "rabbit@node2"]
#
# ### A list of queues to gather as the rabbitmq_queue measurement. If not
# ### specified, metrics for all queues are gathered.
# # queues = ["telegraf"]
#
# ### A list of exchanges to gather as the rabbitmq_exchange measurement. If not
# ### specified, metrics for all exchanges are gathered.
# # exchanges = ["telegraf"]
#
# ### Metrics to include and exclude. Globs accepted.
# ### Note that an empty array for both will include all metrics
# # metric_include = []
# # metric_exclude = []
#
# ### Queues to include and exclude. Globs accepted.
# ### Note that an empty array for both will include all queues
# # queue_name_include = []
# # queue_name_exclude = []
#
# ### Federation upstreams include and exclude when gathering the rabbitmq_federation measurement.
# ### If neither are specified, metrics for all federation upstreams are gathered.
# ### Federation link metrics will only be gathered for queues and exchanges
# ### whose non-federation metrics will be collected (e.g a queue excluded
# ### by the 'queue_name_exclude' option will also be excluded from federation).
# ### Globs accepted.
# # federation_upstream_include = ["dataCentre-*"]
# # federation_upstream_exclude = []

## Read raindrops stats (raindrops - real-time stats for preforking Rack servers)
## An array of raindrops middleware URI to gather stats.
# urls = ["http://localhost:8080/_raindrops"]

## Reads metrics from RavenDB servers via the Monitoring Endpoints
## Node URL and port that RavenDB is listening on
# url = "https://localhost:8080"
#
# RavenDB X509 client certificate setup
# # tls_cert = "/etc/telegraf/raven.crt"
# # tls_key = "/etc/telegraf/raven.key"
#
# ## Optional request timeout
# ##
# ## Timeout, specifies the amount of time to wait
# ## for a server's response headers after fully writing the request and
# ## time limit for requests made by this client
# # timeout = "5s"
#
# ## List of statistics which are collected
# # At least one is required
# # Allowed values: server, databases, indexes, collections
# #
# # stats_include = ["server", "databases", "indexes", "collections"]
#
# ## List of db where database stats are collected
# ## If empty, all db are concerned
# # db_stats_dbs = []
#
# ## List of db where index status are collected
# ## If empty, all indexes from all db are concerned
# # index_stats_dbs = []
#
# ## List of db where collection status are collected
# ## If empty, all collections from all db are concerned
# # collection_stats_dbs = []

# # Read CPU, Fans, Powersupply and Voltage metrics of hardware server through redfish APIs
# [[inputs.redfish]]
# ## Server url
# # address = "https://127.0.0.1:5000"
#
# ## Username, Password for hardware server
# # username = "root"
# # password = "password123456"
#
# ## ComputerSystemId
# # computer_system_id="2M220100SL"
#
# ## Amount of time allowed to complete the HTTP request
# # timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification

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# insecure_skip_verify = false

# Read metrics from one or many Redis servers
# [[inputs.redis]]
# ## specify servers via a url matching:
# ## [protocol://][[:password]@address[:port]]
# ## e.g.
# ## tcp://localhost:6379
# ## tcp://password@192.168.99.100
# ## unix:///var/run/redis.sock
# ##
# ## If no servers are specified, then localhost is used as the host.
# ## If no port is specified, 6379 is used
# servers = ["tcp://localhost:6379"]
#
# ## Optional. Specify Redis commands to retrieve values
# # [[inputs.redis.commands]]
# # # The command to run where each argument is a separate element
# # command = ["get", "sample-key"]
# # # The field to store the result in
# # field = "sample-key-value"
# # # The type of the result
# # type = "string"
# #
# ## specify server password
# # password = "s#cr@t%"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = true

# Read metrics from one or many RethinkDB servers
# [[inputs.rethinkdb]]
# ## An array of URI to gather stats about. Specify an ip or hostname
# ## with optional port add password. ie,
# ## rethinkdb://user:auth_key@10.10.3.30:28105,
# ## rethinkdb://10.10.3.33:18832,
# ## 10.0.0.1:10000, etc.
# servers = ["127.0.0.1:28015"]
#
# ## If you use actual rethinkdb of > 2.3.0 with username/password authorization,
# ## protocol have to be named "rethinkdb2" - it will use 1_0 H.
# # servers = ["rethinkdb2://username:password@127.0.0.1:28015"]
# ###
# ### If you use older versions of rethinkdb (<2.2) with auth_key, protocol
# ### have to be named "rethinkdb".
# # servers = ["rethinkdb://username:auth_key@127.0.0.1:28015"]

## Read metrics one or many Riak servers
# [[inputs.riak]]
# # Specify a list of one or more riak http servers
# # servers = ["http://localhost:8098"]

## Read API usage and limits for a Salesforce organisation
# [[inputs.salesforce]]
# # specify your credentials
# #
# # username = "your_username"
# # password = "your_password"
# #
# # (optional) security token
# # security_token = "your_security_token"
# #
# # (optional) environment type (sandbox or production)
# # default is: production
# #
# # environment = "production"
# #
# # (optional) API version (default: "39.0")
# #
# # version = "39.0"

## Monitor sensors, requires lm-sensors package
# [[inputs.sensors]]
# # Remove numbers from field names.
# # If true, a field name like 'temp1_input' will be changed to 'temp_input'.
# # remove_numbers = true
# #
# # Timeout is the maximum amount of time that the sensors command can run.
# # timeout = "5s"

## Read metrics from storage devices supporting S.M.A.R.T.
# [[inputs.smart]]
# # Optionally specify the path to the smartctl executable
# # path_smartctl = "/usr/bin/smartctl"
#
# Optionally specify the path to the nvme-cli executable
# path_nvme = "/usr/bin/nvme"
#
# Optionally specify if vendor specific attributes should be propagated for NVMe disk case
# ["auto-on"] - automatically find and enable additional vendor specific disk info
# ["vendor1", "vendor2", ...] - e.g. "Intel" enable additional Intel specific disk info
# enable_extensions = ["auto-on"]
#
# On most platforms used cli utilities requires root access.
# Setting 'use_sudo' to true will make use of sudo to run smartctl or nvme-cli.
# Sudo must be configured to allow the telegraf user to run smartctl or nvme-cli
# without a password.
# use_sudo = false
#
# Skip checking disks in this power mode. Defaults to
# "standby" to not wake up disks that have stopped rotating.
# See --nocheck in the man pages for smartctl.
# smartctl version 5.41 and 5.42 have faulty detection of
# power mode and might require changing this value to
# "never" depending on your disks.
# nocheck = "standby"
#
# Gather all returned S.M.A.R.T. attribute metrics and the detailed
# information from each drive into the 'smart_attribute' measurement.
# attributes = false
#
# Optionally specify devices to exclude from reporting if disks auto-discovery is performed.
# excludes = [ "/dev/pass6" ]
#
# Optionally specify devices and device type, if unset
# a scan (smartctl --scan and smartctl --scan -d nvme) for S.M.A.R.T. devices will be done
# and all found will be included except for the excluded in excludes.
# devices = [ "/dev/ada0 -d atacam", "/dev/nvme0"
#]
#
# Timeout for the cli command to complete.
# timeout = "30s"
#
# Optionally call smartctl and nvme-cli with a specific concurrency policy.
# By default, smartctl and nvme-cli are called in separate threads (goroutines) to gather disk attributes.
# Some devices (e.g. disks in RAID arrays) may have access limitations that require sequential reading of
# SMART data - one individual array drive at the time. In such case please set this configuration option
# to "sequential" to get readings for all drives.
# valid options: concurrent, sequential
# read_method = "concurrent"

# Retrieves SNMP values from remote agents
[[inputs.snmp]]
## Agent addresses to retrieve values from.

```
#   ## format: agents = ["<scheme://><hostname>:<port>"]
#   ## scheme: optional, either udp, udp4, udp6, tcp, tcp4, tcp6.
#   ##   default is udp
#   ## port: optional
#   ## example: agents = ["udp://127.0.0.1:161"]
#   ## agents = ["tcp://127.0.0.1:161"]
#   ## agents = ["udp4://v4only-snmp-agent"]
#   ## agents = ["udp://127.0.0.1:161"]
```

## Timeout for each request.

```
# timeout = "5s"
```

## SNMP version; can be 1, 2, or 3.

```
# version = 2
```

## Path to mib files

```
# path = ["/usr/share/snmp/mibs"]
```

## Agent host tag; the tag used to reference the source host

```
# agent_host_tag = "agent_host"
```

## SNMP community string.

```
# community = "public"
```

## Number of retries to attempt.

```
# retries = 3
```

## The GETBULK max-repetitions parameter.

```
# max_repetitions = 10
```

## SNMPv3 authentication and encryption options.

```
# sec_name = "myuser"
# auth_protocol = "MD5"
# auth_password = "pass"
# sec_level = "authNoPriv"
# context_name = "" 
# priv_protocol = ""
# priv_password = ""
```
# Add fields and tables defining the variables you wish to collect. This example collects the system uptime and interface variables. Reference the full plugin documentation for configuration details.

# DEPRECATED! PLEASE USE inputs.snmp INSTEAD.
# [[inputs.snmp_legacy]]
# DEPRECATED: The 'snmp_legacy' plugin is deprecated in version 1.0.0, use 'inputs.snmp' instead.
# To generate 'oids.txt' you need to run:
# smnptranslate -m all -Tz -On | sed -e 's/"//g' > /tmp/oids.txt
# Or if you have an other MIB folder with custom MIBs
# smnptranslate -M /mycustommibfolder -Tz -On -m all | sed -e 's/"//g' > oids.txt
# smnptranslate_file = "/tmp/oids.txt"
# [[inputs.snmp.host]]
# address = "192.168.2.2:161"
# SNMP community
# community = "public" # default public
# SNMP version (1, 2 or 3)
# version = 2 # default 2
# SNMP response timeout
# timeout = 2.0 # default 2.0
# SNMP request retries
# retries = 2 # default 2
# Which get/bulk do you want to collect for this host
# collect = ["mybulk", "sysservices", "sysdescr"]
# Simple list of OIDs to get, in addition to "collect"
# get_oids = []
#
# [[inputs.snmp.host]]
# address = "192.168.2.3:161"
# community = "public"
# version = 2
# timeout = 2.0
# retries = 2
# collect = ["mybulk"]
# get_oids = [
#   "ifNumber",
#   ".1.3.6.1.2.1.3.0",
# ]
#
# [[inputs.snmp.get]]
# name = "ifnumber"
# oid = "ifNumber"
#
# [[inputs.snmp.get]]
# name = "interface_speed"
# oid = "ifSpeed"
# instance = "0"
#
# [[inputs.snmp.get]]
# name = "sysuptime"
# oid = ".1.3.6.1.2.1.1.3.0"
# unit = "second"
#
# [[inputs.snmp.bulk]]
# name = "mybulk"
# max_repetition = 127
# oid = ".1.3.6.1.2.1.1"
#
# [[inputs.snmp.bulk]]
# name = "ifoutoctets"
# max_repetition = 127
# oid = "ifOutOctets"
#
# [[inputs.snmp.host]]
# address = "192.168.2.13:161"
# #address = "127.0.0.1:161"
# community = "public"
# version = 2
# timeout = 2.0
# retries = 2
# #collect = ["mybulk", "sysservices", "sysdescr", "systype"]
# collect = ["sysuptime"]
# [[inputs.snmp.host.table]]
# name = "iftable3"
# include_instances = ["enp5s0", "eth1"]
#
# # SNMP TABLEs
# # table without mapping neither subtables
# [[inputs.snmp.table]]
# name = "iftable1"
# oid = ".1.3.6.1.2.1.31.1.1.1"
#
# # table without mapping but with subtables
# [[inputs.snmp.table]]
# name = "iftable2"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# sub_tables = [".1.3.6.1.2.1.2.2.1.13"]
#
# # table with mapping but without subtables
# [[inputs.snmp.table]]
# name = "iftable3"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# # if empty. get all instances
# mapping_table = ".1.3.6.1.2.1.31.1.1.1.1"
# # if empty, get all subtables
#
# # table with both mapping and subtables
# [[inputs.snmp.table]]
# name = "iftable4"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# # if empty get all instances
# mapping_table = ".1.3.6.1.2.1.31.1.1.1.1"
# # if empty get all subtables
# # sub_tables could be not "real subtables"
# sub_tables=[".1.3.6.1.2.1.2.2.1.13", "bytes_recv", "bytes_send"]

## Read stats from one or more Solr servers or cores
# [[inputs.solr]]
# # specify a list of one or more Solr servers
# servers = ["http://localhost:8983"]
#
# # specify a list of one or more Solr cores (default - all)
# cores = ["main"]
#
# # Optional HTTP Basic Auth Credentials
# # username = "username"
# # password = "pa$$word"

## Gather timeseries from Google Cloud Platform v3 monitoring API
# [[inputs.stackdriver]]
# # GCP Project
# project = "erudite-bloom-151019"
#
# # Include timeseries that start with the given metric type.
# metric_type_prefix_include = [
#   "compute.googleapis.com/",
# ]
#
# # Exclude timeseries that start with the given metric type.
# # metric_type_prefix_exclude = []
#
# # Many metrics are updated once per minute; it is recommended to override
# # the agent level interval with a value of 1m or greater.
# interval = "1m"
#
# # Maximum number of API calls to make per second. The quota for accounts
# # varies, it can be viewed on the API dashboard:
# # https://cloud.google.com/monitoring/quotas#quotas_and_limits
# # rate_limit = 14
# The delay and window options control the number of points selected on each gather. When set, metrics are gathered between:
#   start: now() - delay - window
#   end: now() - delay
#
# Collection delay; if set too low metrics may not yet be available.
# delay = "5m"
#
# If unset, the window will start at 1m and be updated dynamically to span the time between calls (approximately the length of the plugin interval).
# window = "1m"
#
# TTL for cached list of metric types. This is the maximum amount of time it may take to discover new metrics.
# cache_ttl = "1h"
#
# If true, raw bucket counts are collected for distribution value types.
# For a more lightweight collection, you may wish to disable and use distribution_aggregation_aligners instead.
# gather_raw_distribution_buckets = true
#
# Aggregate functions to be used for metrics whose value type is distribution. These aggregate values are recorded in addition to raw bucket counts; if they are enabled.
# distribution_aggregation_aligners = ["ALIGN_PERCENTILE_99", "ALIGN_PERCENTILE_95", "ALIGN_PERCENTILE_50"]
#
# Filters can be added to reduce the number of time series matched. All functions are supported: starts_with, ends_with, has_substring, and one_of. Only the '=' operator is supported.
#
# The logical operators when combining filters are defined statically using the following values:
# filter ::= <resource_labels> {AND <metric_labels>}
# resource_labels ::= <resource_labels> {OR <resource_label>}
# metric_labels ::= <metric_labels> {OR <metric_label>}
#
# For more details, see https://cloud.google.com/monitoring/api/v3/filters
#
# Resource labels refine the time series selection with the following expression:
# resource.labels.<key> = <value>
# # [[inputs.stackdriver.filter.resource_labels]]
# # key = "instance_name"
# # value = 'starts_with("localhost")'
# #
# ### Metric labels refine the time series selection with the following expression:
# ### metric.labels.<key> = <value>
# # [[inputs.stackdriver.filter.metric_labels]]
# # key = "device_name"
# # value = 'one_of("sda", "sdb")'

# # Get synproxy counter statistics from procfs
# [[inputs.synproxy]]
# # # no configuration

# # Sysstat metrics collector
# [[inputs.sysstat]]
# # # Path to the sadc command.
# # #
# # # Common Defaults:
# # # Debian/Ubuntu: /usr/lib/sysstat/sadc
# # # Arch: /usr/lib/sa/sadc
# # # RHEL/CentOS: /usr/lib64/sa/sadc
# # sadc_path = "/usr/lib/sa/sadc" # required
# #
# # # Path to the sadf command, if it is not in PATH
# # sadf_path = "/usr/bin/sadf"
# #
# # # Activities is a list of activities, that are passed as argument to the
# # # sadc collector utility (e.g: DISK, SNMP etc...)
# # # The more activities that are added, the more data is collected.
# # # activities = ["DISK"]
# #
# # # Group metrics to measurements.
# # #
# # # If group is false each metric will be prefixed with a description
# # # and represents itself a measurement.
# # #
# # # If Group is true, corresponding metrics are grouped to a single measurement.
# # # group = true
# #
# # Options for the sadf command. The values on the left represent the sadf
# # options and the values on the right their description (which are used for
# # grouping and prefixing metrics).
# #
# # # Run 'sar -h' or 'man sar' to find out the supported options for your
# # # sysstat version.
# [inputs.sysstat.options]
# -C = "cpu"
# -B = "paging"
# -b = "io"
# -d = "disk" # requires DISK activity
# "-n ALL" = "network"
# "-P ALL" = "per_cpu"
# -q = "queue"
# -R = "mem"
# -r = "mem_util"
# -S = "swap_util"
# -u = "cpu_util"
# -v = "inode"
# -W = "swap"
# -w = "task"
# # -H = "hugepages" # only available for newer linux distributions
# # "-I ALL" = "interrupts" # requires INT activity
#
# ### Device tags can be used to add additional tags for devices.
# ### For example the configuration below adds a tag vg with value rootvg for
# ### all metrics with sda devices.
# # [inputs.sysstat.device_tags.sda]
# # vg = "rootvg"

# # Gather systemd units state
# [[inputs.systemd_units]]
# ### Set timeout for systemctl execution
# # timeout = "1s"
# #
# ### Filter for a specific unit type, default is "service", other possible
# ### values are "socket", "target", "device", "mount", "automount", "swap",
# ### "timer", "path", "slice" and "scope ":
# # unittype = "service"
# #
# ### Filter for a specific pattern, default is "" (i.e. all), other possible
# ### values are valid pattern for systemctl, e.g. "a*" for all units with
# ### names starting with "a"
# # pattern = ""
# # pattern = "telegraf* influxdb*"
# # pattern = "a*"

# # Reads metrics from a Teamspeak 3 Server via ServerQuery
# [[inputs.teamspeak]]
# ### Server address for Teamspeak 3 ServerQuery
# # server = "127.0.0.1:10011"
# ### Username for ServerQuery
# username = "serverqueryuser"
# ## Password for ServerQuery
# password = "secret"
# ## Array of virtual servers
# # virtual_servers = [1]

## Read metrics about temperature
[[inputs.temp]]
# # no configuration

## Read Tengine's basic status information (ngx_http_reqstat_module)
[[inputs.tengine]]
# # An array of Tengine reqstat module URI to gather stats.
# urls = ["http://127.0.0.1/us"]
#
# # HTTP response timeout (default: 5s)
# # response_timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Gather metrics from the Tomcat server status page.
[[inputs.tomcat]]
# # URL of the Tomcat server status
# url = "http://127.0.0.1:8080/manager/status/all?XML=true"
#
# # HTTP Basic Auth Credentials
# # username = "tomcat"
# # password = "s3cret"
#
# # Request timeout
# # timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
## Inserts sine and cosine waves for demonstration purposes

```
[[inputs.trig]]
```

# ## Set the amplitude

```
amplitude = 10.0
```

## Read Twemproxy stats data

```
[[inputs.twemproxy]]
```

# Twemproxy stats address and port (no scheme)

```
addr = "localhost:22222"
```

# Monitor pool name

```
pools = ["redis_pool", "mc_pool"]
```

## A plugin to collect stats from the Unbound DNS resolver

```
[[inputs.unbound]]
```

# Address of server to connect to, read from unbound conf default, optionally ':port'

```
server = "127.0.0.1:8953"
```

# If running as a restricted user you can prepend sudo for additional access:

```
use_sudo = false
```

# The default location of the unbound-control binary can be overridden with:

```
binary = "/usr/sbin/unbound-control"
```

# The default location of the unbound config file can be overridden with:

```
config_file = "/etc/unbound/unbound.conf"
```

# The default timeout of 1s can be overridden with:

```
timeout = "1s"
```

# When set to true, thread metrics are tagged with the thread id.

```
thread_as_tag = false
```

## Read uWSGI metrics.

```
[[inputs.uwsgi]]
```

# List with urls of uWSGI Stats servers. URL must match pattern:

```
```

# General connection timeout
# timeout = "5s"

# A plugin to collect stats from Varnish HTTP Cache
# [[inputs.varnish]]
# If running as a restricted user you can prepend sudo for additional access:
# use_sudo = false

# The default location of the varnishstat binary can be overridden with:
# binary = "/usr/bin/varnishstat"

# By default, telegraf gather stats for 3 metric points.
# Setting stats will override the defaults shown below.
# Glob matching can be used, ie, stats = ["MAIN.*"]
# stats may also be set to ["*"]
# stats = ["MAIN.cache_hit", "MAIN.cache_miss", "MAIN.uptime"]

# Optional name for the varnish instance (or working directory) to query
# Usually append after -n in varnish cli
# instance_name = instanceName

# Timeout for varnishstat command
# timeout = "1s"

# Collect Wireguard server interface and peer statistics
# [[inputs.wireguard]]
# Optional list of Wireguard device/interface names to query.
# If omitted, all Wireguard interfaces are queried.
# devices = ["wg0"]

# Monitor wifi signal strength and quality
# [[inputs.wireless]]
# Sets 'proc' directory path
# If not specified, then default is /proc
# host_proc =="/proc"

# Reads metrics from a SSL certificate
# [[inputs.x509_cert]]
# List certificate sources
# Prefix your entry with 'file://' if you intend to use relative paths
# sources = ["tcp://example.org:443", "https://influxdata.com:443",
#             "udp://127.0.0.1:4433", "/etc/ssl/certs/ssl-cert-snakeoil.pem",
#             "/etc/mycerts/*.mydomain.org.pem", "/file:///path/to/*.pem"]
## Read metrics of ZFS from arcstats, zfetchstats, vdev_cache_stats, pools and datasets

`[[inputs.zfs]]`

### ZFS kstat path. Ignored on FreeBSD

### If not specified, then default is:

```
# kstatPath = "/proc/spl/kstat/zfs"
```

### By default, telegraf gather all zfs stats

### If not specified, then default is:

```
# kstatMetrics = ["arcstats", "zfetchstats", "vdev_cache_stats"]
```

### For Linux, the default is:

```
# kstatMetrics = ["abdstats", "arcstats", "dnodestats", "dbufcachestats",
# "dmu_tx", "fm", "vdev_mirror_stats", "zfetchstats", "zil"]
```

### By default, don't gather zpool stats

```
# poolMetrics = false
```

### By default, don't gather zdataset stats

```
# datasetMetrics = false
```

## Reads 'mntr' stats from one or many zookeeper servers

`[[inputs.zookeeper]]`

### An array of address to gather stats about. Specify an ip or hostname

### with port. ie localhost:2181, 10.0.0.1:2181, etc.

```
# servers = ["":2181"
```

### Timeout for metric collections from all servers. Minimum timeout is "1s".

```
# timeout = "5s"
```

### Optional TLS Config

```
# enable_tls = true
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
```
# # tls_key = "/etc/telegraf/key.pem"
# ## If false, skip chain & host verification
# # insecure_skip_verify = true

# # Pull Metric Statistics from Aliyun CMS
# [[[inputs.aliyuncms]]]
# ## Aliyun Credentials
# ## Credentials are loaded in the following order
# ## 1) Ram RoleArn credential
# ## 2) AccessKey STS token credential
# ## 3) AccessKey credential
# ## 4) Ecs Ram Role credential
# ## 5) RSA keypair credential
# ## 6) Environment variables credential
# ## 7) Instance metadata credential
#
# # access_key_id = 
# # access_key_secret = 
# # access_key_sts_token = 
# # role_arn = 
# # role_session_name = 
# # private_key = 
# # public_key_id = 
# # role_name = 
#
# ## Specify the ali cloud region list to be queried for metrics and objects discovery
# ## If not set, all supported regions (see below) would be covered, it can provide a significant load on API, so the recommendation here
# ## is to limit the list as much as possible. Allowed values: https://www.alibabacloud.com/help/zh/doc-detail/40654.htm
# ## Default supported regions are:
# ## 21 items: cn-qingdao,cn-beijing,cn-zhangjiakou,cn-huhehaote,cn-hangzhou,cn-shanghai,cn-shenzhen,
# ## cn-huyuan,cn-chengdu,cn-hongkong,ap-southeast-1,ap-southeast-2,ap-southeast-3,ap-southeast-5,
# ## ap-south-1,ap-northeast-1,us-west-1,us-east-1,eu-central-1,eu-west-1,me-east-1
# ## From discovery perspective it set the scope for object discovery, the discovered info can be used to enrich
# ## the metrics with objects attributes/tags. Discovery is supported not for all projects (if not supported, then
# ## it will be reported on the start - for example for 'acs_cdn' project:
# ## E! [inputs.aliyuncms] Discovery tool is not activated: no discovery support for project "acs_cdn"
# ## Currently, discovery supported for the following projects:
# ## - acs_ecs_dashboard
# ## - acs_rds_dashboard
# - acs_slb_dashboard
# - acs_vpc_eip
# regions = ["cn-hongkong"]
#
# The minimum period for AliyunCMS metrics is 1 minute (60s). However not all
# metrics are made available to the 1 minute period. Some are collected at
# 3 minute, 5 minute, or larger intervals.
# See: https://help.aliyun.com/document_detail/51936.html?spm=a2c4g.11186623.2.18.2bc1750eeOw1Pv
# Note that if a period is configured that is smaller than the minimum for a
# particular metric, that metric will not be returned by the Aliyun OpenAPI
# and will not be collected by Telegraf.
#
# Requested AliyunCMS aggregation Period (required - must be a multiple of 60s)
# period = "5m"
#
# Collection Delay (required - must account for metrics availability via AliyunCMS API)
# delay = "1m"
#
# Recommended: use metric 'interval' that is a multiple of 'period' to avoid
# gaps or overlap in pulled data
# interval = "5m"
#
# Metric Statistic Project (required)
# project = "acs_slb_dashboard"
#
# Maximum requests per second, default value is 200
# ratelimit = 200
#
# How often the discovery API call executed (default 1m)
# discovery_interval = "1m"
#
# Metrics to Pull (Required)
# [inputs.aliyuncms.metrics]
# Metrics names to be requested,
# described here (per project):
# https://help.aliyun.com/document_detail/28619.html?spm=a2c4g.11186623.6.690.1938ad41wg8QSq
# names = ["InstanceActiveConnection", "InstanceNewConnection"]
#
# Dimension filters for Metric (these are optional).
# This allows to get additional metric dimension. If dimension is not specified it can be returned or
# the data can be aggregated - it depends on particular metric, you can find details here:
# https://help.aliyun.com/document_detail/28619.html?spm=a2c4g.11186623.6.690.1938ad41wg8QSq
# #
# # Note, that by default dimension filter includes the list of discovered objects in scope (if discovery is enabled)
# # Values specified here would be added into the list of discovered objects.
# # You can specify either single dimension:
# # dimensions = '{"instanceId": "p-example"}'}
# Or you can specify several dimensions at once:
# dimensions = [{"instanceId": "p-example"},{"instanceId": "q-example"]
#
# Enrichment tags, can be added from discovery (if supported)
# Notation is <measurement_tag_name>:<JMES query path (https://jmespath.org/tutorial.html)>
# To figure out which fields are available, consult the Describe<ObjectType> API per project.
# For example, for SLB: https://api.aliyun.com/#!/product=Slb&version=2014-05-15&api=DescribeLoadBalancers&params={}&tab=MOCK&lang=GO
# tag_query_path = [
#   "address:Address",
#   "name:LoadBalancerName",
#   "cluster_owner:Tags.Tag[?TagKey=='cs.cluster.name'].TagValue | [0]
# ]
# The following tags added by default: regionId (if discovery enabled), userId, instanceId.
#
# Allow metrics without discovery data, if discovery is enabled. If set to true, then metric without discovery
# data would be emitted, otherwise dropped. This can be of help, in case debugging dimension filters, or partial
# coverage
# allow_dps_without_discovery = false

# AMQP consumer plugin
# [inputs.amqp_consumer]
# Broker to consume from.
# url = "amqp://localhost:5672/influxdb"
#
# Brokers to consume from. If multiple brokers are specified a random broker
# will be selected anytime a connection is established. This can be
# helpful for load balancing when not using a dedicated load balancer.
# brokers = ["amqp://localhost:5672/influxdb"]
#
# Authentication credentials for the PLAIN auth_method.
# username = ""
# password = ""
#
# Name of the exchange to declare. If unset, no exchange will be declared.
# exchange = "telegraf"
#
# Exchange type; common types are "direct", "fanout", "topic", "header", "x-consistent-hash".
# exchange_type = "topic"
#
# If true, exchange will be passively declared.
# exchange_passive = false
#
# Exchange durability can be either "transient" or "durable".
# exchange_durability = "durable"
# Additional exchange arguments.
# exchange_arguments = { }
# exchange_arguments = {"hash_property" = "timestamp"}

# AMQP queue name.
queue = "telegraf"

# AMQP queue durability can be "transient" or "durable".
queue_durability = "durable"

# If true, queue will be passively declared.
queue_passive = false

# A binding between the exchange and queue using this binding key is
# created. If unset, no binding is created.
binding_key = "#"

# Maximum number of messages server should give to the worker.
prefetch_count = 50

# Maximum messages to read from the broker that have not been written by an
# output. For best throughput set based on the number of metrics within
# each message and the size of the output's metric_batch_size.

# For example, if each message from the queue contains 10 metrics and the
# output metric_batch_size is 1000, setting this to 100 will ensure that a
# full batch is collected and the write is triggered immediately without
# waiting until the next flush_interval.
max_undelivered_messages = 1000

# Auth method. PLAIN and EXTERNAL are supported
# Using EXTERNAL requires enabling the rabbitmq_auth_mechanism_ssl plugin as
# described here: https://www.rabbitmq.com/plugins.html
auth_method = "PLAIN"

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Content encoding for message payloads, can be set to "gzip" to or
# "identity" to apply no encoding.
content_encoding = "identity"

# Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# # Read Cassandra metrics through Jolokia
# [[inputs.cassandra]]
# # DEPRECATED: The 'cassandra' plugin is deprecated in version 1.7.0, use 'inputs.jolokia2' with the
# 'cassandra.conf' example configuration instead.
# # DEPRECATED: The cassandra plugin has been deprecated. Please use the
# # jolokia2 plugin instead.
# #
# # See https://github.com/influxdata/telegraf/tree/master/plugins/inputs/jolokia2
# #
# context = "/jolokia/read"
# # List of cassandra servers exposing jolokia read service
# servers = ["myuser:mypassword@10.10.10.1:8778", "10.10.10.2:8778", ":8778"]
# # List of metrics collected on above servers
# # Each metric consists of a jmx path.
# # This will collect all heap memory usage metrics from the jvm and
# # ReadLatency metrics for all keyspaces and tables.
# # "type=Table" in the query works with Cassandra3.0. Older versions might
# # need to use "type=ColumnFamily"
# metrics = [
#   "/java.lang:type=Memory/HeapMemoryUsage",
#   "/org.apache.cassandra.metrics:type=Table,keyspace=*,scope=*,name=ReadLatency"
# ]

# # Cisco model-driven telemetry (MDT) input plugin for IOS XR, IOS XE and NX-OS platforms
# [[inputs.cisco_telemetry_mdt]]
# # Telemetry transport can be "tcp" or "grpc". TLS is only supported when
# # using the grpc transport.
# transport = "grpc"
# # Address and port to host telemetry listener
# service_address = ":57000"
# # Enable TLS; grpc transport only.
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Enable TLS client authentication and define allowed CA certificates; grpc
# # transport only.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
# # Define (for certain nested telemetry measurements with embedded tags) which fields are tags
# embedded_tags = ["Cisco-IOS-XR-qos-ma-oper:qos/interface-table/interface/input/service-policy-names/service-policy-instance/statistics/class-stats/class-name"]
#
# Define aliases to map telemetry encoding paths to simple measurement names
# [inputs.cisco_telemetry_mdt.aliases]
# ifstats = "ietf-interfaces:interfaces-state/interface/statistics"
# [inputs.cisco_telemetry_mdt.dmes]
# ModTs = "ignore"
# CreateTs = "ignore"

## Read metrics from one or many ClickHouse servers
[[inputs.clickhouse]]
## Username for authorization on ClickHouse server
## example: username = "default"
username = "default"
## Password for authorization on ClickHouse server
## example: password = "super_secret"
#
## HTTP(s) timeout while getting metrics values
## The timeout includes connection time, any redirects, and reading the response body.
## example: timeout = 1s
## timeout = 5s
#
## List of servers for metrics scraping
## metrics scrape via HTTP(s) clickhouse interface
## https://clickhouse.tech/docs/en/interfaces/http/
## example: servers = ["http://127.0.0.1:8123","https://custom-server.mdb.yandexcloud.net"]
servers = ["http://127.0.0.1:8123"]
## If "auto_discovery" is "true" plugin tries to connect to all servers available in the cluster
## with using same "user:password" described in "user" and "password" parameters
## and get this server hostname list from "system.clusters" table
## see
## - https://clickhouse.tech/docs/en/operations/system_tables/#system-clusters
## - https://clickhouse.tech/docs/en/operations/table_engines/distributed/
## example: auto_discovery = false
## # auto_discovery = true
#
## Filter cluster names in "system.clusters" when "auto_discovery" is "true"
## when this filter present then "WHERE cluster IN (...)" filter will apply
## please use only full cluster names here, regexp and glob filters is not allowed
## for "/etc/clickhouse-server/config.d/remote.xml"
# remote_servers

## my-own-cluster

### shard

- <replica><host>clickhouse-ru-1.local</host><port>9000</port></replica>
- <replica><host>clickhouse-ru-2.local</host><port>9000</port></replica>

### shard

- <replica><host>clickhouse-eu-1.local</host><port>9000</port></replica>
- <replica><host>clickhouse-eu-2.local</host><port>9000</port></replica>

## my-own-cluster

# Read metrics from Google PubSub

## inputs.cloud_pubsub

### Required. Name of Google Cloud Platform (GCP) Project that owns

### the given PubSub subscription.

### project = "my-project"

### Required. Name of PubSub subscription to ingest metrics from.

### subscription = "my-subscription"

### Required. Data format to consume.

### Each data format has its own unique set of configuration options.

### Read more about them here:

### https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md

### data_format = "influx"

### Optional. Filepath for GCP credentials JSON file to authorize calls to
PubSub APIs. If not set explicitly, Telegraf will attempt to use Application Default Credentials, which is preferred.

```plaintext
# credentials_file = "path/to/my/creds.json"
```

Optional. Number of seconds to wait before attempting to restart the PubSub subscription receiver after an unexpected error.

If the streaming pull for a PubSub Subscription fails (receiver), the agent attempts to restart receiving messages after this many seconds.

```plaintext
# retry_delay_seconds = 5
```

Optional. Maximum byte length of a message to consume. Larger messages are dropped with an error. If less than 0 or unspecified, treated as no limit.

```plaintext
# max_message_len = 1000000
```

Optional. Maximum messages to read from PubSub that have not been written to an output. Defaults to 1000. For best throughput set based on the number of metrics within each message and the size of the output’s metric_batch_size.

```plaintext
# max_undelivered_messages = 1000
```

The following are optional Subscription ReceiveSettings in PubSub.

Read more about these values:

```plaintext
# https://godoc.org/cloud.google.com/go/pubsub#ReceiveSettings
```

Optional. Maximum number of seconds for which a PubSub subscription should auto-extend the PubSub ACK deadline for each message. If less than 0, auto-extension is disabled.

```plaintext
# max_extension = 0
```

Optional. Maximum number of unprocessed messages in PubSub (unacknowledged but not yet expired in PubSub). A value of 0 is treated as the default PubSub value. Negative values will be treated as unlimited.

```plaintext
# max_outstanding_messages = 0
```

Optional. Maximum size in bytes of unprocessed messages in PubSub (unacknowledged but not yet expired in PubSub). A value of 0 is treated as the default PubSub value. Negative values will be treated as unlimited.

```plaintext
# max_outstanding_bytes = 0
```

Optional. Max number of goroutines a PubSub Subscription receiver can spawn.
## Google Cloud Pub/Sub Push HTTP listener

```
[[inputs.cloud_pubsub_push]]

## Address and port to host HTTP listener on
service_address = ":8080"

## Application secret to verify messages originate from Cloud Pub/Sub
# token = ""

## Path to listen to.
# path = "/"

## Maximum duration before timing out read of the request
# read_timeout = "10s"

## Maximum duration before timing out write of the response. This should be set to a value
## large enough that you can send at least `metric_batch_size` number of messages within the
## duration.
# write_timeout = "10s"

## Maximum allowed http request body size in bytes.
## 0 means to use the default of 524,288,00 bytes (500 mebibytes)
# max_body_size = "500MB"

## Whether to add the pubsub metadata, such as message attributes and subscription as a tag.
# add_meta = false

## Optional. Maximum messages to read from PubSub that have not been written
## to an output. Defaults to 1000.
# max_undelivered_messages = 1000

## For best throughput set based on the number of metrics within
## each message and the size of the output's metric_batch_size.
## For example, if each message contains 10 metrics and the output
## metric_batch_size is 1000, setting this to 100 will ensure that a
## full batch is collected and the write is triggered immediately without
## waiting until the next flush_interval.
# max_outstanding_messages = 1000

## Set one or more allowed client CA certificate file names to
## Ingests files in a directory and then moves them to a target directory.

```
[[inputs.directory_monitor]]
  ## The directory to monitor and read files from.
  directory = ""
  #
  ## The directory to move finished files to.
  finished_directory = ""
  #
  ## The directory to move files to upon file error.
  error_directory = ""
  #
  ## The amount of time a file is allowed to sit in the directory before it is picked up.
  directory_duration_threshold = "50ms"
  #
  ## A list of the only file names to monitor, if necessary. Supports regex. If left blank, all files are ingested.
  files_to_monitor = ["^.*\.csv"]
  #
  ## A list of files to ignore, if necessary. Supports regex.
  files_to_ignore = [".DS_Store"]
  #
  ## Maximum lines of the file to process that have not yet be written by the
  ## output. For best throughput set to the size of the output's metric_buffer_limit.
  max_buffered_metrics = 10000
  #
  ## The maximum amount of file paths to queue up for processing at once, before waiting until files are processed
to find more files.
  file_queue_size = 100000
```
```yaml
# # # Name a tag containing the name of the file the data was parsed from. Leave empty
# # # to disable. Cautious when file name variation is high, this can increase the cardinality
# # # significantly. Read more about cardinality here:
# # # https://docs.influxdata.com/influxdb/cloud/reference/glossary/#series-cardinality
# # file_tag = ""
# # # The dataformat to be read from the files.
# # # Each data format has its own unique set of configuration options, read
# # # more about them here:
# # # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # # NOTE: We currently only support parsing newline-delimited JSON. See the format here:
# # https://github.com/ndjson/ndjson-spec
# data_format = "influx"

# # Read logging output from the Docker engine
# [[inputs.docker_log]]
# # Docker Endpoint
# # To use TCP, set endpoint = "tcp://[ip]:[port]"
# # To use environment variables (ie, docker-machine), set endpoint = "ENV"
# # endpoint = "unix:///var/run/docker.sock"
# # When true, container logs are read from the beginning; otherwise
# # reading begins at the end of the log.
# # from_beginning = false
# # # Timeout for Docker API calls.
# # timeout = "5s"
# # # Containers to include and exclude. Globs accepted.
# # # Note that an empty array for both will include all containers
# # container_name_include = []
# # container_name_exclude = []
# # # Container states to include and exclude. Globs accepted.
# # # When empty only containers in the "running" state will be captured.
# # container_state_include = []
# # container_state_exclude = []
# # # docker labels to include and exclude as tags. Globs accepted.
# # # Note that an empty array for both will include all labels as tags
# # docker_label_include = []
# # docker_label_exclude = []
# # # Set the source tag for the metrics to the container ID hostname, eg first 12 chars
# # source_tag = false
# #```
## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
## insecure_skip_verify = false

## Azure Event Hubs service input plugin
[[inputs.eventhub_consumer]]
## The default behavior is to create a new Event Hub client from environment variables.
## This requires one of the following sets of environment variables to be set:

## 1) Expected Environment Variables:
## - "EVENTHUB_CONNECTION_STRING"

## 2) Expected Environment Variables:
## - "EVENTHUB_NAMESPACE"
## - "EVENTHUB_NAME"
## - "EVENTHUB_KEY_NAME"
## - "EVENTHUB_KEY_VALUE"

## 3) Expected Environment Variables:
## - "EVENTHUB_NAMESPACE"
## - "EVENTHUB_NAME"
## - "AZURE_TENANT_ID"
## - "AZURE_CLIENT_ID"
## - "AZURE_CLIENT_SECRET"

## Uncommenting the option below will create an Event Hub client based solely on the connection string.
## This can either be the associated environment variable or hard coded directly.
## If this option is uncommented, environment variables will be ignored.
## Connection string should contain EventHubName (EntityPath)
## connection_string = ""

## Set persistence directory to a valid folder to use a file persister instead of an in-memory persister
## persistence_dir = ""

## Change the default consumer group
## consumer_group = ""

## By default the event hub receives all messages present on the broker, alternative modes can be set below.
## The timestamp should be in https://github.com/toml-lang/toml#offset-date-time format (RFC 3339).
## The 3 options below only apply if no valid persister is read from memory or file (e.g. first run).
## from_timestamp =
## latest = true

## Set a custom prefetch count for the receiver(s)
# prefetch_count = 1000
#
# # Add an epoch to the receiver(s)
# # epoch = 0
#
# # Change to set a custom user agent, "telegraf" is used by default
# # user_agent = "telegraf"
#
# # To consume from a specific partition, set the partition_ids option.
# # An empty array will result in receiving from all partitions.
# # partition_ids = ["0","1"]
#
# # Max undelivered messages
# # max_undelivered_messages = 1000
#
# # Set either option below to true to use a system property as timestamp.
# # You have the choice between EnqueuedTime and IoTHubEnqueuedTime.
# # It is recommended to use this setting when the data itself has no timestamp.
# # enqueued_time_as_ts = true
# # iot_hub_enqueued_time_as_ts = true
#
# # Tags or fields to create from keys present in the application property bag.
# # These could for example be set by message enrichments in Azure IoT Hub.
# # application_property_tags = []
# # application_property_fields = []
#
# # Tag or field name to use for metadata
# # By default all metadata is disabled
# # sequence_number_field = "SequenceNumber"
# # enqueued_time_field = "EnqueuedTime"
# # offset_field = "Offset"
# # partition_id_tag = "PartitionID"
# # partition_key_tag = "PartitionKey"
# # iot_hub_device_connection_id_tag = "IoTHubDeviceConnectionID"
# # iot_hub_auth_generation_id_tag = "IoTHubAuthGenerationID"
# # iot_hub_connection_auth_method_tag = "IoTHubConnectionAuthMethod"
# # iot_hub_connection_module_id_tag = "IoTHubConnectionModuleID"
# # iot_hub_enqueued_time_field = "IoTHubEnqueuedTime"
#
# # Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"

# # Run executable as long-running input plugin
# [[inputs.execd]]
# Program to run as daemon
# command = ["telegraf-smartctl", "-d", "/dev/sda"]
#
# Define how the process is signaled on each collection interval.
## Valid values are:
## "none" : Do not signal anything.
## The process must output metrics by itself.
## "STDIN" : Send a newline on STDIN.
## "SIGHUP" : Send a HUP signal. Not available on Windows.
## "SIGUSR1" : Send a USR1 signal. Not available on Windows.
## "SIGUSR2" : Send a USR2 signal. Not available on Windows.
# signal = "none"
#
# Delay before the process is restarted after an unexpected termination
# restart_delay = "10s"
#
# Data format to consume.
## Each data format has its own unique set of configuration options, read
## more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

## gNMI telemetry input plugin
## [inputs.gnmi]
## Address and port of the gNMI GRPC server
# addresses = ["10.49.234.114:57777"]
#
## define credentials
# username = "cisco"
# password = "cisco"
#
## gNMI encoding requested (one of: "proto", "json", "json_ietf", "bytes")
# encoding = "proto"
#
## redial in case of failures after
# redial = "10s"
#
## enable client-side TLS and define CA to authenticate the device
# enable_tls = true
# tls_ca = "/etc/telegraf/ca.pem"
# insecure_skip_verify = true
#
## define client-side TLS certificate & key to authenticate to the device
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
## gNMI subscription prefix (optional, can usually be left empty)
## Define additional aliases to map telemetry encoding paths to simple measurement names

```
# [inputs.gnmi.aliases]
#  ifcounters = "openconfig:/interfaces/interface/state/counters"
```

## Name of the measurement that will be emitted

```
# [inputs.gnmi.subscription]
#  name = "ifcounters"
```

### Origin and path of the subscription

```
# [inputs.gnmi.subscription]
#  origin = "openconfig-interfaces"
#  path = "/interfaces/interface/state/counters"
```

### Subscription mode (one of: "target_defined", "sample", "on_change") and interval

```
# subscription_mode = "sample"
# sample_interval = "10s"
```

### Suppress redundant transmissions when measured values are unchanged

```
# suppress_redundant = false
```

### If suppression is enabled, send updates at least every X seconds anyway

```
# heartbeat_interval = "60s"
```

## Accept metrics over InfluxDB 1.x HTTP API

```
# [inputs.http_listener]
#  service_address = ":8186"
```

### Maximum duration before timing out read of the request

```
# read_timeout = "10s"
```

### Maximum duration before timing out write of the response

```
# write_timeout = "10s"
```

### Maximum allowed HTTP request body size in bytes.

```
# max_body_size = "32MiB"
```
# Generic HTTP write listener
# [[inputs.http_listener_v2]]
# ## Address and port to host HTTP listener on
# service_address = ":8080"
#
# ## Path to listen to.
# ## This option is deprecated and only available for backward-compatibility. Please use paths instead.
# path = ""
#
# ## Paths to listen to.
# paths = ["/telegraf"]
#
# ## Save path as http_listener_v2_path tag if set to true
# path_tag = false
#
# ## HTTP methods to accept.
# methods = ["POST", "PUT"]
#
# ## maximum duration before timing out read of the request
# read_timeout = "10s"
# ## maximum duration before timing out write of the response
# write_timeout = "10s"
#
# ## Maximum allowed http request body size in bytes.
# ## 0 means to use the default of 524,288,000 bytes (500 mebibytes)
# max_body_size = "500MB"
#
## Part of the request to consume. Available options are "body" and
## "query".
# data_source = "body"
#
## Set one or more allowed client CA certificate file names to
## enable mutually authenticated TLS connections
# tls_allowed_cacerts = [
  "/etc/telegraf/clientca.pem"
]
#
## Add service certificate and key
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
## Optional username and password to accept for HTTP basic authentication.
# You probably want to make sure you have TLS configured above for this.
# basic_username = "foobar"
# basic_password = "barfoo"
#
## Optional setting to map http headers into tags
## If the http header is not present on the request, no corresponding tag will be added
## If multiple instances of the http header are present, only the first value will be used
# http_header_tags = {
  "HTTP_HEADER" = "TAG_NAME"
}
#
## Data format to consume.
## Each data format has its own unique set of configuration options, read
## more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# Accept metrics over InfluxDB 1.x HTTP API
# [[inputs.influxdb_listener]]
## Address and port to host InfluxDB listener on
# service_address = ":8186"
#
## maximum duration before timing out read of the request
# read_timeout = "10s"
## maximum duration before timing out write of the response
# write_timeout = "10s"
#
## Maximum allowed HTTP request body size in bytes.
## 0 means to use the default of 32MiB.
# max_body_size = "32MiB"
#
## Optional tag name used to store the database.
## If the write has a database in the query string then it will be kept in this tag name.
## This tag can be used in downstream outputs.
## # The default value of nothing means it will be off and the database will not be recorded.
## database_tag = ""
#
## If set the retention policy specified in the write query will be added as
## the value of this tag name.
## retention_policy_tag = ""
#
## Set one or more allowed client CA certificate file names to
## enable mutually authenticated TLS connections
## tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
## Add service certificate and key
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
#
## Optional username and password to accept for HTTP basic authentication.
## You probably want to make sure you have TLS configured above for this.
## basic_username = "foobar"
## basic_password = "barfoo"

## Accept metrics over InfluxDB 2.x HTTP API
[[inputs.influxdb_v2_listener]]
## Address and port to host InfluxDB listener on
## (Double check the port. Could be 9999 if using OSS Beta)
## service_address = ":8086"
#
## Maximum allowed HTTP request body size in bytes.
## 0 means to use the default of 32MiB.
## max_body_size = "32MiB"
#
## Optional tag to determine the bucket.
## If the write has a bucket in the query string then it will be kept in this tag name.
## This tag can be used in downstream outputs.
## The default value of nothing means it will be off and the database will not be recorded.
## bucket_tag = ""
#
## Set one or more allowed client CA certificate file names to
## enable mutually authenticated TLS connections
## tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
## Add service certificate and key
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
#
## Optional token to accept for HTTP authentication.
## You probably want to make sure you have TLS configured above for this.
## token = "some-long-shared-secret-token"
# # Intel Performance Monitoring Unit plugin exposes Intel PMU metrics available through Linux Perf subsystem
# [[inputs.intel_pmu]]
# # List of filesystem locations of JSON files that contain PMU event definitions.
# event_definitions = ["/var/cache/pmu/GenuineIntel-6-55-4-core.json", "/var/cache/pmu/GenuineIntel-6-55-4-uncore.json"]
# # List of core events measurement entities. There can be more than one core_events sections.
# [[inputs.intel_pmu.core_events]]
# # List of events to be counted. Event names shall match names from event_definitions files.
# # Single entry can contain name of the event (case insensitive) augmented with config options and perf modifiers.
# # If absent, all core events from provided event_definitions are counted skipping unresolvable ones.
# events = ["INST_RETIRED.ANY", "CPU_CLK_UNHALTED.THREAD_ANY:config1=0x4043200000000k"]
# # Limits the counting of events to core numbers specified.
# # If absent, events are counted on all cores.
# # Single "0", multiple "0,1,2" and range "0-2" notation is supported for each array element.
# # example: cores = ["0,2", "4", "12-16"]
# cores = ["0"]
# # Indicator that plugin shall attempt to run core_events.events as a single perf group.
# # If absent or set to false, each event is counted individually. Defaults to false.
# # This limits the number of events that can be measured to a maximum of available hardware counters per core.
# # Could vary depending on type of event, use of fixed counters.
# # perf_group = false
#
# # Optionally set a custom tag value that will be added to every measurement within this events group.
# # Can be applied to any group of events, unrelated to perf_group setting.
# # events_tag = ""
#
# # List of uncore event measurement entities. There can be more than one uncore_events sections.
# [[inputs.intel_pmu.uncore_events]]
# # List of events to be counted. Event names shall match names from event_definitions files.
# # Single entry can contain name of the event (case insensitive) augmented with config options and perf modifiers.
# # If absent, all uncore events from provided event_definitions are counted skipping unresolvable ones.
# events = ["UNC_CHA_CLOCKTICKS", "UNC_CHA_TOR_OCCUPANCY.IA_MISS"]
# # Limits the counting of events to specified sockets.
# # If absent, events are counted on all sockets.
# # Single "0", multiple "0,1" and range "0-1" notation is supported for each array element.
# # example: sockets = ["0-2"]
# sockets = ["0"]
# # Indicator that plugin shall provide an aggregated value for multiple units of same type distributed in an
Uncore.

# If absent or set to false, events for each unit are exposed as separate metric. Defaults to false.
# aggregate_uncore_units = false
#
# Optionally set a custom tag value that will be added to every measurement within this events group.
# events_tag = ""

# Intel Resource Director Technology plugin
# [inputs.intel_rdt]
### Optionally set sampling interval to Nx100ms.
### This value is propagated to pqos tool. Interval format is defined by pqos itself.
### If not provided or provided 0, will be set to 10 = 10x100ms = 1s.
# sampling_interval = "10"
#
### Optionally specify the path to pqos executable.
### If not provided, auto discovery will be performed.
# pqos_path = "/usr/local/bin/pqos"
#
### Optionally specify if IPC and LLC_Misses metrics shouldn't be propagated.
### If not provided, default value is false.
# shortened_metrics = false
#
### Specify the list of groups of CPU core(s) to be provided as pqos input.
### Mandatory if processes aren't set and forbidden if processes are specified.
### e.g. ["0-3", "4,5,6"] or ["1-3,4"]
# cores = ["0-3"]
#
### Specify the list of processes for which Metrics will be collected.
### Mandatory if cores aren't set and forbidden if cores are specified.
### e.g. ["qemu", "pmd"]
# processes = ["process"]
#
### Specify if the pqos process should be called with sudo.
### Mandatory if the telegraf process does not run as root.
# use_sudo = false

# Read JTI OpenConfig Telemetry from listed sensors
# [inputs.jti_openconfig_telemetry]
### List of device addresses to collect telemetry from
# servers = ["localhost:1883"]
#
### Authentication details. Username and password are must if device expects
### authentication. Client ID must be unique when connecting from multiple instances
# of telegraf to the same device
# username = "user"
# password = "pass"
# client_id = "telegraf"
#
# ## Frequency to get data
# sample_frequency = "1000ms"
#
# ## Sensors to subscribe for
# ## A identifier for each sensor can be provided in path by separating with space
# ## Else sensor path will be used as identifier
# ## When identifier is used, we can provide a list of space separated sensors.
# ## A single subscription will be created with all these sensors and data will
# ## be saved to measurement with this identifier name
# sensors = [
#   "/interfaces/",
#   "collection /components/ /lldp",
#   ]
#
# ## We allow specifying sensor group level reporting rate. To do this, specify the
# ## reporting rate in Duration at the beginning of sensor paths / collection
# ## name. For entries without reporting rate, we use configured sample frequency
# sensors = [
#   "1000ms customReporting /interfaces /lldp",
#   "2000ms collection /components",
#   "/interfaces",
#   ]
#
# ## Optional TLS Config
# # enable_tls = true
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Delay between retry attempts of failed RPC calls or streams. Defaults to 1000ms.
# ## Failed streams/calls will not be retried if 0 is provided
# retry_delay = "1000ms"
#
# ## To treat all string values as tags, set this to true
# str_as_tags = false
#
# ## Read metrics from Kafka topics
# [[inputs.kafka_consumer]]
# ## Kafka brokers.
# # brokers = ["localhost:9092"]
##
# ## Topics to consume.
# topics = ["telegraf"]
## Topic Tag

When set this tag will be added to all metrics with the topic as the value.

```
# topic_tag = ""
```

## Optional Client id

```
# client_id = "Telegraf"
```

## Minimal Supported Kafka Version

Set the minimal supported Kafka version. Setting this enables the use of new Kafka features and APIs. Must be 0.10.2.0 or greater.

```
# ex: version = "1.1.0"
# version = ""
```

## Optional TLS Config

```
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
```

## SASL Authentication Credentials

These settings should typically be used with TLS encryption enabled.

```
# sasl_username = "kafka"
# sasl_password = "secret"
```

## Optional SASL

One of: OAUTHBEARER, PLAIN, SCRAM-SHA-256, SCRAM-SHA-512, GSSAPI (defaults to PLAIN)

```
# sasl_mechanism = ""
```

## GSSAPI

```
# sasl_gssapi_service_name = ""
# One of: KRB5_USER_AUTH and KRB5_KEYTAB_AUTH
# sasl_gssapi_auth_type = "KRB5_USER_AUTH"
# sasl_gssapi_kerberos_config_path = "/"
# sasl_gssapi_realm = "realm"
# sasl_gssapi_key_tab_path = ""
# sasl_gssapi_disable_pafxfast = false
```

## OAuthBearer

```
# sasl_access_token = ""
```

## SASL Protocol Version

When connecting to Azure EventHub set to 0.

```
# sasl_version = 1
```

## Disable Kafka Metadata Full Fetch

```
# metadata_full = false
```

## Consumer Group Name
# consumer_group = "telegraf_metrics_consumers"
#
# compression_codec represents the various compression codecs recognized by Kafka: None, Gzip, Snappy, LZ4, ZSTD
# compression_codec = 0
#
# Initial offset position; one of "oldest" or "newest".
# offset = "oldest"
#
# Consumer group partition assignment strategy; one of "range", "roundrobin" or "sticky".
# balance_strategy = "range"
#
# Maximum length of a message to consume, in bytes (default 0/unlimited); larger messages are dropped
# max_message_len = 1000000
#
# Maximum messages to read from the broker that have not been written by an output. For best throughput set based on the number of metrics within each message and the size of the output's metric_batch_size.
# max_undelivered_messages = 1000
#
# Maximum amount of time the consumer should take to process messages. If the debug log prints messages from sarama about 'abandoning subscription because consuming was taking too long', increase this value to longer than the time taken by the output plugin(s).
# max_processing_time = "100ms"
#
# Data format to consume.
# Each data format has its own unique set of configuration options, read more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# Read metrics from Kafka topic(s)
# [[inputs.kafka_consumer_legacy]]
# ## DEPRECATED: The 'kafka_consumer_legacy' plugin is deprecated in version 1.4.0, use 'inputs.kafka_consumer' instead, NOTE: 'kafka_consumer' only supports Kafka v0.8+.
# ## topic(s) to consume
# topics = ["telegraf"]
#
# ## an array of Zookeeper connection strings
# zookeeper_peers = ["localhost:2181"]
#
# ## Zookeeper Chroot
# zookeeper_chroot = ""
#
# ## the name of the consumer group
# consumer_group = "telegraf_metrics_consumers"
#
# ## Offset (must be either "oldest" or "newest")
# offset = "oldest"
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# ## Maximum length of a message to consume, in bytes (default 0/unlimited);
# larger messages are dropped
# max_message_len = 65536

# Configuration for the AWS Kinesis input.
# [[inputs.kinesis_consumer]]
# ## Amazon REGION of kinesis endpoint.
# region = "ap-southeast-2"
#
# ## Amazon Credentials
# ## Credentials are loaded in the following order
# ## 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# ## 2) Assumed credentials via STS if role_arn is specified
# ## 3) explicit credentials from 'access_key' and 'secret_key'
# ## 4) shared profile from 'profile'
# ## 5) environment variables
# ## 6) shared credentials file
# ## 7) EC2 Instance Profile
# # access_key = ""
# # secret_key = ""
# # token = ""
# # role_arn = ""
# # web_identity_token_file = ""
# role_session_name = ""
# profile = ""
# shared_credential_file = ""
#
# Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
default.
# ex: endpoint_url = "http://localhost:8000"
# endpoint_url = ""
#
# Kinesis StreamName must exist prior to starting telegraf.
# streamname = "StreamName"
#
# Shard iterator type (only 'TRIM_HORIZON' and 'LATEST' currently supported)
# shard_iterator_type = "TRIM_HORIZON"
#
# Maximum messages to read from the broker that have not been written by an
# output. For best throughput set based on the number of metrics within
# each message and the size of the output's metric_batch_size.
#
# For example, if each message from the queue contains 10 metrics and the
# output metric_batch_size is 1000, setting this to 100 will ensure that a
# full batch is collected and the write is triggered immediately without
# waiting until the next flush_interval.
# max_undelivered_messages = 1000
#
# Data format to consume.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# The content encoding of the data from kinesis
# If you are processing a cloudwatch logs kinesis stream then set this to "gzip"
# as AWS compresses cloudwatch log data before it is sent to kinesis (aws
# also base64 encodes the zip byte data before pushing to the stream. The base64 decoding
# is done automatically by the golang sdk, as data is read from kinesis)
# content_encoding = "identity"
#
# Optional
# Configuration for a dynamodb checkpoint
# [inputs.kinesis_consumer.checkpoint_dynamodb]
# unique name for this consumer
# app_name = "default"
# table_name = "default"
## Listener capable of handling KNX bus messages provided through a KNX-IP Interface.

```
# [[inputs.knx_listener]]
# ## Type of KNX-IP interface.
# ## Can be either "tunnel" or "router".
# ## Address of the KNX-IP interface.
# service_type = "tunnel"
# service_address = "localhost:3671"

# ## Measurement definition(s)
# # [[inputs.knx_listener.measurement]]
# # ## Name of the measurement
# # name = "temperature"
# # ## Datapoint-Type (DPT) of the KNX messages
# # dpt = "9.001"
# # ## List of Group-Addresses (GAs) assigned to the measurement
# # addresses = ["/5/5/1"]

# # Name = "illumination"
# dpt = "9.004"
# addresses = ["/5/5/3"]
```

## Read metrics off Arista LANZ, via socket

```
# [[inputs.lanz]]
# ## URL to Arista LANZ endpoint
# servers = [
#   "tcp://127.0.0.1:50001"
# ]
```

## Stream and parse log file(s).

```
# [[inputs.logparser]]
# ## DEPRECATED: The 'logparser' plugin is deprecated in version 1.15.0, use 'inputs.tail' with 'grok' data format instead.
# ## Log files to parse.
# ## These accept standard unix glob matching rules, but with the addition of
# ## ** as a "super asterisk". ie:
# ## /var/log/**.log -> recursively find all .log files in /var/log
# ## /var/log/*/ log -> find all .log files with a parent dir in /var/log
# ## /var/log/apache.log -> only tail the apache log file
# files = ["/var/log/apache/access.log"]
```

# ## Read files that currently exist from the beginning. Files that are created
# ## while telegraf is running (and that match the "files" globs) will always
# ## be read from the beginning.
# from_beginning = false
#
# ## Method used to watch for file updates. Can be either "inotify" or "poll".
# watch_method = "inotify"
#
# ### Parse logstash-style "grok" patterns:
# [inputs.logparser.grok]
#     ## This is a list of patterns to check the given log file(s) for.
#     ## Note that adding patterns here increases processing time. The most
#     ## efficient configuration is to have one pattern per logparser.
#     ## Other common built-in patterns are:
#     ##   %\{COMMON\_LOG\_FORMAT\} (plain apache & nginx access logs)
#     ##   %\{COMBINED\_LOG\_FORMAT\} (access logs + referrer & agent)
#     patterns = "["%\{COMBINED\_LOG\_FORMAT\}"]"
#
#     ## Name of the outputted measurement name.
#     measurement = "apache_access_log"
#
#     ## Full path(s) to custom pattern files.
#     custom_pattern_files = []
#
#     ## Custom patterns can also be defined here. Put one pattern per line.
#     custom_patterns = ""
#     ""
#
#     ## Timezone allows you to provide an override for timestamps that
#     ## don't already include an offset
#     ## e.g. 04/06/2016 12:41:45 data one two 5.43μs
#     ## Default: "" which renders UTC
#     timezone = "Canada/Eastern"
#
#     ## When set to "disable", timestamp will not incremented if there is a
#     ## duplicate.
#     unique_timestamp = "auto"
#
# [inputs.mqtt_consumer]
#     ## Broker URLs for the MQTT server or cluster. To connect to multiple
#     ## clusters or standalone servers, use a separate plugin instance.
#     example: servers = ["tcp://localhost:1883"]
#     servers = ["ssl://localhost:1883"]
servers = ["ws://localhost:1883"]
servers = ["tcp://127.0.0.1:1883"]

# Topics that will be subscribed to.

# servers = ["ws://localhost:1883"]
# servers = ["tcp://127.0.0.1:1883"]
# topics = [
#     "telegraf/host01/cpu",
#     "telegraf/+/mem",
#     "sensors/#",
# ]
# topic_fields = "/_/_/temperature"

# The message topic will be stored in a tag specified by this value. If set
to the empty string no topic tag will be created.

# topic_tag = "topic"

# QoS policy for messages

# 0 = at most once
# 1 = at least once
# 2 = exactly once

# When using a QoS of 1 or 2, you should enable persistent_session to allow
resuming unacknowledged messages.

# qos = 0

# Connection timeout for initial connection in seconds

# connection_timeout = "30s"

# Maximum messages to read from the broker that have not been written by an
output. For best throughput set based on the number of metrics within
# each message and the size of the output's metric_batch_size.

# For example, if each message from the queue contains 10 metrics and the
# output metric_batch_size is 1000, setting this to 100 will ensure that a
# full batch is collected and the write is triggered immediately without
# waiting until the next flush_interval.

# max_undelivered_messages = 1000

# Persistent session disables clearing of the client session on connection.

# In order for this option to work you must also set client_id to identify
# the client. To receive messages that arrived while the client is offline,
# also set the qos option to 1 or 2 and don't forget to also set the QoS when
# publishing.

# persistent_session = false

# If unset, a random client ID will be generated.

# client_id = ""

# Username and password to connect MQTT server.

# username = "telegraf"

# password = "metricsmetricsmetricsmetrics"

# Optional TLS Config

# tls_ca = "/etc/telegraf/ca.pem"

# tls_cert = "/etc/telegraf/cert.pem"

# tls_key = "/etc/telegraf/key.pem"

# Use TLS but skip chain & host verification

# insecure_skip_verify = false
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
# ## Enable extracting tag values from MQTT topics
# ## _ denotes an ignored entry in the topic path
# ## [[inputs.mqtt_consumer.topic_parsing]]
# ## topic = ""
# ## measurement = ""
# ## tags = ""
# ## fields = ""
# ## [inputs.mqtt_consumer.topic_parsing.types]
# ##
#
# # Read metrics from NATS subject(s)
# [[inputs.nats_consumer]]
# ## urls of NATS servers
# servers = ["nats://localhost:4222"]
# # ## subject(s) to consume
# subjects = ["telegraf"]
# # ## name a queue group
# queue_group = "telegraf_consumers"
# # ## Optional credentials
# # username = ""
# # password = ""
# # ## Optional NATS 2.0 and NATS NGS compatible user credentials
# # credentials = "/etc/telegraf/nats.creds"
# # ## Use Transport Layer Security
# # secure = false
# # ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
# # ## Sets the limits for pending msgs and bytes for each subscription
# # These shouldn't need to be adjusted except in very high throughput scenarios
# # pending_message_limit = 65536
# # pending_bytes_limit = 67108864
# Maximum messages to read from the broker that have not been written by an output. For best throughput set based on the number of metrics within each message and the size of the output's metric_batch_size.

For example, if each message from the queue contains 10 metrics and the output metric_batch_size is 1000, setting this to 100 will ensure that a full batch is collected and the write is triggered immediately without waiting until the next flush_interval.

# max_undelivered_messages = 1000

# Data format to consume.
# Each data format has its own unique set of configuration options, read more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md

# data_format = "influx"

# Read NSQ topic for metrics.
# [[inputs.nsq_consumer]]
# Server option still works but is deprecated, we just prepend it to the nsqd array.
# server = "localhost:4150"

# An array representing the NSQD TCP HTTP Endpoints
# nsqd = ["localhost:4150"]

# An array representing the NSQLookupd HTTP Endpoints
# nsqlookupd = ["localhost:4161"]
# topic = "telegraf"
# channel = "consumer"
# max_in_flight = 100

# Maximum messages to read from the broker that have not been written by an output. For best throughput set based on the number of metrics within each message and the size of the output's metric_batch_size.

# For example, if each message from the queue contains 10 metrics and the output metric_batch_size is 1000, setting this to 100 will ensure that a full batch is collected and the write is triggered immediately without waiting until the next flush_interval.

# max_undelivered_messages = 1000

# Data format to consume.
# Each data format has its own unique set of configuration options, read more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md

# data_format = "influx"
# # Receive OpenTelemetry traces, metrics, and logs over gRPC
# [[inputs.opentelemetry]]
# # Override the default (0.0.0.0:4317) destination OpenTelemetry gRPC service
# # address:port
# # service_address = "0.0.0.0:4317"
# # Override the default (5s) new connection timeout
# # timeout = "5s"
# # Override the default (prometheus-v1) metrics schema.
# # Supports: "prometheus-v1", "prometheus-v2"
# # For more information about the alternatives, read the Prometheus input
# # plugin notes.
# # metrics_schema = "prometheus-v1"
# # Optional TLS Config.
# # For advanced options: https://github.com/influxdata/telegraf/blob/v1.18.3/docs/TLS.md
# # Set one or more allowed client CA certificate file names to
# # enable mutually authenticated TLS connections.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
# # Add service certificate and key.
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"

# # Read metrics from one or many pgbouncer servers
# [[inputs.pgbouncer]]
# # specify address via a url matching:
# # postgres://[pqgotest[:password]]@localhost[/dbname]?
# # ?sslmode=[disable|verify-ca|verify-full]
# # or a simple string:
# # host=localhost user=pqgotest password=... sslmode=... dbname=app_production
# # All connection parameters are optional.
# # address = "host=localhost user=pgbouncer sslmode=disable"

# # Read metrics from one or many postgresql servers
# [[inputs.postgresql]]
# # specify address via a url matching:
# # postgres://[pqgotest[:password]]@localhost[/dbname]?
# # ?sslmode=[disable|verify-ca|verify-full]
# # or a simple string:
# # host=localhost user=pqgotest password=... sslmode=... dbname=app_production
# #
# ## All connection parameters are optional.
# ## Without the dbname parameter, the driver will default to a database
# ## with the same name as the user. This dbname is just for instantiating a
# ## connection with the server and doesn't restrict the databases we are trying
# ## to grab metrics for.
# ##
# address = "host=localhost user=postgres sslmode=disable"
# ## A custom name for the database that will be used as the "server" tag in the
# ## measurement output. If not specified, a default one generated from
# ## the connection address is used.
# # outputaddress = "db01"
#
# ## connection configuration.
# ## maxlifetime - specify the maximum lifetime of a connection.
# ## default is forever (0s)
# max_lifetime = "0s"
#
# ## A list of databases to explicitly ignore. If not specified, metrics for all
# ## databases are gathered. Do NOT use with the 'databases' option.
# # ignored_databases = ["postgres", "template0", "template1"]
# 
# ## A list of databases to pull metrics about. If not specified, metrics for all
# ## databases are gathered. Do NOT use with the 'ignored_databases' option.
# # databases = ["app_production", "testing"]

## Read metrics from one or many postgresql servers
## [inputs.postgresql_extensible]
## specify address via a url matching:
## postgres://[pqgotest[:password]]@localhost[/dbname]/
## ?sslmode=[disable|verify-ca|verify-full]
## or a simple string:
## host=localhost user=pqgotest password=... sslmode=... dbname=app_production
##
## All connection parameters are optional. #
## Without the dbname parameter, the driver will default to a database
## with the same name as the user. This dbname is just for instantiating a
## connection with the server and doesn't restrict the databases we are trying
## to grab metrics for.
##
## address = "host=localhost user=postgres sslmode=disable"
##
## connection configuration.
## maxlifetime - specify the maximum lifetime of a connection.
## default is forever (0s)
## max_lifetime = "0s"
# A list of databases to pull metrics about. If not specified, metrics for all databases are gathered.
# databases = ["app_production", "testing"]
#
# A custom name for the database that will be used as the "server" tag in the measurement output. If not specified, a default one generated from the connection address is used.
# outputaddress = "db01"
#
# Define the toml config where the sql queries are stored
# New queries can be added, if the withdbname is set to true and there is no databases defined in the 'databases field', the sql query is ended by a "is not null" in order to make the query succeed.
# Example :
# The sqlquery : "SELECT * FROM pg_stat_database where datname" become "SELECT * FROM pg_stat_database where datname IN ('postgres', 'pgbench')" because the databases variable was set to ['postgres', 'pgbench'] and the with dbname was true. Be careful that if the withdbname is set to false you don't have to define the where clause (aka with the dbname) the tagvalue field is used to define custom tags (separated by commas)
# The optional "measurement" value can be used to override the default output measurement name ("postgresql").
#
# The script option can be used to specify the .sql file path.
# If script and sqlquery options specified at same time, sqlquery will be used
#
# the tagvalue field is used to define custom tags (separated by commas).
# the query is expected to return columns which match the names of the defined tags. The values in these columns must be of a string-type, a number-type or a blob-type.
#
# The timestamp field is used to override the data points timestamp value. By default, all rows inserted with current time. By setting a timestamp column, the row will be inserted with that column's value.
#
# Structure :
# [[inputs.postgresql_extensible.query]]
# sqlquery string
# version string
# withdbname boolean
# tagvalue string (comma separated)
# measurement string
# timestamp string
# [[inputs.postgresql_extensible.query]]
# sqlquery="SELECT * FROM pg_stat_database"
# version=901
# withdbname=false
# tagvalue=""
# measurement=""
# [[inputs.postgresql_extensible.query]]
# sqlquery="SELECT * FROM pg_stat_b Clashwriter"
# version=901
# withdbname=false
# tagvalue="postgresql.stats"

## Read metrics from one or many Prometheus clients
## [[inputs.prometheus]]
## An array of urls to scrape metrics from.
## urls = ["http://localhost:9100/metrics"]
## Metric version controls the mapping from Prometheus metrics into
## Telegraf metrics. When using the prometheus_client output, use the same
## value in both plugins to ensure metrics are round-tripped without
## modification.
##
## example: metric_version = 1;
## metric_version = 2; recommended version
## metric_version = 1
#
## Url tag name (tag containing scrapped url. optional, default is "url")
## url_tag = "url"
#
## Whether the timestamp of the scraped metrics will be ignored.
## If set to true, the gather time will be used.
## ignore_timestamp = false
#
## An array of Kubernetes services to scrape metrics from.
## kubernetes_services = ["http://my-service-dns.my-namespace:9100/metrics"]
## Kubernetes config file to create client from.
## kube_config = "/path/to/kubernetes.config"
##
## Scrape Kubernetes pods for the following Prometheus annotations:
## prometheus.io/scrape: Enable scraping for this pod
## prometheus.io/schema: If the metrics endpoint is secured then you will need to
## set this to 'https' & most likely set the tls config.
## prometheus.io/path: If the metrics path is not /metrics, define it with this annotation.
## prometheus.io/port: If port is not 9102 use this annotation
## monitor_kubernetes_pods = true
## Get the list of pods to scrape with either the scope of
## cluster: the Kubernetes watch api (default, no need to specify)
## node: the local cadvisor api; for scalability. Note that the config node_ip or the environment variable
## NODE_IP must be set to the host IP.
## pod_scrape_scope = "cluster"
## Only for node scrape scope: node IP of the node that telegraf is running on.
## Either this config or the environment variable NODE_IP must be set.
## node_ip = "10.180.1.1"

## Only for node scrape scope: interval in seconds for how often to get updated pod list for scraping.
## Default is 60 seconds.
## pod_scrape_interval = 60

## Restricts Kubernetes monitoring to a single namespace
## ex: monitor_kubernetes_pods_namespace = "default"
## monitor_kubernetes_pods_namespace = ""

## label selector to target pods which have the label
## kubernetes_label_selector = "env=dev.app=nginx"
## field selector to target pods
## eg. To scrape pods on a specific node
## kubernetes_field_selector = "spec.nodeName=$HOSTNAME"

## Scrape Services available in Consul Catalog
## [inputs.prometheus.consul]
## enabled = true
## agent = "http://localhost:8500"
## query_interval = "5m"
##
## [inputs.prometheus.consul.query]
## name = "a service name"
## tag = "a service tag"
## url = "http://([if ne .ServiceAddress ""

## HTTP Basic Authentication username and password. ('bearer_token' and
## 'bearer_token_string' take priority)
## username = ""
## password = ""

## Specify timeout duration for slower prometheus clients (default is 3s)
## response_timeout = "3s"

## Optional TLS Config
## tls_ca = /path/to/cafile
## tls_cert = /path/to/certfile
## tls_key = /path/to/keyfile
## Use TLS but skip chain & host verification
## insecure_skip_verify = false
## RAS plugin exposes counter metrics for Machine Check Errors provided by RASDaemon (sqlite3 output is required).

```
# [[inputs.ras]]
# ## Optional path to RASDaemon sqlite3 database.
# ## Default: /var/lib/rasdaemon/ras-mc_event.db
# # db_path = ""
```

## Riemann protobuf listener.
```
# [[inputs.riemann_listener]]
# ## URL to listen on.
# ## Default is "tcp://:5555"
# # service_address = "tcp://:8094"
# # service_address = "tcp://127.0.0.1:http"
# # service_address = "tcp4://:8094"
# # service_address = "tcp6://:8094"
# # service_address = "tcp6://[2001:db8::1]:8094"
# #
# ## Maximum number of concurrent connections.
# ## 0 (default) is unlimited.
# # max_connections = 1024
# ## Read timeout.
# ## 0 (default) is unlimited.
# # read_timeout = "30s"
# ## Optional TLS configuration.
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Enables client authentication if set.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
# ## Maximum socket buffer size (in bytes when no unit specified).
# # read_buffer_size = "64KiB"
# ## Period between keep alive probes.
# ## 0 disables keep alive probes.
# ## Defaults to the OS configuration.
# # keep_alive_period = "5m"
```

## SFlow V5 Protocol Listener
```
# [[inputs.sflow]]
# ## Address to listen for sFlow packets.
# ## example: service_address = "udp://:6343"
# ## service_address = "udp4://:6343"
# ## service_address = "udp6://:6343"
# service_address = "udp://:6343"
# # ## Set the size of the operating system's receive buffer.
```
## [inputs.snmp_trap]
### Transport, local address, and port to listen on. Transport must
### be "udp://". Omit local address to listen on all interfaces.
### example: "udp://127.0.0.1:1234"
###
### Special permissions may be required to listen on a port less than
### 1024. See README.md for details
###
### service_address = "udp://:162"
###
### Path to mib files
### path = ["/usr/share/snmp/mibs"]
###
### Deprecated in 1.20.0; no longer running smnptranlate
### Timeout running smnptranlate command
### timeout = "5s"
### Snmp version, defaults to 2c
### version = "2c"
### SNMPv3 authentication and encryption options.
###
### Security Name.
### sec_name = "myuser"
### Authentication protocol; one of "MD5", "SHA" or "."
### auth_protocol = "MD5"
### Authentication password.
### auth_password = "pass"
### Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".
### sec_level = "authNoPriv"
### Privacy protocol used for encrypted messages; one of "DES", "AES", "AES192", "AES192C", "AES256", "AES256C" or "."
### priv_protocol = "."
### Privacy password used for encrypted messages.
### priv_password = "."

## [inputs.socket_listener]
### URL to listen on
### service_address = "tcp://:8094"
### service_address = "tcp://127.0.0.1:http"
### service_address = "tcp4://:8094"
### service_address = "tcp6://:8094"
### service_address = "tcp6://[2001:db8::1]:8094"
# service_address = "udp://:8094"
# service_address = "udp4://:8094"
# service_address = "udp6://:8094"
# service_address = "unix:///tmp/telegraf.sock"
# service_address = "unixgram:///tmp/telegraf.sock"

# ## Change the file mode bits on unix sockets. These permissions may not be
# ## respected by some platforms, to safely restrict write permissions it is best
# ## to place the socket into a directory that has previously been created
# ## with the desired permissions.
# ## ex: socket_mode = "777"
# socket_mode = ""

# ## Maximum number of concurrent connections.
# ## Only applies to stream sockets (e.g. TCP).
# ## 0 (default) is unlimited.
# max_connections = 1024

# ## Read timeout.
# ## Only applies to stream sockets (e.g. TCP).
# ## 0 (default) is unlimited.
# read_timeout = "30s"

# ## Optional TLS configuration.
# ## Only applies to stream sockets (e.g. TCP).
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# ## Enables client authentication if set.
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]

# ## Maximum socket buffer size (in bytes when no unit specified).
# ## For stream sockets, once the buffer fills up, the sender will start backing up.
# ## For datagram sockets, once the buffer fills up, metrics will start dropping.
# ## Defaults to the OS default.
# read_buffer_size = "64KiB"

# ## Period between keep alive probes.
# ## Only applies to TCP sockets.
# ## 0 disables keep alive probes.
# ## Defaults to the OS configuration.
# keep_alive_period = "5m"

# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
### Content encoding for message payloads, can be set to "gzip" to or "identity" to apply no encoding.

```
# content_encoding = "identity"
```

### Read metrics from SQL queries

```
# [[inputs.sql]]
# Database Driver
# See https://github.com/influxdata/telegraf/blob/master/docs/SQL_DRIVERS_INPUT.md for a list of supported drivers.
# driver = "mysql"
#
# Data source name for connecting
# The syntax and supported options depends on selected driver.
# dsn = "username:password@mysqlserver:3307/dbname?param=value"
#
# Timeout for any operation
# Note that the timeout for queries is per query not per gather.
# timeout = "5s"
#
# Connection time limits
# By default the maximum idle time and maximum lifetime of a connection is unlimited, i.e. the connections will not be closed automatically. If you specify a positive time, the connections will be closed after idleing or existing for at least that amount of time, respectively.
# connection_max_idle_time = "0s"
# connection_max_life_time = "0s"
#
# Connection count limits
# By default the number of open connections is not limited and the number of maximum idle connections will be inferred from the number of queries specified. If you specify a positive number for any of the two options, connections will be closed when reaching the specified limit. The number of idle connections will be clipped to the maximum number of connections limit if any.
# connection_max_open = 0
# connection_max_idle = auto
#
# Query to perform on the server
# query="SELECT user,state,latency,score FROM Scoreboard WHERE application > 0"
# Alternatively to specifying the query directly you can select a file here containing the SQL query.
# query_script = "/path/to/sql/script.sql"
#
# Name of the measurement
# In case both measurement and 'measurement_col' are given, the latter takes precedence.
# measurement = "sql"
#
# Column name containing the name of the measurement
# If given, this will take precedence over the 'measurement' setting. In case a query result..."
## Read metrics from Microsoft SQL Server

```
[[inputs.sqlserver]]

### Specify instances to monitor with a list of connection strings.

### All connection parameters are optional.

### By default, the host is localhost, listening on default port, TCP 1433.

### for Windows, the user is the currently running AD user (SSO).

### See https://github.com/denisenkom/go-mssqldb for detailed connection parameters, in particular, tls connections can be created like so:

```sh
"encrypt=true;certificate=<cert>;hostNameInCertificate=<SqlServer host fqdn>"
```

```json
servers = [
  "Server=192.168.1.10;Port=1433;User Id=<user>;Password=<pw>;app name=telegraf;log=1;",
]
```
## Authentication method

- **valid methods**: "connection_string", "AAD"
- **auth_method** = "connection_string"

## database_type

- Enables a specific set of queries depending on the database type. If specified, it replaces azuredb = true/false and query_version = 2
- **Possible values** for database_type are - "SQLServer" or "AzureSQLDB" or "AzureSQLMIManagedInstance" or "AzureSQLPool"

## database_type = "SQLServer"

- **A list of queries to include**. If not specified, all the below listed queries are used.
- include_query = []

## A list of queries to explicitly ignore.
- exclude_query = ["SQLServerAvailabilityReplicaStates", "SQLServerDatabaseReplicaStates"]

## Queries enabled by default for database_type = "SQLServer" are -
- SQLServerPerformanceCounters, SQLServerWaitStatsCategorized, SQLServerDatabaseIO, SQLServerProperties, SQLServerMemoryClerks, SQLServerSchedulers, SQLServerRequests, SQLServerVolumeSpace, SQLServerCpu, SQLServerAvailabilityReplicaStates, SQLServerDatabaseReplicaStates

## Queries enabled by default for database_type = "AzureSQLDB" are -

## Queries enabled by default for database_type = "AzureSQLMIManagedInstance" are -

## Queries enabled by default for database_type = "AzureSQLPool" are -

## Following are old config settings

- You may use them only if you are using the earlier flavor of queries, however it is recommended to use
  - the new mechanism of identifying the database_type there by use it's corresponding queries

## Optional parameter, setting this to 2 will use a new version
### Statsd UDP/TCP Server

---

# [inputs.statsd]

#### Protocol, must be "tcp", "udp", "udp4" or "udp6" (default=udp)

```
protocol = "udp"
```

#### MaxTCPConnection - applicable when protocol is set to tcp (default=250)

```
max_tcp_connections = 250
```

#### Enable TCP keep alive probes (default=false)

```
tcp_keep_alive = false
```

#### Specifies the keep-alive period for an active network connection. Only applies to TCP sockets and will be ignored if tcp_keep_alive is false.

```
tcp_keep_alive_period = "2h"
```

#### Address and port to host UDP listener on

```
service_address = ":8125"
```

#### The following configuration options control when telegraf clears it's cache of previous values. If set to false, then telegraf will only clear it's cache when the daemon is restarted.

- Reset gauges every interval (default=true)
  - delete_gauges = true

- Reset counters every interval (default=true)
  - delete_counters = true

- Reset sets every interval (default=true)
  - delete_sets = true

- Reset timings & histograms every interval (default=true)
  - delete_timings = true

#### Percentiles to calculate for timing & histogram stats

```
percentiles = [50.0, 90.0, 99.0, 99.9, 99.95, 100.0]
```

#### separator to use between elements of a statsd metric

```
metric_separator = ":`
```

#### Parses tags in the datadog statsd format

```
http://docs.datadog.com/guides/dogstatsd/
```
# parse_data_dog_tags = false
#
# ## Parses datadog extensions to the statsd format
# datadog_extensions = false
#
# ## Parses distributions metric as specified in the datadog statsd format
# datadog_distributions = false
#
# ## Statsd data translation templates, more info can be read here:
# https://github.com/influxdata/telegraf/blob/master/docs/TEMPLATE_PATTERN.md
# # templates = [
# #     "cpu.* measurement*"
# # ]
#
# ## Number of UDP messages allowed to queue up, once filled,
# ## the statsd server will start dropping packets
# allowed_pending_messages = 10000
#
# ## Number of timing/histogram values to track per-measurement in the
# ## calculation of percentiles. Raising this limit increases the accuracy
# ## of percentiles but also increases the memory usage and cpu time.
# percentile_limit = 1000
#
# ## Max duration (TTL) for each metric to stay cached/reported without being updated.
# max_ttl = "1000h"

# Suricata stats and alerts plugin
# [[inputs.suricata]]
# ## Data sink for Suricata stats and alerts logs
# This is expected to be a filename of a
# unix socket to be created for listening.
# source = "/var/run/suricata-stats.sock"
#
# ## Delimiter for flattening field keys, e.g. subitem "alert" of "detect"
# becomes "detect_alert" when delimiter is ".".
# delimiter = "."
#
# ## Detect alert logs
# alerts = false

# Accepts syslog messages following RFC5424 format with transports as per RFC5426, RFC5425, or RFC6587
# [[inputs.syslog]]
# ## Specify an ip or hostname with port - eg., tcp://localhost:6514, tcp://10.0.0.1:6514
# ## Protocol, address and port to host the syslog receiver.
# ## If no host is specified, then localhost is used.
## If no port is specified, 6514 is used (RFC5425#section-4.1).
## server = "tcp://:6514"
##
## TLS Config
## # tls_allowed_cacerts = ["/etc/telegraf/ca.pem"]
## # tls_cert = "/etc/telegraf/cert.pem"
## # tls_key = "/etc/telegraf/key.pem"
##
## Period between keep alive probes.
## # 0 disables keep alive probes.
## # Defaults to the OS configuration.
## # Only applies to stream sockets (e.g. TCP).
## # keep_alive_period = "5m"
##
## Maximum number of concurrent connections (default = 0).
## # 0 means unlimited.
## # Only applies to stream sockets (e.g. TCP).
## # max_connections = 1024
##
## Read timeout is the maximum time allowed for reading a single message (default = 5s).
## # 0 means unlimited.
## # read_timeout = "5s"
##
## The framing technique with which it is expected that messages are transported (default = "octet-counting").
## # Whether the messages come using the octet-counting (RFC5425#section-4.3.1, RFC6587#section-3.4.1),
## # or the non-transparent framing technique (RFC6587#section-3.4.2).
## # Must be one of "octet-counting", "non-transparent".
## # framing = "octet-counting"
##
## The trailer to be expected in case of non-transparent framing (default = "LF").
## # Must be one of "LF", or "NUL".
## # trailer = "LF"
##
## Whether to parse in best effort mode or not (default = false).
## # By default best effort parsing is off.
## # best_effort = false
##
## The RFC standard to use for message parsing
## # By default RFC5424 is used. RFC3164 only supports UDP transport (no streaming support)
## # Must be one of "RFC5424", or "RFC3164".
## # syslog_standard = "RFC5424"
##
## Character to prepend to SD-PARAMs (default = ".").
## # A syslog message can contain multiple parameters and multiple identifiers within structured data section.
## # Eg., [id1 name1="val1" name2="val2"] [id2 name1="val1" nameA="valA"]
## # For each combination a field is created.
## # Its name is created concatenating identifier, sdparam_separator, and parameter name.
## # sdparam_separator = "."
## Parse the new lines appended to a file

```yaml
# [[inputs.tail]]
# File names or a pattern to tail.
# These accept standard unix glob matching rules, but with the addition of
# ** as a "super asterisk". ie:
# "*/var/log/*/*.log"  -> recursively find all .log files in /var/log
# "*/var/log/*/*.log"  -> find all .log files with a parent dir in /var/log
# "*/var/log/apache.log"  -> just tail the apache log file
# "*/var/log/log[1-2]*"  -> tail files without 1-2
# "*/var/log/log[^1-2]*"  -> identical behavior as above
# See https://github.com/gobwas/glob for more examples
#
# files = ["/var/mymetrics.out"]
#
# Read file from beginning.
# from_beginning = false
#
# Whether file is a named pipe
# pipe = false
#
# Method used to watch for file updates. Can be either "inotify" or "poll".
# watch_method = "inotify"
#
# Maximum lines of the file to process that have not yet be written by the
# output. For best throughput set based on the number of metrics on each
# line and the size of the output's metric_batch_size.
# max_undelivered_lines = 1000
#
# Character encoding to use when interpreting the file contents. Invalid
# characters are replaced using the unicode replacement character. When set
# to the empty string the data is not decoded to text.
# character_encoding = "utf-8"
# character_encoding = "utf-16le"
# character_encoding = "utf-16be"
# character_encoding = ""
#
# Data format to consume.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# Set the tag that will contain the path of the tailed file. If you don't want this tag, set it to an empty string.
# path_tag = "path"
#```
# multiline parser/codec
# [inputs.tail.multiline]
# The pattern should be a regexp which matches what you believe to be an
# indicator that the field is part of an event consisting of multiple lines of log data.
# #pattern = "^s"
#
# This field must be either "previous" or "next".
# If a line matches the pattern, "previous" indicates that it belongs to the previous line,
# whereas "next" indicates that the line belongs to the next one.
# #match_which_line = "previous"
#
# The invert_match field can be true or false (defaults to false).
# If true, a message not matching the pattern will constitute a match of the multiline
# filter and the what will be applied. (vice-versa is also true)
# #invert_match = false
#
# After the specified timeout, this plugin sends a multiline event even if no new pattern
# is found to start a new event. The default timeout is 5s.
# #timeout = 5s

# Generic TCP listener
[inputs.tcp_listener]
# DEPRECATED: The 'tcp_listener' plugin is deprecated in version 1.3.0, use 'inputs.socket_listener' instead.
# DEPRECATED: the TCP listener plugin has been deprecated in favor of the
# socket_listener plugin
# see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/socket_listener

# Generic UDP listener
[inputs.udp_listener]
# DEPRECATED: The 'udp_listener' plugin is deprecated in version 1.3.0, use 'inputs.socket_listener' instead.
# DEPRECATED: the TCP listener plugin has been deprecated in favor of the
# socket_listener plugin
# see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/socket_listener

# Read metrics from VMware vCenter
[inputs.vsphere]
# List of vCenter URLs to be monitored. These three lines must be uncommented
# and edited for the plugin to work.
# vcenters = [ "https://vcenter.local/sdk" ]
# username = "user@corp.local"
# password = "secret"
#
# VMs
# Typical VM metrics (if omitted or empty, all metrics are collected)
# # vm_include = ["/*/vm/**"]  # Inventory path to VMs to collect (by default all are collected)
# # vm_exclude = []  # Inventory paths to exclude
# vm_metric_include = [  
#   "cpu.demand.average",  
#   "cpu.idle.summation",  
#   "cpu.latency.average",  
#   "cpu.readiness.average",  
#   "cpu.ready.summation",  
#   "cpu.run.summation",  
#   "cpu.usagemhz.average",  
#   "cpu.used.summation",  
#   "cpu.wait.summation",  
#   "mem.active.average",  
#   "mem.granted.average",  
#   "mem.latency.average",  
#   "mem.swapin.average",  
#   "mem.swapinRate.average",  
#   "mem.swapout.average",  
#   "mem.swapoutRate.average",  
#   "mem.usage.average",  
#   "mem.vmmemctl.average",  
#   "net.bytesRx.average",  
#   "net.bytesTx.average",  
#   "net.droppedRx.summation",  
#   "net.droppedTx.summation",  
#   "net.usage.average",  
#   "power.power.average",  
#   "virtualDisk.numberReadAveraged.average",  
#   "virtualDisk.numberWriteAveraged.average",  
#   "virtualDisk.read.average",  
#   "virtualDisk.readOIO.latest",  
#   "virtualDisk.throughput.usage.average",  
#   "virtualDisk.totalReadLatency.average",  
#   "virtualDisk.totalWriteLatency.average",  
#   "virtualDisk.write.average",  
#   "virtualDisk.writeOIO.latest",  
#   "sys.uptime.latest",  
# ]
#
# # vm_metric_exclude = []  # Nothing is excluded by default
# # vm_instances = true  # true by default
#
# # Hosts
# ### Typical host metrics (if omitted or empty, all metrics are collected)
# # host_include = ["/*/host/**"]  # Inventory path to hosts to collect (by default all are collected)
# # host_exclude = []  # Inventory paths to exclude
# # host_metric_include = [  
#    "cpu.coreUtilization.average",  
#    "cpu.costop.summation",  
# ]

# "cpu.demand.average",
# "cpu.idle.summation",
# "cpu.latency.average",
# "cpu.readiness.average",
# "cpu.ready.summation",
# "cpu.swapwait.summation",
# "cpu.usage.average",
# "cpu.usagemhz.average",
# "cpu.used.summation",
# "cpu.utilization.average",
# "cpu.wait.summation",
# "disk.deviceReadLatency.average",
# "disk.deviceWriteLatency.average",
# "disk.kernelReadLatency.average",
# "disk.kernelWriteLatency.average",
# "disk.numberReadAveraged.average",
# "disk.numberWriteAveraged.average",
# "disk.read.average",
# "disk.totalReadLatency.average",
# "disk.totalWriteLatency.average",
# "disk.write.average",
# "mem.active.average",
# "mem.latency.average",
# "mem.state.latest",
# "mem.swapin.average",
# "mem.swapinRate.average",
# "mem.swapout.average",
# "mem.swapoutRate.average",
# "mem.totalCapacity.average",
# "mem.usage.average",
# "mem.vmmemctl.average",
# "net.bytesRx.average",
# "net.bytesTx.average",
# "net.droppedRx.summation",
# "net.droppedTx.summation",
# "net.errorsRx.summation",
# "net.errorsTx.summation",
# "net.usage.average",
# "power.power.average",
# "storageAdapter.numberReadAveraged.average",
# "storageAdapter.numberWriteAveraged.average",
# "storageAdapter.read.average",
# "storageAdapter.write.average",
# "sys.uptime.latest",
# ]
# ```
# |
# ```
# # ## Collect IP addresses? Valid values are "ipv4" and "ipv6"
# # ip_addresses = ["ipv6", "ipv4"]
# #
# host_metric_exclude = [] ## Nothing excluded by default
# host_instances = true ## true by default
#
#
## Clusters
# cluster_include = [ "/*/host/**"] # Inventory path to clusters to collect (by default all are collected)
# cluster_exclude = [] # Inventory paths to exclude
# cluster_metric_include = [] ## if omitted or empty, all metrics are collected
# cluster_metric_exclude = [] ## Nothing excluded by default
# cluster_instances = false ## false by default
#
## Datastores
# datastore_include = [ "/*/datastore/**"] # Inventory path to datastores to collect (by default all are collected)
# datastore_exclude = [] # Inventory paths to exclude
# datastore_metric_include = [] ## if omitted or empty, all metrics are collected
# datastore_metric_exclude = [] ## Nothing excluded by default
# datastore_instances = false ## false by default
#
## Datacenters
# datacenter_include = [ "/*/host/**"] # Inventory path to clusters to collect (by default all are collected)
# datacenter_exclude = [] # Inventory paths to exclude
# datacenter_metric_include = [] ## if omitted or empty, all metrics are collected
# datacenter_metric_exclude = [ "*" ] ## Datacenters are not collected by default.
# datacenter_instances = false ## false by default
#
## Plugin Settings
## separator character to use for measurement and field names (default: ".")
# separator = "."
#
## number of objects to retrieve per query for realtime resources (vms and hosts)
# set to 64 for vCenter 5.5 and 6.0 (default: 256)
# max_query_objects = 256
#
## number of metrics to retrieve per query for non-realtime resources (clusters and datastores)
# set to 64 for vCenter 5.5 and 6.0 (default: 256)
# max_query_metrics = 256
#
## number of go routines to use for collection and discovery of objects and metrics
# collect_concurrency = 1
# discover_concurrency = 1
#
## the interval before (re)discovering objects subject to metrics collection (default: 300s)
# object_discovery_interval = "300s"
#
## timeout applies to any of the api request made to vcenter
# timeout = "60s"
#
## When set to true, all samples are sent as integers. This makes the output
## Custom attributes from vCenter can be very useful for queries in order to slice the
## metrics along different dimension and for forming ad-hoc relationships. They are disabled
## by default, since they can add a considerable amount of tags to the resulting metrics. To
## enable, simply set custom_attribute_exclude to [] (empty set) and use custom_attribute_include
## to select the attributes you want to include.
## By default, since they can add a considerable amount of tags to the resulting metrics. To
## enable, simply set custom_attribute_exclude to [] (empty set) and use custom_attribute_include
## to select the attributes you want to include.
## The number of vSphere 5 minute metric collection cycles to look back for non-realtime metrics. In
## some versions (6.7, 7.0 and possible more), certain metrics, such as cluster metrics, may be reported
## with a significant delay (>30min). If this happens, try increasing this number. Please note that increasing
## it too much may cause performance issues.
## # metric_lookback = 3
## Optional SSL Config
## # ssl_ca = "/path/to/cafile"
## # ssl_cert = "/path/to/certfile"
## # ssl_key = "/path/to/keyfile"
## Use SSL but skip chain & host verification
## # insecure_skip_verify = false
## The Historical Interval value must match EXACTLY the interval in the daily
## # "Interval Duration" found on the VCenter server under Configure > General > Statistics > Statistic intervals
## # historical_interval = "5m"

## A Webhooks Event collector
## [[inputs.webhooks]]
## ## Address and port to host Webhook listener on
## # service_address = ":1619"
## # [inputs.webhooks.filestack]
## # path = "/filestack"
## # [inputs.webhooks.github]
## # path = "/github"
## # secret = ""
##
# [inputs.webhooks.mandrill]
#     path = "/mandrill"
#
# [inputs.webhooks.rollbar]
#     path = "/rollbar"
#
# [inputs.webhooks.papertrail]
#     path = "/papertrail"
#
# [inputs.webhooks.particle]
#     path = "/particle"

## This plugin implements the Zipkin http server to gather trace and timing data needed to troubleshoot latency problems in microservice architectures.
# [[inputs.zipkin]]
#     # path = "/api/v1/spans" # URL path for span data
#     # port = 9411            # Port on which Telegraf listens

Found in path(s):
* /opt/cola/permits/1302206250_1652257888.0273938/0/telegraf-1.21.4-1.x86_64.src.rpm-cosi-expand-archive-5SVv0qQE/etc/telegraf/telegraf.conf

1.911 parted 3.2-39.el8
1.911.1 Available under license:

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Version 3, 29 June 2007

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1.916 amir-raidman 0.0.0-20170415203553-1ccc43bfb9c9

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1.917 mnuralp-fileutils 0.5.0

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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d) Verify that the user has already received a copy of these
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END OF TERMS AND CONDITIONS

Appendix: How to Apply These Terms to Your New Libraries

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b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

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**1.919 protobuf 1.26.0**

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1.923 perl-digest 1.17-395.el8

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=head1 NAME

Digest - Modules that calculate message digests

=head1 SYNOPSIS

$md5  = Digest->new("MD5");
$sha1 = Digest->new("SHA-1");
$sha256 = Digest->new("SHA-256");
$sha384 = Digest->new("SHA-384");
$sha512 = Digest->new("SHA-512");

$hmac = Digest->HMAC_MD5($key);

=head1 DESCRIPTION

The C<<Digest::>> modules calculate digests, also called "fingerprints" or "hashes", of some data, called a message. The digest is (usually) some small/fixed size string. The actual size of the digest depend of the algorithm used. The message is simply a sequence of arbitrary bytes or bits.

An important property of the digest algorithms is that the digest is I<likely> to change if the message change in some way. Another property is that digest functions are one-way functions, that is it should be I<hard> to find a message that correspond to some given digest. Algorithms differ in how "likely" and how "hard", as well as how efficient they are to compute.

Note that the properties of the algorithms change over time, as the algorithms are analyzed and machines grow faster. If your application for instance depends on it being "impossible" to generate the same digest for a different message it is wise to make it easy to plug in stronger algorithms as the one used grow weaker. Using the interface documented here should make it easy to change algorithms later.

All C<<Digest::>> modules provide the same programming interface. A functional interface for simple use, as well as an object oriented interface that can handle messages of arbitrary length and which can read files directly.

The digest can be delivered in three formats:

=over 8

=item I<binary>

This is the most compact form, but it is not well suited for printing or embedding in places that can't handle arbitrary data.

=item I<hex>

A twice as long string of lowercase hexadecimal digits.

=item I;base64>

A string of portable printable characters. This is the base64 encoded representation of the digest with any trailing padding removed. The
string will be about 30% longer than the binary version.
L<MIME::Base64> tells you more about this encoding.

=back

The functional interface is simply importable functions with the same
name as the algorithm. The functions take the message as argument and
return the digest. Example:

use Digest::MD5 qw(md5);
$digest = md5($message);

There are also versions of the functions with "_hex" or "_base64"
appended to the name, which returns the digest in the indicated form.

=head1 OO INTERFACE

The following methods are available for all C<Digest::> modules:

=over 4
=item $ctx = Digest->XXX($arg,...)
=item $ctx = Digest->new(XXX => $arg,...)
=item $ctx = Digest::XXX->new($arg,...)

The constructor returns some object that encapsulate the state of the
message-digest algorithm. You can add data to the object and finally
ask for the digest. The "XXX" should of course be replaced by the proper
name of the digest algorithm you want to use.

The two first forms are simply syntactic sugar which automatically
load the right module on first use. The second form allow you to use
algorithm names which contains letters which are not legal perl
identifiers, e.g. "SHA-1". If no implementation for the given algorithm
can be found, then an exception is raised.

If new() is called as an instance method (i.e. $ctx->new) it will just
reset the state the object to the state of a newly created object. No
new object is created in this case, and the return value is the
reference to the object (i.e. $ctx).

=item $other_ctx = $ctx->clone

The clone method creates a copy of the digest state object and returns
a reference to the copy.
=item $ctx->reset

This is just an alias for $ctx->new.

=item $ctx->add( $data )

=item $ctx->add( $chunk1, $chunk2, ... )

The string value of the $data provided as argument is appended to the message we calculate the digest for. The return value is the $ctx object itself.

If more arguments are provided then they are all appended to the message, thus all these lines will have the same effect on the state of the $ctx object:

```perl
$ctx->add("a"); $ctx->add("b"); $ctx->add("c");
$ctx->add("a")->add("b")->add("c");
$ctx->add("a", "b", "c");
$ctx->add("abc");
```

Most algorithms are only defined for strings of bytes and this method might therefore croak if the provided arguments contain chars with ordinal number above 255.

=item $ctx->addfile( $io_handle )

The $io_handle is read until EOF and the content is appended to the message we calculate the digest for. The return value is the $ctx object itself.

The addfile() method will croak() if it fails reading data for some reason. If it croaks it is unpredictable what the state of the $ctx object will be in. The addfile() method might have been able to read the file partially before it failed. It is probably wise to discard or reset the $ctx object if this occurs.

In most cases you want to make sure that the $io_handle is in "binmode" before you pass it as argument to the addfile() method.

=item $ctx->add_bits( $data, $nbins )

=item $ctx->add_bits( $bitstring )

The add_bits() method is an alternative to add() that allow partial bytes to be appended to the message. Most users should just ignore this method as partial bytes is very unlikely to be of any practical
The two argument form of add_bits() will add the first \$nbits bits from \$data. For the last potentially partial byte only the high order \( C^{<< \; \text{\$nbits} \; \% \; 8} >> \) bits are used. If \$nbits is greater than \( C^{<< \; \text{\length(\$data)} \; \times \; 8} >> \), then this method would do the same as \( C^{<< \; \text{\$ctx->add(\$data)} >>} \).

The one argument form of add_bits() takes a \$bitstring of "1" and "0" chars as argument. It's a shorthand for \( C^{<< \; \text{\$ctx->add_bits(pack("B*", \$bitstring), length(\$bitstring)) >>}} \).

The return value is the \$ctx object itself.

This example shows two calls that should have the same effect:

\$ctx->add_bits("111100001010");
\$ctx->add_bits("\xF0\xA0", 12);

Most digest algorithms are byte based and for these it is not possible to add bits that are not a multiple of 8, and the add_bits() method will croak if you try.

=item $ctx->digest

Return the binary digest for the message.

Note that the \( \text{\$ctx->digest} \) operation is effectively a destructive, read-once operation. Once it has been performed, the \$ctx object is automatically \( \text{\$ctx->reset} \) and can be used to calculate another digest value. Call \$ctx->clone->digest if you want to calculate the digest without resetting the digest state.

=item $ctx->hexdigest

Same as \$ctx->digest, but will return the digest in hexadecimal form.

=item $ctx->b64digest

Same as \$ctx->digest, but will return the digest as a base64 encoded string.

=back

=head1 Digest speed

This table should give some indication on the relative speed of different algorithms. It is sorted by throughput based on a benchmark
done with of some implementations of this API:

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Size</th>
<th>Implementation</th>
<th>MB/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD4</td>
<td>128</td>
<td>Digest::MD4 v1.3</td>
<td>165.0</td>
</tr>
<tr>
<td>MD5</td>
<td>128</td>
<td>Digest::MD5 v2.33</td>
<td>98.8</td>
</tr>
<tr>
<td>SHA-256</td>
<td>256</td>
<td>Digest::SHA2 v1.1.0</td>
<td>66.7</td>
</tr>
<tr>
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<td>160</td>
<td>Digest::SHA v4.3.1</td>
<td>58.9</td>
</tr>
<tr>
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<td>41.3</td>
</tr>
<tr>
<td>Haval-256</td>
<td>256</td>
<td>Digest::Haval256 v1.0.4</td>
<td>39.8</td>
</tr>
<tr>
<td>SHA-384</td>
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<td>Digest::SHA2 v1.1.0</td>
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<td>19.3</td>
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<td>Digest::SHA v4.3.1</td>
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<td>Whirlpool</td>
<td>512</td>
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<td>Adler-32</td>
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<tr>
<td>CRC-32</td>
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<td>1.1</td>
</tr>
<tr>
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<tr>
<td>CRC-CCITT</td>
<td>16</td>
<td>Digest::CRC v0.05</td>
<td>0.8</td>
</tr>
</tbody>
</table>

These numbers was achieved Apr 2004 with ActivePerl-5.8.3 running under Linux on a P4 2.8 GHz CPU. The last 5 entries differ by being pure perl implementations of the algorithms, which explains why they are so slow.

=head1 SEE ALSO

L<Digest::Adler32>, L<Digest::CRC>, L<Digest::Haval256>, L<Digest::HMAC>, L<Digest::MD2>, L<Digest::MD4>, L<Digest::MD5>, L<Digest::SHA>, L<Digest::SHA1>, L<Digest::SHA2>, L<Digest::Whirlpool>

New digest implementations should consider subclassing from L<Digest::base>.

L<MIME::Base64>

http://en.wikipedia.org/wiki/Cryptographic_hash_function

=head1 AUTHOR

Gisle Aas <gisle@aas.no>

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You will need perl version 5.004 or better to install this module.

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1.924 kubernetes-cri-api 0.20.6
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* /opt/cola/permits/1177945013_1625575335.76/0/jopt-simple-5-0-4-sources-8-jar/joptsimple/OptionParserState.java
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dateutil - Extensions to the standard Python datetime module.

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for
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This is why click-contrib exists. The GitHub organization is a collection of possibly experimental third-party packages whose feature set does not belong into Click, but also a playground for major features that may be added to Click in the future. It is also meant to coordinate and concentrate effort on writing third-party extensions for Click, and to ease the effort of searching for such extensions. In that sense it could be described as a low-maintenance alternative to extension repositories of other frameworks.

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*
* Optimised ANSI C code for the Rijndael cipher (now AES)
*
* @author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>
* @author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>
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// ISO C9x compliant stdint.h for Microsoft Visual Studio
// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124
//
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# PLY (Python Lex-Yacc) Version 3.11


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Introduction

PLY is a 100% Python implementation of the common parsing tools lex
and yacc. Here are a few highlights:

- PLY is very closely modeled after traditional lex/yacc.
  If you know how to use these tools in C, you will find PLY
to be similar.
- PLY provides *very* extensive error reporting and diagnostic information to assist in parser construction. The original implementation was developed for instructional purposes. As a result, the system tries to identify the most common types of errors made by novice users.

- PLY provides full support for empty productions, error recovery, precedence specifiers, and moderately ambiguous grammars.

- Parsing is based on LR-parsing which is fast, memory efficient, better suited to large grammars, and which has a number of nice properties when dealing with syntax errors and other parsing problems. Currently, PLY builds its parsing tables using the LALR(1) algorithm used in yacc.

- PLY uses Python introspection features to build lexers and parsers. This greatly simplifies the task of parser construction since it reduces the number of files and eliminates the need to run a separate lex/yacc tool before running your program.

- PLY can be used to build parsers for "real" programming languages. Although it is not ultra-fast due to its Python implementation, PLY can be used to parse grammars consisting of several hundred rules (as might be found for a language like C). The lexer and LR parser are also reasonably efficient when parsing typically sized programs. People have used PLY to build parsers for C, C++, ADA, and other real programming languages.

How to Use
==========

PLY consists of two files : lex.py and yacc.py. These are contained within the 'ply' directory which may also be used as a Python package. To use PLY, simply copy the 'ply' directory to your project and import lex and yacc from the associated 'ply' package. For example:

```python
import ply.lex as lex
import ply.yacc as yacc
```

Alternatively, you can copy just the files lex.py and yacc.py individually and use them as modules. For example:

```python
import lex
import yacc
```

The file setup.py can be used to install ply using distutils.
The file doc/ply.html contains complete documentation on how to use the system.

The example directory contains several different examples including a PLY specification for ANSI C as given in K&R 2nd Ed.

A simple example is found at the end of this document.

Requirements
==============

PLY requires the use of Python 2.6 or greater. However, you should use the latest Python release if possible. It should work on just about any platform. PLY has been tested with both CPython and Jython. It also seems to work with IronPython.

Resources
=========  
More information about PLY can be obtained on the PLY webpage at:

http://www.dabeaz.com/ply

For a detailed overview of parsing theory, consult the excellent book "Compilers : Principles, Techniques, and Tools" by Aho, Sethi, and Ullman. The topics found in "Lex & Yacc" by Levine, Mason, and Brown may also be useful.

The GitHub page for PLY can be found at:

https://github.com/dabeaz/ply

An old and relatively inactive discussion group for PLY is found at:

http://groups.google.com/group/ply-hack

Acknowledgments
================

A special thanks is in order for all of the students in CS326 who suffered through about 25 different versions of these tools :-).

The CHANGES file acknowledges those who have contributed patches.

Elias Ioup did the first implementation of LALR(1) parsing in PLY-1.x. Andrew Waters and Markus Schoepflin were instrumental in reporting bugs and testing a revised LALR(1) implementation for PLY-2.0.

Special Note for PLY-3.0

PLY-3.0 the first PLY release to support Python 3. However, backwards
compatibility with Python 2.6 is still preserved. PLY provides dual Python 2/3 compatibility by restricting its implementation to a common subset of basic language features. You should not convert PLY using 2to3—it is not necessary and may in fact break the implementation.

Example
=======

Here is a simple example showing a PLY implementation of a calculator with variables.

```
# calc.py
#
# A simple calculator with variables.
#

tokens = (
    'NAME', 'NUMBER',
    'PLUS', 'MINUS', 'TIMES', 'DIVIDE', 'EQUALS',
    'LPAREN', 'RPAREN',
)

# Tokens

t_PLUS    = r'\+'    
t_MINUS   = r'-'   
t_TIMES   = r'\*'
    t_DIVIDE  = r'/'
    t_EQUALS  = r'='
    t_LPAREN  = r'('    
    t_RPAREN  = r')'
    t_NAME    = r'\[a-zA-Z_][a-zA-Z0-9_]*'

def t_NUMBER(t):
    r'\d+'
    t.value = int(t.value)
    return t

# Ignored characters

t_ignore = " \
"

def t_newline(t):
    r'\n+'
    t.lexer.lineno += t.value.count("\n")

def t_error(t):
    print("Illegal character '%s'" % t.value[0])
```
t.lexer.skip(1)

# Build the lexer
import ply.lex as lex
lex.lex()

# Precedence rules for the arithmetic operators
precedence = (
    ('left','PLUS','MINUS'),
    ('left','TIMES','DIVIDE'),
    ('right','UMINUS'),
    )

# dictionary of names (for storing variables)
names = { }

def p_statement_assign(p):
    'statement : NAME EQUALS expression'
    names[p[1]] = p[3]

def p_statement_expr(p):
    'statement : expression'
    print(p[1])

def p_expression_binop(p):
    """expression : expression PLUS expression |
    expression MINUS expression |
    expression TIMES expression |
    expression DIVIDE expression"

def p_expression_uminus(p):
    'expression : MINUS expression %prec UMINUS'
    p[0] = -p[2]

def p_expression_group(p):
    'expression : LPAREN expression RPAREN'
    p[0] = p[2]

def p_expression_number(p):
    'expression : NUMBER'
    p[0] = p[1]

def p_expression_name(p):
    'expression : NAME'
try:
    p[0] = names[p[1]]
except LookupError:
    print("Undefined name '%s'" % p[1])
    p[0] = 0

def p_error(p):
    print("Syntax error at '%s'" % p.value)

import ply.yacc as yacc
yacc.yacc()

while True:
    try:
        s = raw_input('calc > ')   # use input() on Python 3
        except EOFError:
            break
    yacc.parse(s)

Bug Reports and Patches
=======================
My goal with PLY is to simply have a decent lex/yacc implementation
for Python. As a general rule, I don't spend huge amounts of time
working on it unless I receive very specific bug reports and/or
patches to fix problems. I also try to incorporate submitted feature
requests and enhancements into each new version. Please visit the PLY
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e-mail to dave@dabeaz.com.

-- Dave

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.. _contrib:

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click-contrib

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As the userbase of Click grows, more and more major feature requests pop up in Click’s bugtracker. As reasonable as it may be for those features to be bundled with Click instead of being a standalone project, many of those requested features are either highly experimental or have unproven practical use, while potentially being a burden to maintain.

This is why click-contrib_ exists. The GitHub organization is a collection of possibly experimental third-party packages whose feature set does not belong into Click, but also a playground for major features that may be added to Click in the future. It is also meant to coordinate and concentrate effort on writing third-party extensions for Click, and to ease the effort of searching for such extensions. In that sense it could be described as a low-maintenance alternative to extension repositories of other frameworks.

Please note that the quality and stability of those packages may be different than what you expect from Click itself. While published under a common organization, they are still projects separate from Click.

.. _click-contrib: https://github.com/click-contrib/

Found in path(s):
* /opt/cola/permits/1183964583_1627499467.81/0/pallets-click-7-0-0-ga936b99-1-tar-gz/pallets-click-a936b99/docs/contrib.rst

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License Text
------------
.. include:: ../LICENSE.rst

import io
import re
from setuptools import setup

with io.open("README.rst", "rt", encoding="utf8") as f:
    readme = f.read()

with io.open("click/__init__.py", "rt", encoding="utf8") as f:
    version = re.search(r"__version__ = '(.*?)'"", f.read()).group(1)

setup(
    name="Click",
    version=version,
    url="https://palletsprojects.com/p/click/",
    project_urls={
        "Documentation": "https://click.palletsprojects.com/",
        "Code": "https://github.com/pallets/click",
        "Issue tracker": "https://github.com/pallets/click/issues",
    },
    license="BSD",
    author="Armin Ronacher",
    author_email="armin.ronacher@active-4.com",
    maintainer="Pallets Team",
    maintainer_email="contact@palletsprojects.com",
    description="Composable command line interface toolkit",
    long_description=readme,
    packages=["click"],
    include_package_data=True,
    python_requires=">=2.7, !=3.0.*, !=3.1.*, !=3.2.*, !=3.3.*",
    classifiers=[
"Development Status :: 4 - Beta",
"Intended Audience :: Developers",
"License :: OSI Approved :: BSD License",
"Natural Language :: English",
"Programming Language :: Python :: 2.7",
"Programming Language :: Python :: 3.5",
"Programming Language :: Python :: 3.6",
"Programming Language :: Python :: 3.7",
"Programming Language :: Python :: 3.8",
"Topic :: Internet :: WWW/HTTP :: Dynamic Content :: Applications",
"Topic :: Software Development :: Libraries :: Python Modules",
"Topic :: System :: Networking :: Transcoding :: Protocols :: BGP",
]}
"Development Status :: 5 - Production/Stable",
"Intended Audience :: Developers",
"License :: OSI Approved :: BSD License",
"Operating System :: OS Independent",
"Programming Language :: Python",
"Programming Language :: Python :: 2",
"Programming Language :: Python :: 2.7",
"Programming Language :: Python :: 3",
"Programming Language :: Python :: 3.4",
"Programming Language :: Python :: 3.5",
"Programming Language :: Python :: 3.6",
"Programming Language :: Python :: 3.7",
]
)

Found in path(s):
* /opt/cola/permits/1183964583_1627499467.81/0/pallets-click-7-0-0-ga936b99-1-tar-gz/pallets-click-a936b99/setup.py

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# binary only, patch it back to the system, and then use a wrapper

Found in path(s):
* /opt/cola/permits/1183964583_1627499467.81/0/pallets-click-7-0-0-ga936b99-1-tar-gz/pallets-click-a936b99/click/_compat.py

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Including attribution to #612

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* /opt/cola/permits/1183964583_1627499467.81/0/pallets-click-7-0-0-ga936b99-1-tar-gz/pallets-click-a936b99/tests/test_formatting.py

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\$ click\_

============

Click is a Python package for creating beautiful command line interfaces in a composable way with as little code as necessary. It's the "Command Line Interface Creation Kit". It's highly configurable but comes with sensible defaults out of the box.

It aims to make the process of writing command line tools quick and fun while also preventing any frustration caused by the inability to implement an intended CLI API.

Click in three points:
- Arbitrary nesting of commands
- Automatic help page generation
- Supports lazy loading of subcommands at runtime

Installing
----------

Install and update using `pip`:

.. code-block:: text

   $ pip install click

Click supports Python 3.4 and newer, Python 2.7, and PyPy.


A Simple Example
----------------

What does it look like? Here is an example of a simple Click program:

.. code-block:: python

   import click

   @click.command()
   @click.option("--count", default=1, help="Number of greetings.")
   @click.option("--name", prompt="Your name",
               help="The person to greet.")
   def hello(count, name):
      """Simple program that greets NAME for a total of COUNT times."""
      for _ in range(count):
         click.echo("Hello, %s!" % name)

      if __name__ == '__main__':
         hello()

And what it looks like when run:

.. code-block:: text

   $ python hello.py --count=3
   Your name: Click
   Hello, Click!
   Hello, Click!
Hello, Click!

Donate
------

The Pallets organization develops and supports Click and other popular packages. In order to grow the community of contributors and users, and allow the maintainers to devote more time to the projects, `please donate today`_.

.. _please donate today: https://palletsprojects.com/donate

Links
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* Issue tracker: https://github.com/pallets/click/issues
* Test status:
  * Linux, Mac: https://travis-ci.org/pallets/click
  * Windows: https://ci.appveyor.com/project/pallets/click

* Test coverage: https://codecov.io/gh/pallets/click

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1.967 shared-mime-info 1.9 3.el8

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1.969 kubernetes-apimachinery 0.22.2

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1.971 perl-carp 1.42-396.el8

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NAME

Carp - alternative warn and die for modules

DESCRIPTION

The Carp routines are useful in your own modules because they act like
die() or warn(), but with a message which is more likely to be useful
to a user of your module. In the case of cluck, confess, and longmess
that context is a summary of every call in the call-stack. For a shorter
message you can use carp or croak which report the error as being from
where your module was called. There is no guarantee that that is where
the error was, but it is a good educated guess.

You can also alter the way the output and logic of Carp works, by changing
some global variables in the Carp namespace.

INSTALLATION

perl Makefile.PL
make
make test
AUTHOR

The Carp module first appeared in Larry Wall's perl 5.000 distribution. Since then it has been modified by several of the perl 5 porters. Andrew Main (Zefram) <zefram@fysh.org> divested Carp into an independent distribution.

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---
abstract: 'alternative warn and die for modules'
author:
  - unknown
build_requires:
  ExtUtils::MakeMaker: '0'
configure_requires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.1, CPAN::Meta::Converter version 2.150005'
license: perl
meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
name: Carp
no_index:
directory:
  - t
  - inc
requires:
  Config: '0'
  Exporter: '0'
  ExtUtils::MakeMaker: '0'
=head1 NAME

Carp - alternative warn and die for modules

=head1 SYNOPSIS

use Carp;

    # warn user (from perspective of caller)
    carp "string trimmed to 80 chars";

    # die of errors (from perspective of caller)
    croak "We're outta here!";

    # die of errors with stack backtrace
    confess "not implemented";

    # cluck, longmess and shortmess not exported by default
    use Carp qw(cluck longmess shortmess);
    cluck "This is how we got here!";
    $long_message   = longmess( "message from cluck() or confess()" );
    $short_message  = shortmess( "message from carp() or croak()" );

=head1 DESCRIPTION

The Carp routines are useful in your own modules because they act like C<die()> or C<warn()> but with a message which is more likely to be useful to a user of your module. In the case of
C<cluck()> and C<confess()>, that context is a summary of every call in the call-stack; C<longmess()> returns the contents of the error message.

For a shorter message you can use C<carp()> or C<croak()> which report the error as being from where your module was called. C<shortmess()> returns the contents of this error message. There is no guarantee that that is where the error was, but it is a good educated guess.

C<Carp> takes care not to clobber the status variables C<$!> and C<$^E> in the course of assembling its error messages. This means that a C<$SIG{__DIE__}> or C<$SIG{__WARN__}> handler can capture the error information held in those variables, if it is required to augment the error message, and if the code calling C<Carp> left useful values there. Of course, C<Carp> can't guarantee the latter.

You can also alter the way the output and logic of C<Carp> works, by changing some global variables in the C<Carp> namespace. See the section on C<GLOBAL VARIABLES> below.

Here is a more complete description of how C<carp> and C<croak> work. What they do is search the call-stack for a function call stack where they have not been told that there shouldn't be an error. If every call is marked safe, they give up and give a full stack backtrace instead. In other words they presume that the first likely looking potential suspect is guilty. Their rules for telling whether a call shouldn't generate errors work as follows:

=over 4

=item 1.

Any call from a package to itself is safe.

=item 2.

Packages claim that there won't be errors on calls to or from packages explicitly marked as safe by inclusion in C<@CARP_NOT>, or (if that array is empty) C<@ISA>. The ability to override what @ISA says is new in 5.8.

=item 3.

The trust in item 2 is transitive. If A trusts B, and B trusts C, then A trusts C. So if you do not override C<@ISA> with C<@CARP_NOT>, then this trust relationship is identical to, "inherits from".
item 4.

Any call from an internal Perl module is safe. (Nothing keeps user modules from marking themselves as internal to Perl, but this practice is discouraged.)

item 5.

Any call to Perl's warning system (eg Carp itself) is safe. (This rule is what keeps it from reporting the error at the point where you call C<carp> or C<croak>.)

item 6.

C<$Carp::CarpLevel> can be set to skip a fixed number of additional call levels. Using this is not recommended because it is very difficult to get it to behave correctly.

Forcing a Stack Trace

As a debugging aid, you can force Carp to treat a croak as a confess and a carp as a cluck across I<all> modules. In other words, force a detailed stack trace to be given. This can be very helpful when trying to understand why, or from where, a warning or error is being generated.

This feature is enabled by 'importing' the non-existent symbol 'verbose'. You would typically enable it by saying

perl -MCarp=verbose script.pl

or by including the string C<-MCarp=verbose> in the PERL5OPT environment variable.

Alternately, you can set the global variable C<$Carp::Verbose> to true. See the C<GLOBAL VARIABLES> section below.

Stack Trace formatting

At each stack level, the subroutine's name is displayed along with its parameters. For simple scalars, this is sufficient. For complex data types, such as objects and other references, this can simply display C<'HASH(0x1ab36d8)'>.

Carp gives two ways to control this.
For objects, a method, C<CARP_TRACE>, will be called, if it exists. If this method doesn't exist, or it recurses into C<Carp>, or it otherwise throws an exception, this is skipped, and Carp moves on to the next option, otherwise checking stops and the string returned is used. It is recommended that the object's type is part of the string to make debugging easier.

For any type of reference, C<$Carp::RefArgFormatter> is checked (see below). This variable is expected to be a code reference, and the current parameter is passed in. If this function doesn't exist (the variable is undef), or it recurses into C<Carp>, or it otherwise throws an exception, this is skipped, and Carp moves on to the next option, otherwise checking stops and the string returned is used.

Otherwise, if neither C<CARP_TRACE> nor C<$Carp::RefArgFormatter> is available, stringify the value ignoring any overloading.

GLOBAL VARIABLES

$Carp::MaxEvalLen

This variable determines how many characters of a string-eval are to be shown in the output. Use a value of C<0> to show all text.

Defaults to C<0>.

$Carp::MaxArgLen

This variable determines how many characters of each argument to a function to print. Use a value of C<0> to show the full length of the argument.

Defaults to C<64>.

$Carp::MaxArgNums

This variable determines how many arguments to each function to show. Use a false value to show all arguments to a function call. To suppress all arguments, use C<-1> or C<0 but true>.
Defaults to C<8>.

=head2 $Carp::Verbose

This variable makes C<carp()> and C<croak()> generate stack backtraces just like C<cluck()> and C<confess()> . This is how C<use Carp 'verbose'> is implemented internally.

Defaults to C<0>.

=head2 $Carp::RefArgFormatter

This variable sets a general argument formatter to display references. Plain scalars and objects that implement C<CARP_TRACE> will not go through this formatter. Calling C<Carp> from within this function is not supported.

local $Carp::RefArgFormatter = sub {
    require Data::Dumper;
    Data::Dumper::Dump($_[0]); # not necessarily safe
};

=head2 @CARP_NOT

This variable, I<in your package>, says which packages are I<not> to be considered as the location of an error. The C<carp()> and C<cluck()> functions will skip over callers when reporting where an error occurred.

NB: This variable must be in the package's symbol table, thus:

    # These work
    our @CARP_NOT; # file scope
    use vars qw(@CARP_NOT); # package scope
    @My::Package::CARP_NOT = ... ; # explicit package variable

    # These don't work
    sub xyz { ... @CARP_NOT = ... } # w/o declarations above
    my @CARP_NOT; # even at top-level

Example of use:

    package My::Carping::Package;
    use Carp;
    our @CARP_NOT;
    sub bar { .... or _error('Wrong input') }
    sub _error {
        # temporary control of where'ness, __PACKAGE__ is implicit
        local @CARP_NOT = qw(My::Friendly::Caller);
        carp(@_)}
This would make \texttt{C<Carp>} report the error as coming from a caller not in \texttt{C<My::Carping::Package>}, nor from \texttt{C<My::Friendly::Caller>}.

Also read the \texttt{L<DESCRIPTION>} section above, about how \texttt{C<Carp>} decides where the error is reported from.

Use \texttt{C<@CARP_NOT>}, instead of \texttt{C<$Carp::CarpLevel>}.

Overrides \texttt{C<Carp>}'s use of \texttt{C<@ISA>}.  

=head2 \%Carp::Internal

This says what packages are internal to Perl. \texttt{C<Carp>} will never report an error as being from a line in a package that is internal to Perl. For example:

\begin{verbatim}
$Carp::Internal{ (__PACKAGE__) }++;  
# time passes...  
sub foo { ... or confess("whatever") };
\end{verbatim}

would give a full stack backtrace starting from the first caller outside of \texttt{__PACKAGE__}. (Unless that package was also internal to Perl.)

=head2 \%Carp::CarpInternal

This says which packages are internal to Perl's warning system. For generating a full stack backtrace this is the same as being internal to Perl, the stack backtrace will not start inside packages that are listed in \texttt{C<%Carp::CarpInternal>}. But it is slightly different for the summary message generated by \texttt{C<carp>} or \texttt{C<croak>}. There errors will not be reported on any lines that are calling packages in \texttt{C<%Carp::CarpInternal>}.  

For example \texttt{C<Carp> itself is listed in C<%Carp::CarpInternal>}. Therefore the full stack backtrace from \texttt{C<confess>} will not start inside of \texttt{C<Carp>}, and the short message from calling \texttt{C<croak> is not placed on the line where C<croak> was called.}

=head2 $Carp::CarpLevel

This variable determines how many additional call frames are to be skipped that would not otherwise be when reporting where an error occurred on a call to one of \texttt{C<Carp>}'s functions. It is fairly easy to count these call frames on calls that generate a full stack backtrace. However it is much harder to do this accounting for calls...
that generate a short message. Usually people skip too many call frames. If they are lucky they skip enough that Carp goes all of the way through the call stack, realizes that something is wrong, and then generates a full stack backtrace. If they are unlucky then the error is reported from somewhere misleading very high in the call stack.

Therefore it is best to avoid Carp::CarpLevel. Instead use Carp::CarpNOT, Carp::Internal and Carp::CarpInternal.

Defaults to 0.

=head1 BUGS

The Carp routines don't handle exception objects currently. If called with a first argument that is a reference, they simply call die() or warn(), as appropriate.

=head1 SEE ALSO

L<Carp::Always>, L<Carp::Clan>

=head1 AUTHOR

The Carp module first appeared in Larry Wall's perl 5.000 distribution. Since then it has been modified by several of the perl 5 porters.
Andrew Main (Zefram) <zefram@fysh.org> divested Carp into an independent distribution.

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* /opt/ws_local/PERMITS_SQL/1009548115_1591901898.54/0/perl-Carp-1.42-396.el8.src.rpm-cosi-expand-archive-6G9eXuF1/Carp-1.38.tar.gz-cosi-expand-archive-ok6zis0t/Carp-1.38/lib/Carp.pm
1.972 pysmi 0.3.4

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SNMP SMI compiler
===================

.. toctree::
   :maxdepth: 2

The PySMI library and tools are designed to parse, verify and transform
`SNMP SMI`<https://en.wikipedia.org/wiki/Management_information_base>`_ MIB
modules from their original ASN.1 form into JSON or `pysnmp`<http://snmplabs.com/pysnmp/>_ representation.

Documentation
-------------

.. toctree::
   :maxdepth: 2

/`documentation`

Source code & Changelog
------------------------

Project source code is hosted at `GitHub`<https://github.com/etingof/pysmi>`_.
Everyone is welcome to fork and contribute back!

We maintain the detailed `log of changes`<https://github.com/etingof/pysmi/releases>`_ to our software.

Download & Install
-------------------

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-----------------

The PySMI project maintains a `collection <http://mibs.snmplabs.com/asn1/>`_ of publicly available ASN.1 MIB files collected on the Internet. You are welcome to use this MIBs archive however we can't guarantee any degree of consistency or reliability when it comes to these MIB modules.

The *mibdump.py* tool as well as many other utilities based on PySMI are programmed to use this MIB repository for automatic download and dependency resolution.

You can always reconfigure PySMI to use some other remote MIB repository instead or in addition to this one.

Contact
-------

In case of questions or troubles using SNMP SMI library, please open up an `issue <https://github.com/etingof/pysmi/issues>`_ at GitHub or ask at `Stack Overflow <http://stackoverflow.com/questions/tagged/pysmi>`_.

Found in path(s):
* /opt/cola/permits/1154558979_1618867784.84/0/etingof-pysmi-v0-3-4-0-ga0ae433-tar-gz/etingof-pysmi-a0ae433/docs/source/contents.rst

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SNMP MIB parser
----------------

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PySMI is a pure-Python implementation of
Open Source Used In BGP TE Controller Version 4.3.0  11529

This tool is designed to turn ASN.1 MIBs into various formats. As of this moment, JSON and [pysnmp](https://github.com/etingof/pysnmp) modules can be generated from ASN.1 MIBs.

Features
--------

* Understands SMIv1, SMIv2 and de-facto SMI dialects
* Turns MIBs into pysnmp classes and JSON documents
* Maintains an index of MIB objects over many MIB modules
* Automatically pulls ASN.1 MIBs from local directories, ZIP archives, HTTP and FTP servers
* 100% Python, works with Python 2.4 up to Python 3.7

Rendered PySMI documentation can be found at [pysmi site](http://snmplabs.com/pysmi).

How to use PySMI
----------------

If you are using pysnmp, you might never notice pysmi presence - pysnmp calls pysmi for MIB download and compilation behind the scenes (you can still do that manually by invoking *mibdump.py* tool).

To turn ASN.1 MIB into a JSON document, call *mibdump.py* tool like this:

```bash
$ mibdump.py --generate-mib-texts --destination-format json IF-MIB
```

Source MIB repositories: file:///usr/share/snmp/mibs, http://mibs.snmplabs.com/asn1/@mib@

Borrow missing/failed MIBs from: http://mibs.snmplabs.com/json/fulltexts/@mib@

Existing/compiled MIB locations: Compiled MIBs destination directory: .

MIBs excluded from code generation: RFC-1212, RFC-1215, RFC1065-SMI, RFC1155-SMI, RFC1158-MIB, RFC1213-MIB, SNMPv2-CONF, SNMPv2-SMI, SNMPv2-TC, SNMPv2-TM

MIBs to compile: IF-MIB

Destination format: json

Parser grammar cache directory: not used

Also compile all relevant MIBs: yes

Rebuild MIBs regardless of age: yes

Do not create/update MIBs: no

Byte-compile Python modules: no (optimization level no)

Ignore compilation errors: no

Generate OID->MIB index: no

Generate texts in MIBs: yes

Keep original texts layout: no

Try various filenames while searching for MIB module: yes

Created/updated MIBs: IANAifType-MIB, IF-MIB, SNMPv2-MIB

Pre-compiled MIBs borrowed:
Up to date MIBs: SNMPv2-CONF, SNMPv2-SMI, SNMPv2-TC

Missing source MIBs:

Ignored MIBs:
Failed MIBs:

JSON document build from
[IF-MIB module](http://mibs.snmplabs.com/asn1/IF-MIB)
would hold information such as:

```json
{
  "ifMIB": {
    "name": "ifMIB",
    "oid": "1.3.6.1.2.1.31",
    "class": "moduleidentity",
    "revisions": [
      "2007-02-15 00:00",
      "1996-02-28 21:55",
      "1993-11-08 21:55"
    ],
  },
  "ifTestId": {
    "name": "ifTestId",
    "oid": "1.3.6.1.2.1.31.1.3.1",
    "nodetype": "row",
    "class": "objecttype",
    "maxaccess": "not-accessible",
    "augmention": {
      "name": "ifTestId",
      "module": "IF-MIB",
      "object": "ifEntry"
    }
  }
}
```
In general, converted MIBs capture all aspects of original (ASN.1) MIB contents and layout. The snippet above is just a partial example, but here is the complete [IF-MIB.json](http://mibs.snmplabs.com/json/fulltexts/IF-MIB.json) file.

Besides one-to-one MIB conversion, PySMI library can produce JSON index to facilitate fast MIB information lookup across large collection of MIB files. For example, JSON index for [IP-MIB.json](http://mibs.snmplabs.com/json/asn1/IP-MIB), [TCP-MIB.json](http://mibs.snmplabs.com/json/asn1/TCP-MIB) and [UDP-MIB.json](http://mibs.snmplabs.com/json/asn1/UDP-MIB) modules would keep information like this:

```json
{
    "compliance": {
        "1.3.6.1.2.1.48.2.1.1": ["IP-MIB"],
        "1.3.6.1.2.1.49.2.1.1": ["TCP-MIB"],
        "1.3.6.1.2.1.50.2.1.1": ["UDP-MIB"]
    },
    "identity": {
        "1.3.6.1.2.1.48": ["IP-MIB"],
        "1.3.6.1.2.1.49": ["TCP-MIB"],
        "1.3.6.1.2.1.50": ["UDP-MIB"]
    },
    "oids": {
        "1.3.6.1.2.1.4": [
```
With this example, *compliance* and *identity* keys point to
*MODULE-COMPLIANCE* and *MODULE-IDENTITY* MIB objects, *oids*
list top-level OIDs branches defined in MIB modules. Full index
build over thousands of MIBs could be seen
[here](http://mibs.snmplabs.com/json/index.json).

The PySMI library can automatically fetch required MIBs from HTTP, FTP sites
or local directories. You could configure any MIB source available to you (including

How to get PySMI

--------------

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available as a GitHub [repo](https://github.com/etingof/pysmi).

You could `pip install pysmi` or download it from [PyPI](https://pypi.org/project/pysmi/).

If something does not work as expected,
[open an issue](https://github.com/etingof/pysmi/issues) at GitHub or
post your question [on Stack Overflow](http://stackoverflow.com/questions/ask).

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* /opt/cola/permits/1154558979_1618867784.84/0/etingof-pysmi-v0-3-4-0-ga0ae433-tar-gz/etingof-pysmi-
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1.973 goprotobuf 1.5.0

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=head1 NAME
Exporter - Implements default import method for modules

=head1 SYNOPSIS

In module F<YourModule.pm>:

```perl
package YourModule;
require Exporter;
@ISA = qw(Exporter);
@EXPORT_OK = qw(munge frobnicate);  # symbols to export on request
```
or

```perl
package YourModule;
use Exporter 'import'; # gives you Exporter's import() method directly
@EXPORT_OK = qw(munge frobnicate);  # symbols to export on request
```

In other files which wish to use C<YourModule>:

```perl
use YourModule qw(frobnicate);    # import listed symbols
frobnicate ($left, $right)       # calls YourModule::frobnicate
```

Take a look at L</Good Practices> for some variants you will like to use in modern Perl code.

=head1 DESCRIPTION

The Exporter module implements an C<import> method which allows a module to export functions and variables to its users' namespaces. Many modules use Exporter rather than implementing their own C<import> method because Exporter provides a highly flexible interface, with an implementation optimised
Perl automatically calls the \texttt{C<import>} method when processing a \texttt{C<use>} statement for a module. Modules and \texttt{C<use>} are documented in \texttt{L<perlfunc>} and \texttt{L<perlmod>}. Understanding the concept of modules and how the \texttt{C<use>} statement operates is important to understanding the Exporter.

=head2 How to Export

The arrays \texttt{C<@EXPORT>} and \texttt{C<@EXPORT_OK>} in a module hold lists of symbols that are going to be exported into the users namespace by default, or which they can request to be exported, respectively. The symbols can represent functions, scalars, arrays, hashes, or typeglobs. The symbols must be given by full name with the exception that the ampersand in front of a function is optional, e.g.

\begin{verbatim}
@EXPORT    = qw(afunc $scalar @array);   # afunc is a function
@EXPORT_OK = qw(&bfunc %hash *typeglob); # explicit prefix on &bfunc
\end{verbatim}

If you are only exporting function names it is recommended to omit the ampersand, as the implementation is faster this way.

=head2 Selecting What to Export

Do \texttt{B<not>} export method names!

Do \texttt{B<not>} export anything else by default without a good reason!

Exports pollute the namespace of the module user. If you must export try to use \texttt{C<@EXPORT_OK>} in preference to \texttt{C<@EXPORT>} and avoid short or common symbol names to reduce the risk of name clashes.

Generally anything not exported is still accessible from outside the module using the \texttt{C<YourModule::item_name>} (or \texttt{C<< $blessed_ref->method >>}) syntax. By convention you can use a leading underscore on names to informally indicate that they are 'internal' and not for public use.

(It is actually possible to get private functions by saying:

\begin{verbatim}
my $subref = sub { ... };
$subref->(@args);   # Call it as a function
$obj->$subref(@args);   # Use it as a method
\end{verbatim}

However if you use them for methods it is up to you to figure out how to make inheritance work.)

As a general rule, if the module is trying to be object oriented
then export nothing. If it's just a collection of functions then
C<@EXPORT_OK> anything but use C<@EXPORT> with caution. For function and
method names use barewords in preference to names prefixed with
ampersands for the export lists.

Other module design guidelines can be found in L<perlmod>.

=head2 How to Import

In other files which wish to use your module there are three basic ways for
them to load your module and import its symbols:

=over 4

=item C<use YourModule;>

This imports all the symbols from YourModule's C<@EXPORT> into the namespace
of the C<use> statement.

=item C<use YourModule ();>

This causes perl to load your module but does not import any symbols.

=item C<use YourModule qw(...);>

This imports only the symbols listed by the caller into their namespace.
All listed symbols must be in your C<@EXPORT> or C<@EXPORT_OK>, else an error
occurs. The advanced export features of Exporter are accessed like this,
but with list entries that are syntactically distinct from symbol names.

=back

Unless you want to use its advanced features, this is probably all you
need to know to use Exporter.

=head1 Advanced Features

=head2 Specialised Import Lists

If any of the entries in an import list begins with !, : or / then
the list is treated as a series of specifications which either add to
or delete from the list of names to import. They are processed left to
right. Specifications are in the form:

[!]name     This name only
[!]:DEFAULT  All names in @EXPORT
[!]:tag      All names in $EXPORT_TAGS{tag} anonymous list
[!]/pattern/ All names in @EXPORT and @EXPORT_OK which match
A leading ! indicates that matching names should be deleted from the
list of names to import. If the first specification is a deletion it
is treated as though preceded by :DEFAULT. If you just want to import
extra names in addition to the default set you will still need to
include :DEFAULT explicitly.

e.g., F<Module.pm> defines:

```perl
@EXPORT  = qw(A1 A2 A3 A4 A5);
@EXPORT_OK = qw(B1 B2 B3 B4 B5);
%EXPORT_TAGS = (T1 => [qw(A1 A2 B1 B2)], T2 => [qw(A1 A2 B3 B4)]);
```

Note that you cannot use tags in @EXPORT or @EXPORT_OK.

Names in EXPORT_TAGS must also appear in @EXPORT or @EXPORT_OK.

An application using Module can say something like:

```perl
use Module qw(:DEFAULT :T2 !B3 A3);
```

Other examples include:

```perl
use Socket qw(!/^[AP]F_/ !SOMAXCONN !SOL_SOCKET);
use POSIX qw(:errno_h :termios_h !TCSADRAIN !/^EXIT/);
```

Remember that most patterns (using //) will need to be anchored
with a leading ^, e.g., C</^EXIT/> rather than C</EXIT/>.

You can say C<BEGIN { $Exporter::Verbose=1 }> to see how the
specifications are being processed and what is actually being imported
into modules.

=head2 Exporting Without Using Exporter's import Method

Exporter has a special method, `export_to_level' which is used in situations
where you can't directly call Exporter's
import method. The export_to_level
method looks like:

```perl
MyPackage->export_to_level($where_to_export, $package, @what_to_export);
```

where C<$where_to_export> is an integer telling how far up the calling stack
to export your symbols, and C<$@what_to_export> is an array telling what
symbols *to* export (usually this is C<$@_>). The C<$package> argument is
currently unused.
For example, suppose that you have a module, A, which already has an import function:

```perl
package A;

@ISA = qw(Exporter);
@EXPORT_OK = qw($b);

sub import
{
$A::b = 1;  # not a very useful import method
}
```

and you want to Export symbol \C<$A::b> back to the module that called package A. Since Exporter relies on the import method to work, via inheritance, as it stands Exporter::import() will never get called. Instead, say the following:

```perl
package A;
@ISA = qw(Exporter);
@EXPORT_OK = qw($b);

sub import
{
$A::b = 1;
A->export_to_level(1, @_);
}
```

This will export the symbols one level 'above' the current package - ie: to the program or module that used package A. 

Note: Be careful not to modify \C<@_> at all before you call export_to_level - or people using your package will get very unexplained results!

=head2 Exporting Without Inheriting from Exporter

By including Exporter in your \C<@ISA> you inherit an Exporter's import() method but you also inherit several other helper methods which you probably don't want. To avoid this you can do:

```perl
package YourModule;
use Exporter qw(import);
```

which will export Exporter's own import() method into YourModule. Everything will work as before but you won't need to include Exporter in \C<@YourModule::ISA>.
Note: This feature was introduced in version 5.57 of Exporter, released with Perl 5.8.3.

=head2 Module Version Checking

The Exporter module will convert an attempt to import a number from a module into a call to \$module_name->VERSION($value). This can be used to validate that the version of the module being used is greater than or equal to the required version.

For historical reasons, Exporter supplies a \$require_version method that simply delegates to \$VERSION. Originally, before \$UNIVERSAL::VERSION existed, Exporter would call \$require_version.

Since the \$UNIVERSAL::VERSION method treats the \$VERSION number as a simple numeric value it will regard version 1.10 as lower than 1.9. For this reason it is strongly recommended that you use numbers with at least two decimal places, e.g., 1.09.

=head2 Managing Unknown Symbols

In some situations you may want to prevent certain symbols from being exported. Typically this applies to extensions which have functions or constants that may not exist on some systems.

The names of any symbols that cannot be exported should be listed in the \$@EXPORT_FAIL array.

If a module attempts to import any of these symbols the Exporter will give the module an opportunity to handle the situation before generating an error. The Exporter will call an export_fail method with a list of the failed symbols:

@failed_symbols = $module_name->export_fail(@failed_symbols);

If the \$export_fail method returns an empty list then no error is recorded and all the requested symbols are exported. If the returned list is not empty then an error is generated for each symbol and the export fails. The Exporter provides a default \$export_fail method which simply returns the list unchanged.

Uses for the \$export_fail method include giving better error messages for some symbols and performing lazy architectural checks (put more symbols into \$@EXPORT_FAIL by default and then take them out if someone actually tries to use them and an expensive check shows that they are usable on that platform).

=head2 Tag Handling Utility Functions
Since the symbols listed within \texttt{C<%EXPORT_TAGS>} must also appear in either \texttt{C<@EXPORT>} or \texttt{C<@EXPORT_OK>}, two utility functions are provided which allow you to easily add tagged sets of symbols to \texttt{C<@EXPORT>} or \texttt{C<@EXPORT_OK>}:

\begin{verbatim}
%EXPORT_TAGS = (foo => [qw(aa bb cc)], bar => [qw(aa cc dd)]);

Exporter::export_tags('foo');     # add aa, bb and cc to @EXPORT
Exporter::export_ok_tags('bar');  # add aa, cc and dd to @EXPORT_OK
\end{verbatim}

Any names which are not tags are added to \texttt{C<@EXPORT>} or \texttt{C<@EXPORT_OK>} unchanged but will trigger a warning (with \texttt{C<-w>}) to avoid misspelt tags names being silently added to \texttt{C<@EXPORT>} or \texttt{C<@EXPORT_OK>}. Future versions may make this a fatal error.

=head2 Generating Combined Tags

If several symbol categories exist in \texttt{C<%EXPORT_TAGS>}, it's usually useful to create the utility ".:all" to simplify "use" statements.

The simplest way to do this is:

\begin{verbatim}
%EXPORT_TAGS = (foo => [qw(aa bb cc)], bar => [qw(aa cc dd)]);

# add all the other ":class" tags to the ":all" class,
# deleting duplicates
{
  my %seen;

  push @{$EXPORT_TAGS{all}},
    grep {!$seen{$_}++} @{$EXPORT_TAGS{$_}} foreach keys %EXPORT_TAGS;
}
\end{verbatim}

\texttt{CGI.pm} creates an ".:all" tag which contains some (but not really all) of its categories. That could be done with one small change:

\begin{verbatim}
# add some of the other ":class" tags to the ":all" class,
# deleting duplicates
{
  my %seen;

  push @{$EXPORT_TAGS{all}},
    grep {!$seen{$_}++} @{$EXPORT_TAGS{$_}} foreach qw/html2 html3 netscape form cgi internal/;
}
\end{verbatim}

Note that the tag names in \texttt{C<%EXPORT_TAGS>} don't have the leading ".".
=head2 C<AUTOLOAD>ed Constants

Many modules make use of C<AUTOLOAD>ing for constant subroutines to avoid having to compile and waste memory on rarely used values (see L<perlsub> for details on constant subroutines). Calls to such constant subroutines are not optimized away at compile time because they can't be checked at compile time for constancy.

Even if a prototype is available at compile time, the body of the subroutine is not (it hasn't been C<AUTOLOAD>ed yet). perl needs to examine both the C<()> prototype and the body of a subroutine at compile time to detect that it can safely replace calls to that subroutine with the constant value.

A workaround for this is to call the constants once in a C<BEGIN> block:

    package My;
    use Socket;

    foo( SO_LINGER );  ## SO_LINGER NOT optimized away; called at runtime
    BEGIN { SO_LINGER }
    foo( SO_LINGER );  ## SO_LINGER optimized away at compile time.

This forces the C<AUTOLOAD> for C<SO_LINGER> to take place before SO_LINGER is encountered later in C<My> package.

If you are writing a package that C<AUTOLOAD>s, consider forcing an C<AUTOLOAD> for any constants explicitly imported by other packages or which are usually used when your package is C<use>d.

=head1 Good Practices

=head2 Declaring C:@EXPORT_OK> and Friends

When using C<Exporter> with the standard C<strict> and C<warnings> pragmas, the C<our> keyword is needed to declare the package variables C:@EXPORT_OK>, C:@EXPORT>, C:@ISA>, etc.

    our @ISA = qw(Exporter);
    our @EXPORT_OK = qw(munge frobnicate);

If backward compatibility for Perls under 5.6 is important, one must write instead a C<use vars> statement.

    use vars qw(@ISA @EXPORT_OK);
    @ISA = qw(Exporter);
Playing Safe

There are some caveats with the use of runtime statements like `require Exporter` and the assignment to package variables, which can be very subtle for the unaware programmer. This may happen for instance with mutually recursive modules, which are affected by the time the relevant constructions are executed.

The ideal (but a bit ugly) way to never have to think about that is to use `BEGIN` blocks. So the first part of the SYNOPSIS code could be rewritten as:

```perl
package YourModule;

use strict;
use warnings;

our (@ISA, @EXPORT_OK);
BEGIN {
    require Exporter;
    @ISA = qw(Exporter);
    @EXPORT_OK = qw(munge frobnicate);  # symbols to export on request
}
```

The `BEGIN` will assure that the loading of `Exporter.pm` and the assignments to `@ISA` and `@EXPORT_OK` happen immediately, leaving no room for something to get awry or just plain wrong.

With respect to loading `Exporter` and inheriting, there are alternatives with the use of modules like `base` and `parent`.

```perl
use base qw(Exporter);
# or
use parent qw(Exporter);
```

Any of these statements are nice replacements for `BEGIN { require Exporter; @ISA = qw(Exporter); }` with the same compile-time effect. The basic difference is that `base` code interacts with declared `fields` while `parent` is a streamlined version of the older `base` code to just establish the IS-A relationship.

For more details, see the documentation and code of `base` and `parent`. 
Another thorough remedy to that runtime vs. compile-time trap is to use `Exporter::Easy`, which is a wrapper of `Exporter` that allows all boilerplate code at a single gulp in the use statement.

```perl
use Exporter::Easy (
    OK => [ qw(munge frobnicate) ],
); # @ISA setup is automatic
# all assignments happen at compile time
```

=head2 What Not to Export

You have been warned already in `Selecting What to Export` to not export:

=over 4

=item *

method names (because you don't need to and that's likely to not do what you want),

=item *

anything by default (because you don't want to surprise your users... badly)

=item *

anything you don't need to (because less is more)

=back

There's one more item to add to this list. Do not export variable names. Just because `Exporter` lets you do that, it does not mean you should.

```
@EXPORT_OK = qw($svar @avar %hvar); # DON'T!
```

Exporting variables is not a good idea. They can change under the hood, provoking horrible effects at-a-distance that are too hard to track and to fix. Trust me: they are not worth it.

To provide the capability to set/get class-wide
settings, it is best instead to provide accessors as subroutines or class methods instead.

=head1 SEE ALSO

C<Exporter> is definitely not the only module with symbol exporter capabilities. At CPAN, you may find a bunch of them. Some are lighter. Some provide improved APIs and features. Pick the one that fits your needs. The following is a sample list of such modules.

Exporter::Easy
Exporter::Lite
Exporter::Renaming
Exporter::Tidy
Sub::Exporter / Sub::Installer
Perl6::Export / Perl6::Export::Attrs

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abstract: 'Implements default import method for modules'
author:  
- unknown
build_requires:  
  ExtUtils::MakeMaker: 0
configure_requires:  
  ExtUtils::MakeMaker: 0
dynamic_config: 1
1.975 rdma-cm 35.0-1.el8

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Upstream-Name: rdma-core
Upstream-Contact: Doug Ledford <dledford@redhat.com>, Leon Romanovsky <Leon@kernel.org>
Source: https://github.com/linux-rdma/rdma-core

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Files: CMakeLists.txt
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Files: buildlib/*

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Files: ccan/list/*
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* /opt/ws_local/PERMITS_SQL/1068232293_1594320747.73/0/netty-resolver-4-1-49-final-sources-1-
  jar/io/netty/resolver/NoopAddressResolverGroup.java
* /opt/ws_local/PERMITS_SQL/1068232293_1594320747.73/0/netty-resolver-4-1-49-final-sources-1-
  jar/io/netty/resolver/AddressResolverGroup.java
* /opt/ws_local/PERMITS_SQL/1068232293_1594320747.73/0/netty-resolver-4-1-49-final-sources-1-
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  jar/io/netty/resolver/RoundRobinInetAddressResolver.java

1.986 go-autorest-validation 0.3.1
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* /opt/cola/permits/1258291910_1643053091.75/0/jline-terminal-jna-3-14-1-sources-jar/org/jline/terminal/impl/jna/osx/CLibrary.java
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* /opt/cola/permits/1258291910_1643053091.75/0/jline-terminal-jna-3-14-1-sources-jar/org/jline/terminal/impl/jna/linux/LinuxNativePty.java
* /opt/cola/permits/1258291910_1643053091.75/0/jline-terminal-jna-3-14-1-sources-jar/org/jline/terminal/impl/jna/freebsd/CLibrary.java
* /opt/cola/permits/1258291910_1643053091.75/0/jline-terminal-jna-3-14-1-sources-jar/org/jline/terminal/impl/jna/win/WindowsAnsiWriter.java
* /opt/cola/permits/1258291910_1643053091.75/0/jline-terminal-jna-3-14-1-sources-jar/org/jline/terminal/impl/jna/JnaNativePty.java
* /opt/cola/permits/1258291910_1643053091.75/0/jline-terminal-jna-3-14-1-sources-jar/org/jline/terminal/impl/jna/linux/CLibrary.java
* /opt/cola/permits/1258291910_1643053091.75/0/jline-terminal-jna-3-14-1-sources-jar/org/jline/terminal/impl/jna/freebsd/FreeBsdNativePty.java

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* /opt/cola/permits/1258291910_1643053091.75/0/jline-terminal-jna-3-14-1-sources-jar/org/jline/terminal/impl/jna/JnaSupportImpl.java

1.988 jansson 2.11
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* /opt/ws_local/PERMITS_SQL/1013874009_1591325437.54/0/antlr4-runtime-4-5-1-sources.jar/org/antlr/v4/runtime/tn/ContextSensitivityInfo.java
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1.995 dnf-plugins-core 4.0.21-4.el8_5

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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# SFC64

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Adapted from a C++ implementation of Chris Doty-Humphrey's SFC PRNG.

https://gist.github.com/imneme/f1f7821f07cf76504a97f6537c818083

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Original algorithm for the implementation of rk_interval function from Richard J. Wagner's implementation of the Mersenne Twister RNG, optimised by Magnus Jonsson.

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Eclipse

The following artifacts are EPL.
* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

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Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

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Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.
* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications
are hosted at github and both modified and original are under GPL v2 with
classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

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**OW2**

The following artifacts are licensed by the OW2 Foundation according to the
terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm

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**Apache**

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

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**MortBay**

The following artifacts are ASL2 licensed. Based on selected classes from
following Apache Tomcat jars, all ASL2 licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api
Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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1.1018 lockfile python-3.6

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1.1019 shim 14

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1.1020 libtiff 4.0.9-20.el8

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1.1021  libcroco 0.6.12 4.el8_2.1

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1.1022 opensaml-profile-api 3.4.5

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auto_left_margin, bw, bw
auto_right_margin, am, am
back_color_erase, bce, ut
can_change, ccc, cc
ceol_standout_glitch, xhp, xs
col_addr_glitch, xhpa, YA
cpi_changes_res, cpix, YF
cr_cancels_micro_mode, crxm, YB
dest_tabs_magic_smso, xt, xt
eat_newline_glitch, xenl, xn
erase_overstrike, eo, eo
generic_type, gn, gn
hard_copy, hc, hc
hard_cursor, chts, HC
has_meta_key, km, km
has_print_wheel, daisy, YC
has_status_line, hs, hs
hue_lightness_saturation, hls, hl
insert_null_glitch, in, in
lpix_changes_res, lpix, YG
memory_above, da, da
memory_below, db, db
move_insert_mode, mir, mi
move_standout_mode, msgr, ms
needs_xon_xoff, nxon, nx
no_esc_crtc, xsb, xb
no_pad_char, npc, NP
non_dest_scroll_region, ndscr, ND
non_rev_rmcup, nrmc, NR
over_strike, os, os
prtr_silent, mc5i, 5i
row_addr_glitch, xvpa, YD
semi_auto_right_margin, sam, YE
status_line_esc_ok, eslok, es
tilde_glitch, hz, hz
transparent_underline, ul, ul
xon_xoff, xon, xo
erase_chars, ech, ec
exit_alt_charset_mode, rmacs, ae
exit_am_mode, rmam, RA
exit_attribute_mode, sgr0, me
exit_ca_mode, rmcup, te
exit_delete_mode, rmdc, ed
exit_doublewide_mode, rwidm, ZQ
exit_insert_mode, rmir, ei
exit_italics_mode, ritm, ZR
exit_leftward_mode, rlm, ZS
exit_micro_mode, rmicm, ZT
exit_shadow_mode, rshm, ZU
exit_standout_mode, rmso, se
exit_subscript_mode, rsubm, ZV
exit_superscript_mode, rsupm, ZW
exit_underline_mode, rmul, ue
exit_upward_mode, rum, ZX
exit_xon_mode, rmxon, RX
fixed_pause, pause, PA
flash_hook, hook, fh
flash_screen, flash, vb
form_feed, ff, ff
from_status_line, fsl, fs
goto_window, wingo, WG
hangup, hup, HU
init_1string, is1, i1
init_2string, is2, is
init_3string, is3, i3
init_file, if, if
init_prog, iprog, iP
initialize_color, initc, Ic
initialize_pair, initp, Ip
insert_character, ich1, ic
insert_line, il1, al
insert_padding, ip, ip
key_a1, ka1, K1
key_a3, ka3, K3
key_b2, kb2, K2
key_backspace, kbs, kb
key_beg, kbeg, @1
key_btab, kcbt, kB
key_c1, kc1, K4
key_c3, kc3, K5
key_cancel, kcan, @2
key_catab, ktbc, ka
key_clear, kclr, kC
key_close, kclo, @3
key_command, kcmd, @4
key_f41, kf41, FV
key_f42, kf42, FW
key_f43, kf43, FX
key_f44, kf44, FY
key_f45, kf45, FZ
key_f46, kf46, Fa
key_f47, kf47, Fb
key_f48, kf48, Fc
key_f49, kf49, Fd
key_f5, kf5, k5
key_f50, kf50, Fe
key_f51, kf51, Ff
key_f52, kf52, Fg
key_f53, kf53, Ph
key_f54, kf54, Pi
key_f55, kf55, Fj
key_f56, kf56, Fk
key_f57, kf57, Fl
key_f58, kf58, Fm
key_f59, kf59, Fn
key_f6, kf6, k6
key_f60, kf60, Fo
key_f61, kf61, Fp
key_f62, kf62, Fq
key_f63, kf63, Fr
key_f7, kf7, k7
key_f8, kf8, k8
key_f9, kf9, k9
key_find, kfnd, @0
key_help, khlp, %1
key_home, khome, kh
key_ic, kich1, kI
key_il, kil1, kA
key_left, kcub1, kl
key_ll, kll, kH
key_mark, kmrk, %2
key_message, kmsg, %3
key_move, kmov, %4
key_next, knxt, %5
key_npage, knp, kN
key_open, kopn, %6
key_options, kopt, %7
key_ppage, kpp, kP
key_previous, kprv, %8
key_print, kprt, %9
key_redo, krdo, %0
key_reference, kref, &1
key_refresh, krfr, &2
key_replace, krpl, &3
key_restart, krst, &4
key_resume, kres, &5
key_right, kcuf1, kr
key_save, ksav, &6
key_sbeg, kBEG, &9
key_scancel, kCAN, &0
key_scommand, kCMD, *1
key_scopy, kCPY, *2
key_screate, kCRT, *3
key_sdc, kDC, *4
key sdl, kDL, *5
key_select, kslt, *6
key_send, kEND, *7
key_seol, kEOL, *8
key_sexit, kEXT, *9
key_sf, kind, kF
key_sfind, kFND, *0
key_shelp, kHLP, #1
key_shome, kHOM, #2
key_sic, kIC, #3
key_sleft, kLFT, #4
key_smessage, kMSG, %a
key_smov, kMOV, %b
key_snext, kNXT, %c
key_soptions, kOPT, %d
key_sprevious, kPRV, %e
key_sprint, kPRT, %f
key_sr, kri, kr
key_sredo, kRDO, %g
key_sreplace, kRPL, %h
key_sright, kRIT, %i
key_sresume, kRES, %j
key_ssave, kSAV, !1
key_ssuspend, kSPD, !2
key_stab, khts, kT
key_sundo, kUND, !3
key_suspend, kspd, &7
key_undo, kund, &8
key_up, kcuu1, ku
keypad_local, rmkx, ke
keypad_xmit, smkx, ks
lab_f0, lf0, l0
lab_f1, lf1, l1
lab_f10, lf10, la
lab_f2, lf2, l2
lab_f3, lf3, l3
lab_f4, lf4, l4
reset_1string, rs1, r1
reset_2string, rs2, r2
reset_3string, rs3, r3
reset_file, rf, rf
restore_cursor, rc, rc
row_address, vpa, cv
save_cursor, sc, sc
scroll_forward, ind, sf
scroll_reverse, ri, sr
select_char_set, scs, Zj
set_attributes, sgr, sa
set_background, setb, Sb
set_bottom_margin, smgb, Zk
set_bottom_margin_parm, smgpb, Zl
set_clock, sclk, SC
set_color_pair, scp, sp
set_foreground, setf, Sf
set_left_margin, smgl, ML
set_left_margin_parm, smglp, Zm
set_right_margin, smgr, MR
set_right_margin_parm, smgrp, Zn
set_tab, hts, st
set_top_margin, smgt, Zo
set_top_margin_parm, smgtp, Zp
set_window, wind, wi
start_bit_image, sbim, Zq
start_char_set_def, scsd, Zr
stop_bit_image, rbim, Zs
stop_char_set_def, rcsd, Zt
subscript_characters, subcs, Zu
superscript_characters, supcs, Zv
tab, ht, ta
these_cause_cr, docr, Zw
to_status_line, tsl, ts
tone, tone, TO
underline_char, uc, uc
up_half_line, hu, hu
user0, u0, u0
user1, u1, u1
user2, u2, u2
user3, u3, u3
user4, u4, u4
user5, u5, u5
user6, u6, u6
user7, u7, u7
user8, u8, u8
user9, u9, u9
wait_tone, wait, WA
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* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/Terminal.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/ExternalTerminal.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/NonBlockingReader.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/LineDisciplineTerminal.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/PosixSysTerminal.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/Colors.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/StyleResolver.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/Display.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/DumbTerminal.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/PosixPtyTerminal.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/NonBlockingReaderImpl.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/AttributedStringBuilder.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/NonBlockingInputStreamImpl.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/Size.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/AttributedStringBuilder.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/NonBlockingInputStreamImpl.java

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* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/InputStreamReader.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/AttributedString.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/WCWidth.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/DiffHelper.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/AbstractPosixTerminal.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/Signals.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/package-info.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/Attributes.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/ShutdownHooks.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/ClosedException.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/ExecHelper.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/OSUtils.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/spi/Pty.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/MouseEvent.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/ExecPty.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/package-info.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/Log.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/Levenshtein.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/CursorSupport.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/Cursor.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/MouseSupport.java

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* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/TerminalBuilder.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/InfoCmp.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/spi/JnaSupport.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/spi/JansiSupport.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/AbstractWindowsTerminal.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/AttributedCharSequence.java

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* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/NonBlockingPumpReader.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/NonBlockingPumpInputStream.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/terminal/impl/AbstractWindowsConsoleWriter.java
* /opt/cola/permits/1260641921_1643189388.73/0/jline-terminal-3-12-1-sources-jar/org/jline/utils/WriterOutputStream.java

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green
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navy
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silver
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grey0
navyblue
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* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/JCompType.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/JFloat.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/Utils.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/CGenerator.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/CppGenerator.java
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* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/BinaryInputArchive.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/BinaryOutputArchive.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/JMap.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/JVector.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/Record.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/ByteBuffer.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/Field.java
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* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/generated/RccTokenManager.java
**/org/apache/jute/compiler/generated/ParseException.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/generated/Token.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/generated/Rcc.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/generated/TokenMgrError.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/jute/compiler/generated/RccConstants.java
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* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/ErrorTxn.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/DeleteTxn.java
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* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/CreateTTLRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/GetMaxChildrenResponse.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/SyncResponse.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/DeleteTxn.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/MultiTxn.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/data/Stat.java
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* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/GetChildrenResponse.java
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* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/server/quorum/QuorumAuthPacket.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/ConnectResponse.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/SetACLTxn.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/Txn.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/CreateContainerTxn.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/CloseSessionTxn.java
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* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/GetACLRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/GetChildren2Request.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/DeleteRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/ConnectRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/GetSASLRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/server/quorum/LearnerInfo.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/GetChildrenRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/CheckVersionRequest.java
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Found in path(s):
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/SetMaxChildrenTxn.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/GetMaxChildrenRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/ExistsRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/AuthPacket.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/GetAllChildrenNumberRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/CheckVersionTxn.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/Create2Response.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/SetWatches2.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/SyncRequest.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/CreateTxnV0.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/GetAllChildrenNumberResponse.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/proto/MultiHeader.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/CreateTxn.java
* /opt/cola/permits/1204625930_1631958758.34/0/zookeeper-jute-3-6-3-sources-jar/org/apache/zookeeper/txn/CreateTTLTxn.java

No license file was found, but licenses were detected in source scan.
options {
    STATIC=false;
}

PARSER_BEGIN(Rcc)
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   */

package org.apache.jute.compiler.generated;

import org.apache.jute.compiler.*;
import java.util.ArrayList;
import java.util.Hashtable;
import java.io.File;
import java.io.FileReader;
import java.io.FileNotFoundException;
import java.io.IOException;
@SuppressWarnings("unused")
public class Rcc {
    private static Hashtable<String, JRecord> recTab = new Hashtable<String, JRecord>();
    private static String curDir = System.getProperty("user.dir");
    private static String curFileName;
    private static String curModuleName;
    public static void main(String args[]) {
        String language = "java";
ArrayList<String> recFiles = new ArrayList<String>();
JFile curFile=null;

for (int i=0; i<args.length; i++) {
    if ("-l".equalsIgnoreCase(args[i]) ||
        "--language".equalsIgnoreCase(args[i])) {
        language = args[i+1].toLowerCase();
        i++;
    } else {
        recFiles.add(args[i]);
    }
}

if (!"c++".equals(language) && !"java".equals(language) && !"c".equals(language)) {
    System.out.println("Cannot recognize language:" + language);
    System.exit(1);
}

if (recFiles.size() == 0) {
    System.out.println("No record files specified. Exiting.");
    System.exit(1);
}

for (int i=0; i<recFiles.size(); i++) {
    curFileName = recFiles.get(i);
    File file = new File(curFileName);
    try {
        curFile = parseFile(file);
    } catch (FileNotFoundException e) {
        System.out.println("File " + recFiles.get(i) + " Not found.");
        System.exit(1);
    } catch (ParseException e) {
        System.out.println(e.toString());
        System.exit(1);
    }
    System.out.println(recFiles.get(i) + " Parsed Successfully");
    try {
        curFile.genCode(language, new File("."));
    } catch (IOException e) {
        System.out.println(e.toString());
        System.exit(1);
    }
}

public static JFile parseFile(File file) throws FileNotFoundException, ParseException {
    curDir = file.getParent();
    curFileName = file.getName();
    FileReader reader = new FileReader(file);
    try {
        Rcc parser = new Rcc(reader);
    } catch (IOException e) {
        System.out.println(e.toString());
        System.exit(1);
    }
    return null;
}
recTab = new Hashtable<String, JRecord>();
return parser.Input();
} finally {
    try {
        reader.close();
    } catch (IOException e) {
    }
}
}
}

PARSER_END(Rcc)

SKIP :
{
  " "
| "\t"
| "\n"
| "\r"
}

SPECIAL_TOKEN :
{
  "//" : WithinOneLineComment
}

<WithinOneLineComment> SPECIAL_TOKEN :
{
  <("\n" | "\r" | "\r\n")> : DEFAULT
}

<WithinOneLineComment> MORE :
{
  <-[
}

SPECIAL_TOKEN :
{
  "/*" : WithinMultiLineComment
}

<WithinMultiLineComment> SPECIAL_TOKEN :
{
  "*/" : DEFAULT
}

<WithinMultiLineComment> MORE :
{

TOKEN:
{
  <MODULE_TKN: "module">
  <RECORD_TKN: "class">
  <INCLUDE_TKN: "include">
  <BYTE_TKN: "byte">
  <BOOLEAN_TKN: "boolean">
  <INT_TKN: "int">
  <LONG_TKN: "long">
  <FLOAT_TKN: "float">
  <DOUBLE_TKN: "double">
  <STRING_TKN: "string">
  <BUFFER_TKN: "buffer">
  <VECTOR_TKN: "vector">
  <MAP_TKN: "map">
  <LBRACE_TKN: "{"}
  <RBRACE_TKN: "}">
  <LT_TKN: "<">
  <GT_TKN: ">">
  <SEMICOLON_TKN: ";">
  <COMMA_TKN: ",">
  <DOT_TKN: ".">
  <CSTRING_TKN: "\" ([\"\"]+ )"">
  <IDENT_TKN: [\"A\"-\"Z\",\"a\"-\"z\"] ([\"a\"-\"Z\",\"A\"-\"Z\",\"0\"-\"9\",\"\"])*>
}

JFile Input():
{
  ArrayList<JFile> ilist = new ArrayList<JFile>();
  ArrayList<JRecord> rlist = new ArrayList<JRecord>();
  JFile i;
  ArrayList<JRecord> l;
  }
  |
  i = Include()
  { ilist.add(i); }
  l = Module()
  { rlist.addAll(l); }
  }+
  <EOF>
  { return new JFile(curFileName, ilist, rlist); }
}

JFile Include():

```java
{  
    String fname;
    Token t;
}

<INCLUDE_TKN>
t = <CSTRING_TKN>
{
    JFile ret = null;
    fname = t.image.replaceAll("^\"", ".\"\"..\"\"\"\"\").replaceAll("\"$", ".\"\"\"\"\"");
    File file = new File(curDir, fname);
    String tmpDir = curDir;
    String tmpFile = curFileName;
    curDir = file.getParent();
    curFileName = file.getName();
    try {
        FileReader reader = new FileReader(file);
        Rcc parser = new Rcc(reader);
        try {
            ret = parser.Input();
            System.out.println(fname + " Parsed Successfully");
        } catch (ParseException e) {
            System.out.println(e.toString());
            System.exit(1);
        }
        try {
            reader.close();
        } catch (IOException e) {
        }
    } catch (FileNotFoundException e) {
        System.out.println("File " + fname + " Not found.");
        System.exit(1);
    }
    curDir = tmpDir;
    curFileName = tmpFile;
    return ret;
}

ArrayList<JRecord> Module() :
{
    String mName;
    ArrayList<JRecord> rlist;
}

<MODULE_TKN>
mName = ModuleName()
```
{ curModuleName = mName; }
<rbrace_tkn>
    rlist = RecordList()
<rbrace_tkn>
    { return rlist; }
}

String ModuleName() :
{
    String name = "";
    Token t;
    
    t = <ident_tkn>
    { name += t.image; }
    (<dot_tkn>
    t = <ident_tkn>
    { name += "." + t.image; }
    )* 
    { return name; }
}

ArrayList<JRecord> RecordList() :
{
    ArrayList<JRecord> rlist = new ArrayList<JRecord>();
    JRecord r;
    
    ( r = Record()
    { rlist.add(r); } 
    )+
    { return rlist; }
}

JRecord Record() :
{
    String rname;
    ArrayList<JField> flist = new ArrayList<JField>();
    Token t;
    JField f;
    
    ( <record_tkn>
    t = <ident_tkn>
    { rname = t.image; }
    <rbrace_tkn>
(f = Field()
    { flist.add(f); }
    <SEMICOLON_TKN>
)+
<RBRACE_TKN>
{
    String fqn = curModuleName + "." + rname;
    JRecord r = new JRecord(fqn, flist);
    recTab.put(fqn, r);
    return r;
}

JField Field() :
{
    JType jt;
    Token t;
}
{
    jt = Type()
    t = <IDENT_TKN>
    { return new JField(jt, t.image); }
}

JType Type() :
{
    JType jt;
    Token t;
    String rname;
}
{
   jt = Map()
    { return jt; }
|   jt = Vector()
    { return jt; }
|   <BYTE_TKN>
    { return new JByte(); }
|   <BOOLEAN_TKN>
    { return new JBoolean(); }
|   <INT_TKN>
    { return new JInt(); }
|   <LONG_TKN>
    { return new JLong(); }
|   <FLOAT_TKN>
    { return new JFloat(); }
|   <DOUBLE_TKN>
    { return new JDouble(); }
JMap Map() :
{
    JType jt1;
    JType jt2;
}
{
    <MAP_TKN>
    <LT_TKN>
    jt1 = Type()
    <COMMA_TKN>
    jt2 = Type()
    <GT_TKN>
    { return new JMap(jt1, jt2); } 
}

JVector Vector() :
{
    JType jt;
}
{
    <VECTOR_TKN>
    <LT_TKN>
    jt = Type()
    <GT_TKN>
    { return new JVector(jt); } 
}
1.1035 docker-cli 20.10.12+incompatible

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Protocol Buffers for Go with Gadgets

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procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc.

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possible use to humanity, the best way to achieve this is to make it
free software which everyone can redistribute and change under these
terms.

To do so, attach the following notices to the program. It is safest to
attach them to the start of each source file to most effectively convey
the exclusion of warranty; and each file should have at least the
"copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
Copyright (C) 19yy <name of author>

This program is free software; you can redistribute it and/or modify
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the Free Software Foundation; either version 1, or (at your option)
any later version.

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along with this program; if not, write to the Free Software

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

    Gnomovision version 69, Copyright (C) 19xx name of author
    Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
    This is free software, and you are welcome to redistribute it
    under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here a sample; alter the names:

    Yoyodyne, Inc., hereby disclaims all copyright interest in the
    program `Gnomovision' (a program to direct compilers to make passes
    at assemblers) written by James Hacker.

    <signature of Ty Coon>, 1 April 1989
    Ty Coon, President of Vice

That's all there is to it!

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    The Artistic License

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The End

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1.1047 gophercloud 0.16.0
1.1047.1 Available under license:
package RESOURCE

    import (    
        "github.com/gophercloud/gophercloud"
        "github.com/gophercloud/gophercloud/pagination"
    )

    // RESOURCE represents...
    type Resource struct {
type commonResult struct {
  gophercloud.Result
}

// GetResult is the response from a Get operation. Call its Extract method
// to interpret it as a RESOURCE.
type GetResult struct {
  commonResult
}

// CreateResult is the response from a Create operation. Call its Extract method
// to interpret it as a RESOURCE.
type CreateResult struct {
  commonResult
}

// DeleteResult is the response from a Delete operation. Call its ExtractErr to
// determine if the request succeeded or failed.
type DeleteResult struct {
  gophercloud.ErrResult
}

// UpdateResult is the result of an Update request. Call its Extract method to
// interpret it as a RESOURCE.
type UpdateResult struct {
  commonResult
}

// ResourcePage is a single page of RESOURCE results.
type ResourcePage struct {
  pagination.LinkedPageBase
}

// IsEmpty determines whether or not a page of RESOURCES contains any results.
func (r ResourcePage) IsEmpty() (bool, error) {
  resources, err := ExtractResources(r)
  return len(resources) == 0, err
}

// NextPageURL extracts the "next" link from the links section of the result.
func (r ResourcePage) NextPageURL() (string, error) {
  var s struct {
    Links struct {
      Next string `json:"next"`
      Previous string `json:"previous"
    } `json:"links"
  }
  return
}
Contributor Tutorial

This tutorial is to help new contributors become familiar with the processes used by the Gophercloud team when adding a new feature or fixing a bug.

While we have a defined process for working on Gophercloud, we're very mindful that everyone is new to this in the beginning. Please reach out for help or ask for clarification if needed. No question is ever "dumb" or not worth our time answering.

To begin, go to [Step 1](step-01-introduction.md).

Step 5: Writing the Code

At this point, you should have:

- [x] Identified a feature or bug fix
- [x] Opened an Issue about it
- [x] Located the project's service code which validates the feature or fix
- [x] Have an OpenStack environment available to test with
Now it's time to write the actual code! We recommend reading over the [CONTRIBUTING](/.github/CONTRIBUTING.md) guide again as a refresh. Notably the [Getting Started](/.github/CONTRIBUTING.md#getting-started) section will help you set up a `git` repository correctly.

We encourage you to browse the existing Gophercloud code to find examples of similar implementations. It would be a _very_ rare occurrence for you to be implementing something that hasn't already been done.

Use the existing packages as templates and mirror the style, naming, and logic.

Types of Pull Requests

The amount of changes you plan to make will determine how much code you should submit as Pull Requests.

### A Single Bug Fix

If you're implementing a single bug fix, then creating one `git` branch and submitting one Pull Request is fine.

### Adding a Single Field

If you're adding a single field, then a single Pull Request is also fine. See [#662](https://github.com/gophercloud/gophercloud/pull/662) as an example of this.

If you plan to add more than one missing field, you will need to open a Pull Request for _each_ field.

### Adding a Single API Call

Single API calls can also be submitted as a single Pull Request. See [#722](https://github.com/gophercloud/gophercloud/pull/722) as an example of this.

### Adding a Suite of API Calls

If you're adding support for a "suite" of API calls (meaning: Create, Update, Delete, Get), then you will need to create one Pull Request for _each_ call.

The following Pull Requests are good examples of how to do this:

* https://github.com/gophercloud/gophercloud/pull/584
* https://github.com/gophercloud/gophercloud/pull/586
* https://github.com/gophercloud/gophercloud/pull/587
You can also use the provided template as it contains a lot of the repeated boiler plate code seen in each resource. However, please make sure to thoroughly review and edit it as needed. Leaving templated portions in-place might be interpreted as rushing through the work and will require further rounds of review to fix.

### Adding an Entire OpenStack Project

To add an entire OpenStack project, you must break each set of API calls into individual Pull Requests. Implementing an entire project can be thought of as implementing multiple API suites.

An example of this can be seen from the Pull Requests referenced in [#723](https://github.com/gophercloud/gophercloud/issues/723).

What to Include in a Pull Request

1. The actual Go code to implement the feature or bug fix
2. Unit tests
3. Acceptance tests
4. Documentation

Whether you want to bundle all of the above into a single commit or multiple commits is up to you. Use your preferred style.

### Unit Tests

Unit tests should provide basic validation that your code works as intended.

Please do not use JSON fixtures from the API reference documentation. Please generate your own fixtures using the OpenStack environment you're [testing](step-04-acceptance-testing.md) with.

### Acceptance Tests

Since unit tests are not run against an actual OpenStack environment, acceptance tests can arguably be more important. The acceptance tests that you include in your Pull Request should confirm that your implemented code works as intended with an actual OpenStack environment.

### Documentation

All documentation in Gophercloud is done through in-line `godoc`. Please make
sure to document all fields, functions, and methods appropriately. In addition, each package has a `doc.go` file which should be created or amended with details of your Pull Request, where appropriate.

Dealing with Related Pull Requests
----------------------------------

If you plan to open more than one Pull Request, it's only natural that code from one Pull Request will be dependent on code from the prior Pull Request.

There are two methods of handling this:

### Create Independent Pull Requests

With this method, each Pull Request has all of the code to fully implement the code in question. Each Pull Request can be merged in any order because it's self contained.

Use the following `git` workflow to implement this method:

```
```shell
$ git checkout master
$ git pull
$ git checkout -b identityv3-regions-create
$(write your code)
$ git add .
$ git commit -m "Implementing Regions Create"

$ git checkout master
$ git checkout -b identityv3-regions-update
$(write your code)
$ git add .
$ git commit -m "Implementing Regions Update"
```

Advantages of this Method:

* Pull Requests can be merged in any order
* Additional commits to one Pull Request are independent of other Pull Requests

Disadvantages of this Method:

* There will be _a lot_ of duplicate code in each Pull Request
* You will have to rebase all other Pull Requests and resolve a good amount of merge conflicts.

### Create a Chain of Pull Requests
With this method, each Pull Request is based off of a previous Pull Request.
Pull Requests will have to be merged in a specific order since there is a defined relationship.

Use the following `git` workflow to implement this method:

```shell
$ git checkout master
$ git pull
$ git checkout -b identityv3-regions-create
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Create"

$ git checkout -b identityv3-regions-update
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Update"
```

Advantages of this Method:

* Each Pull Request becomes smaller since you are building off of the last

Disadvantages of this Method:

* If a Pull Request requires changes, you will have to rebase _all_ child
Pull Requests based off of the parent.

The choice of method is up to you.

---

Once you have your code written, submit a Pull Request to Gophercloud and proceed to [Step 6](step-06-code-review.md).

Step 6: Code Review

Once you've submitted a Pull Request, three things will happen automatically:

1. Travis-CI will run a set of simple tests:
   a. Unit Tests
   b. Code Formatting checks
   c. `go vet` checks
2. Coveralls will run a coverage test.
3. [OpenLab](https://openlabtesting.org/) will run acceptance tests.

Depending on the results of the above, you might need to make additional changes to your code.

While you're working on the finishing touches to your code, it is helpful to add a `[wip]` tag to the title of your Pull Request.

You are most welcomed to take as much time as you need to work on your Pull Request. As well, take advantage of the automatic testing that is done to each commit.

### Travis-CI

If Travis reports code formatting issues, please make sure to run `gofmt` on all of your code. Travis will also report errors with unit tests, so you should ensure those are fixed, too.

### Coveralls

If Coveralls reports a decrease in test coverage, check and make sure you have provided unit tests. A decrease in test coverage is _sometimes_ unavoidable and ignorable.

### OpenLab

OpenLab does not yet run a full suite of acceptance tests, so it's possible that the acceptance tests you've included were not run. When this happens, a core member for Gophercloud will run the tests manually.

There are times when a core reviewer does not have access to the resources required to run the acceptance tests. When this happens, it is essential that you've run them yourself (See [Step 4](step-04.md)).

**Request a Code Review**

----------

When you feel your Pull Request is ready for review, please leave a comment requesting a code review. If you don't explicitly ask for a code review, a core member might not know the Pull Request is ready for review.

Additionally, if there are parts of your implementation that you are unsure about, please ask for help. We're more than happy to provide advice.

During the code review process, a core member will review the code you've submitted and either request changes or request additional information. Generally these requests fall under the following categories:
1. Code which needs to be reformatted (See our [Style Guide](/docs/STYLEGUIDE.md) for conventions used.

2. Requests for additional information about the validity of something. This might happen because the included supporting service code URLs don't have enough information.

3. Missing unit tests or acceptance tests.

Submitting Changes
------------------
If a code review requires changes to be submitted, please do not squash your commits. Please only add new commits to the Pull Request. This is to help the code reviewer see only the changes that were made.

It's Never Personal
-------------------
Code review is a healthy exercise where a new set of eyes can sometimes spot items forgotten by the author.

Please don't take change requests personally. Our intention is to ensure the code is correct before merging.

---
Once the code has been reviewed and approved, a core member will merge your Pull Request.

Please proceed to [Step 7](step-07-congratulations.md).
	namespace testing

import (  
    "fmt"  
    "net/http"  
    "testing"

    "github.com/gophercloud/gophercloud/openstack/service/vN/resources"  
th "github.com/gophercloud/gophercloud/testhelper"  
"github.com/gophercloud/gophercloud/testhelper/client"  
)

// ListResult provides a single page of RESOURCE results.  
const ListResult = `  
{  
}`
// GetResult provides a Get result.
const GetResult = `{
}
`

// CreateRequest provides the input to a Create request.
const CreateRequest = `{
}
`

// UpdateRequest provides the input to a Update request.
const UpdateRequest = `{
}
`

// UpdateResult provides an update result.
const UpdateResult = `{
}
`

// FirstResource is the first resource in the List request.
var FirstResource = resources.Resource{ }

// SecondResource is the second resource in the List request.
var SecondResource = resources.Resource{ }

// SecondResourceUpdated is how SecondResource should look after an Update.
var SecondResourceUpdated = resources.Resource{ }

// ExpectedResourcesSlice is the slice of resources expected to be returned from ListResult.
var ExpectedResourcesSlice = []resources.Resource{FirstResource, SecondResource}

// HandleListResourceSuccessfully creates an HTTP handler at `resources` on the // test handler mux that responds with a list of two resources.
func HandleListResourceSuccessfully(t *testing.T) {
th.Mux.HandleFunc(`/resources`, func(w http.ResponseWriter, r *http.Request) {
    th.TestMethod(t, r, "GET")
    th.TestHeader(t, r, "Accept", "application/json")
    th.TestHeader(t, r, "X-Auth-Token", client.TokenID)
    w.Header().Set("Content-Type", "application/json")
    w.WriteHeader(http.StatusOK)
})
fmt.Fprintf(w, ListResult)
})

// HandleGetResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that responds with a single resource.
func HandleGetResourceSuccessfully(t *testing.T) {
    th.Mux.HandleFunc(`/resources/9fe1d3`, func(w http.ResponseWriter, r *http.Request) {
        th.TestMethod(t, r, "GET")
        th.TestHeader(t, r, "Accept", "application/json")
        th.TestHeader(t, r, "X-Auth-Token", client.TokenID)
        w.Header().Set("Content-Type", "application/json")
        w.WriteHeader(http.StatusOK)
        fmt.Fprintf(w, GetResult)
    })
}

// HandleCreateResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that tests resource creation.
func HandleCreateResourceSuccessfully(t *testing.T) {
    th.Mux.HandleFunc(`/resources`, func(w http.ResponseWriter, r *http.Request) {
        th.TestMethod(t, r, "POST")
        th.TestHeader(t, r, "X-Auth-Token", client.TokenID)
        th.TestJSONRequest(t, r, CreateRequest)
        w.WriteHeader(http.StatusCreated)
        fmt.Fprintf(w, GetResult)
    })
}

// HandleDeleteResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that tests resource deletion.
func HandleDeleteResourceSuccessfully(t *testing.T) {
    th.Mux.HandleFunc(`/resources/9fe1d3`, func(w http.ResponseWriter, r *http.Request) {
        th.TestMethod(t, r, "DELETE")
        th.TestHeader(t, r, "X-Auth-Token", client.TokenID)
        w.WriteHeader(http.StatusNoContent)
    })
}

// HandleUpdateResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that tests resource update.
func HandleUpdateResourceSuccessfully(t *testing.T) {
    th.Mux.HandleFunc(`/resources/9fe1d3`, func(w http.ResponseWriter, r *http.Request) {
        th.TestMethod(t, r, "PATCH")
        th.TestHeader(t, r, "X-Auth-Token", client.TokenID)
        w.WriteHeader(http.StatusNoContent)
    })
}
th.TestJSONRequest(t, r, UpdateRequest)

w.WriteHeader(http.StatusOK)
fmt.Fprintf(w, UpdateResult)
}
}
package testing

import {
  "testing"

  "github.com/gophercloud/gophercloud/openstack/service/vN/resources"
  "github.com/gophercloud/gophercloud/pagination"
  th "github.com/gophercloud/gophercloud/testhelper"
  "github.com/gophercloud/gophercloud/testhelper/client"
  
  func TestListResources(t *testing.T) {
  th.SetupHTTP()
  defer th.TeardownHTTP()
  HandleListResourcesSuccessfully(t)

  count := 0

  actual, err := resources.ExtractResources(page)
  th.AssertNoErr(t, err)
  th.AssertDeepEquals(t, ExpectedResourcesSlice, actual)

  return true, nil
  })
  th.AssertNoErr(t, err)
  th.AssertEquals(t, count, 1)
  }

  func TestListResourcesAllPages(t *testing.T) {
  th.SetupHTTP()
  defer th.TeardownHTTP()
  HandleListResourcesSuccessfully(t)

  allPages, err := resources.List(client.ServiceClient(), nil).AllPages()
  th.AssertNoErr(t, err)
  actual, err := resources.ExtractResources(allPages)
  th.AssertNoErr(t, err)
  th.AssertDeepEquals(t, ExpectedResourcesSlice, actual)
  }
func TestGetResource(t *testing.T) {
    th.SetupHTTP()
    defer th.TeardownHTTP()
    HandleGetResourceSuccessfully(t)

    actual, err := resources.Get(client.ServiceClient(), "9fe1d3").Extract()
    th.AssertNoErr(t, err)
}

func TestCreateResource(t *testing.T) {
    th.SetupHTTP()
    defer th.TeardownHTTP()
    HandleCreateResourceSuccessfully(t)

    createOpts := resources.CreateOpts{
        Name: "resource two",
    }

    actual, err := resources.Create(client.ServiceClient(), createOpts).Extract()
    th.AssertNoErr(t, err)
}

func TestDeleteResource(t *testing.T) {
    th.SetupHTTP()
    defer th.TeardownHTTP()
    HandleDeleteResourceSuccessfully(t)

    res := resources.Delete(client.ServiceClient(), "9fe1d3")
    th.AssertNoErr(t, res.Err)
}

func TestUpdateResource(t *testing.T) {
    th.SetupHTTP()
    defer th.TeardownHTTP()
    HandleUpdateResourceSuccessfully(t)

    updateOpts := resources.UpdateOpts{
        Description: "Staging Resource",
    }

    actual, err := resources.Update(client.ServiceClient(), "9fe1d3", updateOpts).Extract()
    th.AssertNoErr(t, err)
    th.AssertDeepEquals(t, SecondResourceUpdated, *actual)
}
package RESOURCE

import {
    "github.com/gophercloud/gophercloud"
    "github.com/gophercloud/gophercloud/pagination"
)

// ListOptsBuilder allows extensions to add additional parameters to
// the List request
type ListOptsBuilder interface {
    ToResourceListQuery() (string, error)
}

// ListOpts provides options to filter the List results.
type ListOpts struct {
}

// ToResourceListQuery formats a ListOpts into a query string.
func (opts ListOpts) ToResourceListQuery() (string, error) {
    q, err := gophercloud.BuildQueryString(opts)
    return q.String(), err
}

// List retrieves a list of RESOURCES.
func List(client *gophercloud.ServiceClient, opts ListOptsBuilder) pagination.Pager {
    url := listURL(client)
    if opts != nil {
        query, err := opts.ToResourceListQuery()
        if err != nil {
            return pagination.Pager{Err: err}
        }
        url += query
    }
        return ResourcePage{pagination.LinkedPageBase{PageResult: r}}
    })
}

// Get retrieves details of a RESOURCE.
func Get(client *gophercloud.ServiceClient, id string) (r GetResult) {
    resp, err := client.Get(getURL(client, id), &r.Body, nil)
    _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
    return
}

// CreateOptsBuilder allows extensions to add additional parameters to
// the Create request.
type CreateOptsBuilder interface {
ToResourceCreateMap() (map[string]interface{}, error)

// CreateOpts provides options used to create a RESOURCE.
type CreateOpts struct {
}

// ToResourceCreateMap formats a CreateOpts into a create request.
func (opts CreateOpts) ToResourceCreateMap() (map[string]interface{}, error) {
    return gophercloud.BuildRequestBody(opts, "resource")
}

// Create creates a new RESOURCE.
func Create(client *gophercloud.ServiceClient, opts CreateOptsBuilder) (r CreateResult) {
    b, err := opts.ToResourceCreateMap()
    if err != nil {
        r.Err = err
        return
    }
    resp, err := client.Post(createURL(client), &b, &r.Body, &gophercloud.RequestOpts{
        OkCodes: []int{201},
    })
    _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
    return
}

// Delete deletes a RESOURCE.
func Delete(client *gophercloud.ServiceClient, id string) (r DeleteResult) {
    resp, err := client.Delete(deleteURL(client, id), nil)
    _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
    return
}

// UpdateOptsBuilder allows extensions to add additional parameters to
// the Update request.
type UpdateOptsBuilder interface {
    ToResourceUpdateMap() (map[string]interface{}, error)
}

// UpdateOpts represents parameters to update a RESOURCE.
type UpdateOpts struct {
}

// ToUpdateCreateMap formats a UpdateOpts into an update request.
func (opts UpdateOpts) ToResourceUpdateMap() (map[string]interface{}, error) {
    return gophercloud.BuildRequestBody(opts, "resource")
}
// Update modifies the attributes of a RESOURCE.
func Update(client *gophercloud.ServiceClient, id string, opts UpdateOptsBuilder) (r UpdateResult) {
    b, err := opts.ToResourceUpdateMap()
    if err != nil {
        r.Err = err
        return
    }
    resp, err := client.Patch(updateURL(client, id), b, &r.Body, &gophercloud.RequestOpts{
        OkCodes: []int{200},
    })
    _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
    return
}

package RESOURCE

import "github.com/gophercloud/gophercloud"

func listURL(client *gophercloud.ServiceClient) string {
    return client.ServiceURL("resource")
}

func getURL(client *gophercloud.ServiceClient, id string) string {
    return client.ServiceURL("resource", id)
}

func createURL(client *gophercloud.ServiceClient) string {
    return client.ServiceURL("resource")
}

func deleteURL(client *gophercloud.ServiceClient, id string) string {
    return client.ServiceURL("resource", id)
}

func updateURL(client *gophercloud.ServiceClient, id string) string {
    return client.ServiceURL("resource", id)
}

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Step 7: Congratulations!

==================================

At this point your code is merged and you've either fixed a bug or added a new feature to Gophercloud!

We completely understand that this has been a long process. We appreciate your patience as well as the time you have taken for working on this. You've made Gophercloud a better project with your work.

Step 4: Acceptance Testing

==================================

If we haven't started working on the feature or bug fix, why are we talking...
about Acceptance Testing now?

Before you implement a feature or bug fix, you _must_ be able to test your code in a working OpenStack environment. Please do not submit code which you have only tested with offline unit tests.

Blindly submitting code is dangerous to the Gophercloud project. Developers from all over the world use Gophercloud in many different projects. If you submit code which is untested, it can cause these projects to break or become unstable.

And, to be frank, submitting untested code will inevitably cause someone else to have to spend time fixing it.

If you don't have an OpenStack environment to test with, we have lots of documentation [here](/acceptance) to help you build your own small OpenStack environment for testing.

---

Once you've confirmed you are able to test your code, proceed to [Step 5](step-05-pull-requests.md) to (finally!) start working on a Pull Request.

/*
Package NAME manages and retrieves RESOURCE in the OpenStack SERVICE Service.

Example to List RESOURCE

Example to Create a RESOURCE

Example to Update a RESOURCE

Example to Delete a RESOURCE

*/

package RESOURCE

Step 2: Create an Issue

==================================

Every patch / Pull Request requires a corresponding issue. If you're fixing a bug for an existing issue, then there's no need to create a new issue.

However, if no prior issue exists, you must create an issue.

Reporting a Bug

-----------

When reporting a bug, please try to provide as much information as you
The following issues are good examples for reporting a bug:

* https://github.com/gophercloud/gophercloud/issues/108
* https://github.com/gophercloud/gophercloud/issues/212
* https://github.com/gophercloud/gophercloud/issues/424
* https://github.com/gophercloud/gophercloud/issues/588
* https://github.com/gophercloud/gophercloud/issues/629
* https://github.com/gophercloud/gophercloud/issues/647

Feature Request
---------------

If you've noticed that a feature is missing from Gophercloud, you'll also need to create an issue before doing any work. This is to start a discussion about whether or not the feature should be included in Gophercloud. We don't want to see you put in hours of work only to learn that the feature is out of scope of the project.

Feature requests can come in different forms:

### Adding a Feature to Gophercloud Core

The "core" of Gophercloud is the code which supports API requests and responses: pagination, error handling, building request bodies, and parsing response bodies are all examples of core code.

Modifications to core will usually have the most amount of discussion than other requests since a change to core will affect all of Gophercloud.

The following issues are examples of core change discussions:

* https://github.com/gophercloud/gophercloud/issues/310
* https://github.com/gophercloud/gophercloud/issues/613
* https://github.com/gophercloud/gophercloud/issues/729
* https://github.com/gophercloud/gophercloud/issues/713

### Adding a Missing Field

If you've found a missing field in an existing struct, submit an issue to request having it added. These kinds of issues are pretty easy to report and resolve.

You should also provide a link to the actual service's Python code which defines the missing field.

The following issues are examples of missing fields:
There's one situation which can make adding fields more difficult: if the field is part of an API extension rather than the base API itself. An example of this can be seen in [this](https://github.com/gophercloud/gophercloud/issues/749) issue.

Here, a user reported fields missing in the `Get` function of `networking/v2/networks`. The fields reported missing weren't missing at all, they're just part of various Networking extensions located in `networking/v2/extensions`.

### Adding a Missing API Call

If you've found a missing API action, create an issue with details of the action. For example:

* https://github.com/gophercloud/gophercloud/issues/715
* https://github.com/gophercloud/gophercloud/issues/719

You'll want to make sure the API call is part of the upstream OpenStack project and not an extension created by a third-party or vendor. Gophercloud only supports the OpenStack projects proper.

### Adding a Missing API Suite

Adding support to a missing suite of API calls will require more than one Pull Request. However, you can use a single issue for all PRs.

Examples of issues which track the addition of a missing API suite are:

* https://github.com/gophercloud/gophercloud/issues/539
* https://github.com/gophercloud/gophercloud/issues/555
* https://github.com/gophercloud/gophercloud/issues/571
* https://github.com/gophercloud/gophercloud/issues/583
* https://github.com/gophercloud/gophercloud/issues/605

Note how the issue breaks down the implementation by request types (Create, Update, Delete, Get, List).

Also note how these issues provide links to the service's Python code. These links are not required for _issues_, but it's usually a good idea to provide them, anyway. These links _are required_ for PRs and that will be covered in detail in a later step of this tutorial.
### Adding a Missing OpenStack Project

These kinds of feature additions are large undertakings. Adding support for an entire OpenStack project is something the Gophercloud team very much appreciates, but you should be prepared for several weeks of work and interaction with the Gophercloud team.

An example of how to create an issue for an entire project can be seen here:

* https://github.com/gophercloud/gophercloud/issues/723

---

With all of the above in mind, proceed to [Step 3](step-03-code-hunting.md) to learn about Code Hunting.

**Step 3: Code Hunting**

If you plan to submit a feature or bug fix to Gophercloud, you must be able to prove your code correctly works with the OpenStack service in question.

Let's use the following issue as an example: [https://github.com/gophercloud/gophercloud/issues/621](https://github.com/gophercloud/gophercloud/issues/621).

In this issue, there's a request being made to add support for `availability_zone_hints` to the `networking/v2/networks` package.

**Meaning,** we want to change:

```go
type Network struct {
    ID     string `json:"id"
    Name   string `json:"name"
    AdminStateUp bool `json:"admin_state_up"
    Status string `json:"status"
    Subnets []string `json:"subnets"
    TenantID string `json:"tenant_id"
    Shared  bool `json:"shared"
}
```

**to look like**

```go
type Network struct {
    ID     string `json:"id"
    Name   string `json:"name"
    AdminStateUp bool `json:"admin_state_up"
```
We need to be sure that `availability_zone_hints` is a field which really does exist in the OpenStack Neutron project and it's not a field which was added as a customization to a single OpenStack cloud.

In addition, we need to ensure that `availability_zone_hints` is really a `[]string` and not a different kind of type.

One way of verifying this is through the [OpenStack API reference documentation](https://developer.openstack.org/api-ref/network/v2/). However, the API docs might either be incorrect or they might not provide all of the details we need to know in order to ensure this field is added correctly.

> Note: when we say the API docs might be incorrect, we are _not_ implying that the API docs aren't useful or that the contributors who work on the API docs are wrong. OpenStack moves fast. Typos happen. Forgetting to update documentation happens.

Since the OpenStack service itself correctly accepts and processes the fields, the best source of information on how the field works is in the service code itself.

Continuing on with using #621 as an example, we can find the definition of `availability_zone_hints` in the following piece of code:

https://github.com/openstack/neutron/blob/8e9959725eda4063a318b4ba6af1e3494cad9e35/neutron/objects/network.py#L191

The above code confirms that `availability_zone_hints` is indeed part of the `Network` object and that its type is a list of strings (`[]string`).

This example is a best-case situation: the code is relatively easy to find and it's simple to understand. However, there will be times when proving the implementation in the service code is difficult. Make no mistake, this is _not_ fun work. This can sometimes be more difficult than writing the actual patch for Gophercloud. However, this is an essential step to ensuring the feature or bug fix is correctly added to Gophercloud.

Examples of good code hunting can be seen here:
OpenStack projects differ from one to another. Code is organized in different ways. However, the following tips should be useful across all projects.

* The logic which implements Create and Delete actions is usually either located in the 'model' or 'controller' portion of the code.

* Use Github's search box to search for the exact field you're working on. Review all results to gain a good understanding of everywhere the field is used.

* When adding a field, look for an object model or a schema of some sort.

---

Proceed to [Step 4](step-04-acceptance-testing.md) to learn about Acceptance Testing.

Step 1: Read Our Guides

There are two introductory guides you should read before proceeding:

* [CONTRIBUTING](/github/CONTRIBUTING.md): The Contributing guide is a detailed document which describes the different ways you can contribute to Gophercloud and how to get started. This tutorial you're reading is very similar to that guide, but presented in a different way. We still recommend you read it over.

* [STYLE](/docs/STYLEGUIDE.md): The Style Guide documents coding conventions used in the Gophercloud project.

---

When you've finished reading those guides, proceed to [Step 2](step-02-issues.md).

1.1048 pycrypto 2.6.1
1.1048.1 Available under license:

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2. Replacing some modules with clearly-licensed code from other sources (e.g. the DES and DES3 modules were replaced with new ones based on Tom St. Denis's public-domain LibTomCrypt library.)

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PyCrypto Code Submission Requirements - Rev. C

Last updated: 2009-02-28

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=== EOF ===

1.1049 jackson-databind 2.12.3
1.1049.1 Available under license :

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1.1051 x-text 0.3.5

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1.1054 otel-exporters-otlp-internal-retry 1.4.1

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1.1059 dynatrace-oss-dynatrace-metric-utils-go 0.3.0

1.1059.1 Available under license:
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```
/opt/cola/permits/1216933448_1652759819.755799/0/telegraf-1.21.4-1.x86_64.src.rpm-cosi-expand-archive-84HOI8oJ/usr/bin/telegraf: binary file matches
```

Found in path(s):
* /bin/grep

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```
# Telegraf Configuration
#
# Telegraf is entirely plugin driven. All metrics are gathered from the
# declared inputs, and sent to the declared outputs.
#
# Plugins must be declared in here to be active.
```
# To deactivate a plugin, comment out the name and any variables.
#
# Use 'telegraf -config telegraf.conf -test' to see what metrics a config
# file would generate.
#
# Environment variables can be used anywhere in this config file, simply surround
# them with ${}. For strings the variable must be within quotes (ie, "${STR_VAR}"),
# for numbers and booleans they should be plain (ie, ${INT_VAR}, ${BOOL_VAR})
#
# Global tags can be specified here in key="value" format.
[global_tags]
# dc = "us-east-1" # will tag all metrics with dc=us-east-1
# rack = "1a"
### Environment variables can be used as tags, and throughout the config file
# user = "$USER"

# Configuration for telegraf agent
[agent]
### Default data collection interval for all inputs
interval = "10s"
### Rounds collection interval to 'interval'
### ie, if interval="10s" then always collect on :00, :10, :20, etc.
round_interval = true

### Telegraf will send metrics to outputs in batches of at most
### metric_batch_size metrics.
### This controls the size of writes that Telegraf sends to output plugins.
metric_batch_size = 1000

### Maximum number of unwritten metrics per output. Increasing this value
### allows for longer periods of output downtime without dropping metrics at the
### cost of higher maximum memory usage.
metric_buffer_limit = 10000

### Collection jitter is used to jitter the collection by a random amount.
### Each plugin will sleep for a random time within jitter before collecting.
### This can be used to avoid many plugins querying things like sysfs at the
### same time, which can have a measurable effect on the system.
collection_jitter = "0s"

### Default flushing interval for all outputs. Maximum flush_interval will be
### flush_interval + flush_jitter
flush_interval = "10s"
### Jitter the flush interval by a random amount. This is primarily to avoid
### large write spikes for users running a large number of telegraf instances.
### ie, a jitter of 5s and interval 10s means flushes will happen every 10-15s
flush_jitter = "0s"

## By default or when set to "0s", precision will be set to the same
## timestamp order as the collection interval, with the maximum being 1s.
## ie, when interval = "10s", precision will be "1s"
##   when interval = "250ms", precision will be "1ms"
## Precision will NOT be used for service inputs. It is up to each individual
## service input to set the timestamp at the appropriate precision.
## Valid time units are "ns", "us" (or "µs"), "ms", "s".
precision = ""

## Log at debug level.
# debug = false
## Log only error level messages.
# quiet = false

## Log target controls the destination for logs and can be one of "file",
## "stderr" or, on Windows, "eventlog". When set to "file", the output file
## is determined by the "logfile" setting.
# logtarget = "file"

## Name of the file to be logged to when using the "file" logtarget. If set to
## the empty string then logs are written to stderr.
# logfile = ""

## The logfile will be rotated after the time interval specified. When set
## to 0 no time based rotation is performed. Logs are rotated only when
## written to, if there is no log activity rotation may be delayed.
# logfile_rotation_interval = "0d"

## The logfile will be rotated when it becomes larger than the specified
## size. When set to 0 no size based rotation is performed.
# logfile_rotation_max_size = "0MB"

## Maximum number of rotated archives to keep, any older logs are deleted.
## If set to -1, no archives are removed.
# logfile_rotation_max_archives = 5

## Pick a timezone to use when logging or type 'local' for local time.
## Example: America/Chicago
# log_with_timezone = ""

## Override default hostname, if empty use os.Hostname()
hostname = ""
## If set to true, do no set the "host" tag in the telegraf agent.
omit_hostname = false

###############################################################################
# Configuration for sending metrics to InfluxDB

[[outputs.influxdb]]

### The full HTTP or UDP URL for your InfluxDB instance.

### Multiple URLs can be specified for a single cluster, only ONE of the
### urls will be written to each interval.

# urls = ["unix:///var/run/influxdb.sock"]
# urls = ["udp://127.0.0.1:8089"]
# urls = ["http://127.0.0.1:8086"]

### The target database for metrics; will be created as needed.
### For UDP url endpoint database needs to be configured on server side.
# database = "telegraf"

### The value of this tag will be used to determine the database. If this
### tag is not set the 'database' option is used as the default.
# database_tag = ""

### If true, the 'database_tag' will not be included in the written metric.
# exclude_database_tag = false

### If true, no CREATE DATABASE queries will be sent. Set to true when using
### Telegraf with a user without permissions to create databases or when the
### database already exists.
# skip_database_creation = false

### Name of existing retention policy to write to. Empty string writes to
### the default retention policy. Only takes effect when using HTTP.
# retention_policy = ""

### The value of this tag will be used to determine the retention policy. If this
### tag is not set the 'retention_policy' option is used as the default.
# retention_policy_tag = ""

### If true, the 'retention_policy_tag' will not be included in the written metric.
# exclude_retention_policy_tag = false

### Write consistency (clusters only), can be: "any", "one", "quorum", "all".
### Only takes effect when using HTTP.
# write_consistency = "any"

### Timeout for HTTP messages.
# timeout = "5s"
```yaml
## HTTP Basic Auth
# username = "telegraf"
# password = "metricsmetricsmetricsmetrics"

## HTTP User-Agent
# user_agent = "telegraf"

## UDP payload size is the maximum packet size to send.
# udp_payload = "512B"

## Optional TLS Config for use on HTTP connections.
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

## HTTP Proxy override, if unset values the standard proxy environment
## variables are consulted to determine which proxy, if any, should be used.
# http_proxy = "http://corporate.proxy:3128"

## Additional HTTP headers
# http_headers = {"X-Special-Header" = "Special-Value"}

## HTTP Content-Encoding for write request body, can be set to "gzip" to
## compress body or "identity" to apply no encoding.
# content_encoding = "gzip"

## When true, Telegraf will output unsigned integers as unsigned values,
## i.e.: "42u". You will need a version of InfluxDB supporting unsigned
## integer values. Enabling this option will result in field type errors if
## existing data has been written.
# influx_uint_support = false

## Configuration for Amon Server to send metrics to.
# [[outputs.amon]]
# ## Amon Server Key
# server_key = "my-server-key" # required.
# #
# # ## Amon Instance URL
# # amon_instance = "https://youramoninstance" # required
# #
# # ## Connection timeout.
# # timeout = "5s"

## Publishes metrics to an AMQP broker
```
# [[outputs.amqp]]
# ## Broker to publish to.
# ## deprecated in 1.7; use the brokers option
# # url = "amqp://localhost:5672/influxdb"
#
# ## Brokers to publish to. If multiple brokers are specified a random broker
# ## will be selected anytime a connection is established. This can be
# ## helpful for load balancing when not using a dedicated load balancer.
# brokers = ["amqp://localhost:5672/influxdb"]
#
# ## Maximum messages to send over a connection. Once this is reached, the
# ## connection is closed and a new connection is made. This can be helpful for
# ## load balancing when not using a dedicated load balancer.
# # max_messages = 0
#
# ## Exchange to declare and publish to.
# exchange = "telegraf"
#
# ## Exchange type; common types are "direct", "fanout", "topic", "header", "x-consistent-hash".
# # exchange_type = "topic"
#
# ## If true, exchange will be passively declared.
# # exchange_passive = false
#
# ## Exchange durability can be either "transient" or "durable".
# # exchange_durability = "durable"
#
# ## Additional exchange arguments.
# # exchange_arguments = { }
# # exchange_arguments = {"hash_property" = "timestamp"}
#
# ## Authentication credentials for the PLAIN auth_method.
# # username = ""
# # password = ""
#
# ## Auth method. PLAIN and EXTERNAL are supported
# ## Using EXTERNAL requires enabling the rabbitmq_auth_mechanism_ssl plugin as
# ## described here: https://www.rabbitmq.com/plugins.html
# # auth_method = "PLAIN"
#
# ## Metric tag to use as a routing key.
# ## ie, if this tag exists, its value will be used as the routing key
# # routing_tag = "host"
#
# ## Static routing key. Used when no routing_tag is set or as a fallback
# ## when the tag specified in routing tag is not found.
# # routing_key = ""
# # routing_key = "telegraf"
# Delivery Mode controls if a published message is persistent.
# One of "transient" or "persistent".
# delivery_mode = "transient"
#
# InfluxDB database added as a message header.
# deprecated in 1.7; use the headers option
# database = "telegraf"
#
# InfluxDB retention policy added as a message header
# deprecated in 1.7; use the headers option
# retention_policy = "default"
#
# Static headers added to each published message.
# headers = { }
# headers = {"database" = "telegraf", "retention_policy" = "default"}
#
# Connection timeout. If not provided, will default to 5s. 0s means no
# timeout (not recommended).
# timeout = "5s"
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# If true use batch serialization format instead of line based delimiting.
# Only applies to data formats which are not line based such as JSON.
# Recommended to set to true.
# use_batch_format = false
#
# Content encoding for message payloads, can be set to "gzip" to or
# "identity" to apply no encoding.
# content_encoding = "identity"
#
# Data format to output.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
## Send metrics to Azure Application Insights

```yaml
# [outputs.application_insights]
# ## Instrumentation key of the Application Insights resource.
# instrumentation_key = "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxx"
#
# ## Regions that require endpoint modification https://docs.microsoft.com/en-us/azure/azure-monitor/app/custom-endpoints
# endpoint_url = "https://dc.services.visualstudio.com/v2/track"
#
# ## Timeout for closing (default: 5s).
# timeout = "5s"
#
# ## Enable additional diagnostic logging.
# enable_diagnostic_logging = false
#
# ## Context Tag Sources add Application Insights context tags to a tag value.
# 
# ## For list of allowed context tag keys see:
# # https://github.com/microsoft/ApplicationInsights-Go/blob/master/appinsights/contracts/contexttagkeys.go
# # [outputs.application_insights.context_tag_sources]
# #   "ai.cloud.role" = "kubernetes_container_name"
# #   "ai.cloud.roleInstance" = "kubernetes_pod_name"
```

## Sends metrics to Azure Data Explorer

```yaml
# [outputs.azure_data_explorer]
# ## Azure Data Explorer cluster endpoint
# endpoint_url = "https://clustername.australiasoutheast.kusto.windows.net"
#
# ## The Azure Data Explorer database that the metrics will be ingested into.
# database = ""
#
# ## Timeout for Azure Data Explorer operations
# timeout = "20s"
#
# ## Type of metrics grouping used when pushing to Azure Data Explorer.
# Default is "TablePerMetric" for one table per different metric.
# For more information, please check the plugin README.
# metrics_grouping_type = "TablePerMetric"
#
# ## Name of the single table to store all the metrics (Only needed if metrics_grouping_type is "SingleTable").
# table_name = ""
#
# ## Creates tables and relevant mapping if set to true(default).
```
# # Skips table and mapping creation if set to false, this is useful for running Telegraf with the lowest possible
permissions i.e. table ingestor role.
# # create_tables = true

# # Send aggregate metrics to Azure Monitor
# [[outputs.azure_monitor]]
# # Timeout for HTTP writes.
# # timeout = "20s"
# #
# # # Set the namespace prefix, defaults to "Telegraf/<input-name>".
# # namespace_prefix = "Telegraf"
# # # Azure Monitor doesn't have a string value type, so convert string
# # # fields to dimensions (a.k.a. tags) if enabled. Azure Monitor allows
# # # a maximum of 10 dimensions so Telegraf will only send the first 10
# # # alphanumeric dimensions.
# # strings_as_dimensions = false
# # # Both region and resource_id must be set or be available via the
# # # Instance Metadata service on Azure Virtual Machines.
# # #
# # # Azure Region to publish metrics against.
# # # ex: region = "southcentralus"
# # region = ""
# # # # The Azure Resource ID against which metric will be logged, e.g.
# # # # ex: resource_id = "/subscriptions/<subscription_id>/resourceGroups/<resource_group>/providers/Microsoft.Compute/virtualMachines/<vm_name>"
# # resource_id = ""
# # # Optionally, if in Azure US Government, China or other sovereign
# # # cloud environment, set appropriate REST endpoint for receiving
# # metrics. (Note: region may be unused in this context)
# # endpoint_url = "https://monitoring.core.usgovcloudapi.net"

# # Configuration for Google Cloud BigQuery to send entries
# [[outputs.bigquery]]
# # Credentials File
# credentials_file = "/path/to/service/account/key.json"
# #
# # # Google Cloud Platform Project
# # project = "my-gcp-project"
# #
# # # The namespace for the metric descriptor
# dataset = "telegraf"
## Timeout for BigQuery operations.

```
# timeout = "5s"
```

## Character to replace hyphens on Metric name

```
# replace_hyphen_to = "_"
```

## Publish Telegraf metrics to a Google Cloud PubSub topic

```
[[outputs.cloud_pubsub]]

## Required. Name of Google Cloud Platform (GCP) Project that owns
## the given PubSub topic.
project = "my-project"

## Required. Name of PubSub topic to publish metrics to.
topic = "my-topic"

## Required. Data format to consume.
## Each data format has its own unique set of configuration options.
## Read more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
data_format = "influx"

## Optional. Filepath for GCP credentials JSON file to authorize calls to
## PubSub APIs. If not set explicitly, Telegraf will attempt to use
## Application Default Credentials, which is preferred.
credentials_file = "path/to/my/creds.json"

## Optional. If true, will send all metrics per write in one PubSub message.
send_batched = true

## The following publish_* parameters specifically configures batching
## requests made to the GCP Cloud PubSub API via the PubSub Golang library. Read
## more here: https://godoc.org/cloud.google.com/go/pubsub#PublishSettings

## Optional. Send a request to PubSub (i.e. actually publish a batch)
## when it has this many PubSub messages. If send_batched is true,
## this is ignored and treated as if it were 1.
publish_count_threshold = 1000

## Optional. Send a request to PubSub (i.e. actually publish a batch)
## when it has this many PubSub messages. If send_batched is true,
## this is ignored and treated as if it were 1
publish_byte_threshold = 1000000

## Optional. Specifically configures requests made to the PubSub API.
publish_num_go_routines = 2
# Optional. Specifies a timeout for requests to the PubSub API.
# publish_timeout = "30s"
#
# Optional. If true, published PubSub message data will be base64-encoded.
# base64_data = false
#
# Optional. PubSub attributes to add to metrics.
# [outputs.cloud_pubsub.attributes]
# my_attr = "tag_value"

# Configuration for AWS CloudWatch output.
[[outputs.cloudwatch]]
## Amazon REGION
region = "us-east-1"
#
## Amazon Credentials
## Credentials are loaded in the following order
## 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
## 2) Assumed credentials via STS if role_arn is specified
## 3) explicit credentials from 'access_key' and 'secret_key'
## 4) shared profile from 'profile'
## 5) environment variables
## 6) shared credentials file
## 7) EC2 Instance Profile
# access_key = ""
# secret_key = ""
# token = ""
# role_arn = ""
# web_identity_token_file = ""
# role_session_name = ""
# profile = ""
# shared_credential_file = ""
#
## Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
default.
# ex: endpoint_url = "http://localhost:8000"
# endpoint_url = ""
#
## Namespace for the CloudWatch MetricDatums
namespace = "InfluxData/Telegraf"
#
## If you have a large amount of metrics, you should consider to send statistic
d values instead of raw metrics which could not only improve performance but
e also save AWS API cost. If enable this flag, this plugin would parse the required
## CloudWatch statistic fields (count, min, max, and sum) and send them to CloudWatch.
## You could use basicstats aggregator to calculate those fields. If not all statistic
## fields are available, all fields would still be sent as raw metrics.

## write_statistics = false

## Enable high resolution metrics of 1 second (if not enabled, standard resolution are of 60 seconds precision)

## high_resolution_metrics = false

### Configuration for AWS CloudWatchLogs output.

[[outputs.cloudwatch_logs]]

### The region is the Amazon region that you wish to connect to.

### Examples include but are not limited to:

- us-west-1
- us-west-2
- us-east-1
- ap-southeast-1
- ap-southeast-2
- ...

### region = "us-east-1"

### Amazon Credentials

### Credentials are loaded in the following order

1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
2) Assumed credentials via STS if role_arn is specified
3) explicit credentials from 'access_key' and 'secret_key'
4) shared profile from 'profile'
5) environment variables
6) shared credentials file
7) EC2 Instance Profile

### access_key = ""

### secret_key = ""

### token = ""

### role_arn = ""

### web_identity_token_file = ""

### role_session_name = ""

### profile = ""

### shared_credential_file = ""

### Endpoint to make request against, the correct endpoint is automatically determined and this option should only be set if you wish to override the default.

### ex: endpoint_url = "http://localhost:8000"

### log_group = "my-group-name"

### Log stream in log group

---

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### Either log group name or reference to metric attribute, from which it can be parsed:
### tag:<TAG_NAME> or field:<FIELD_NAME>. If log stream is not exist, it will be created.
### Since AWS is not automatically delete logs streams with expired logs entries (i.e. empty log stream)
you need to put in place appropriate house-keeping

```
# log_stream = "tag:location"
```

### Source of log data - metric name
### specify the name of the metric, from which the log data should be retrieved.
### I.e., if you are using docker_log plugin to stream logs from container, then
### specify log_data_metric_name = "docker_log"
```
log_data_metric_name  = "docker_log"
```

### Specify from which metric attribute the log data should be retrieved:
### tag:<TAG_NAME> or field:<FIELD_NAME>.
### I.e., if you are using docker_log plugin to stream logs from container, then
### specify log_data_source = "field:message"
```
log_data_source  = "field:message"
```

### Configuration for CrateDB to send metrics to.
```
# [[outputs.cratehrb]]
# # A github.com/jackc/pgx/v4 connection string.
# # See https://pkg.go.dev/github.com/jackc/pgx/v4#ParseConfig
# url = "postgres://user:password@localhost/schema?sslmode=disable"
# # Timeout for all CrateDB queries.
# timeout = "5s"
# # Name of the table to store metrics in.
# table = "metrics"
# # If true, and the metrics table does not exist, create it automatically.
# table_create = true
# # The character(s) to replace any "." in an object key with
# key_separator = "_"  
```

### Configuration for DataDog API to send metrics to.
```
# [[outputs.datadog]]
# # Datadog API key
# apikey = "my-secret-key"
# # Connection timeout.
# timeout = "5s"
# # Write URL override; useful for debugging.
# url = "https://app.datadoghq.com/api/v1/series"
# # Set http_proxy (telegraf uses the system wide proxy settings if it isn't set)
# http_proxy_url = "http://localhost:8888"
```
# Send metrics to nowhere at all
# [[outputs.discard]]
# # no configuration

# Send telegraf metrics to a Dynatrace environment
# [[outputs.dynatrace]]
# ### For usage with the Dynatrace OneAgent you can omit any configuration,
# ### the only requirement is that the OneAgent is running on the same host.
# ### Only setup environment url and token if you want to monitor a Host without the OneAgent present.
# ###
# ### Your Dynatrace environment URL.
# ### For Dynatrace OneAgent you can leave this empty or set it to "http://127.0.0.1:14499/metrics/ingest" (default)
# ### For Dynatrace SaaS environments the URL scheme is "https://{your-environment-id}.live.dynatrace.com/api/v2/metrics/ingest"
# ### For Dynatrace Managed environments the URL scheme is "https://{your-domain}/e/{your-environment-id}/api/v2/metrics/ingest"
# url = ""
#
# ### Your Dynatrace API token.
# ### Create an API token within your Dynatrace environment, by navigating to Settings > Integration > Dynatrace API
# ### The API token needs data ingest scope permission. When using OneAgent, no API token is required.
# api_token = ""
#
# ### Optional prefix for metric names (e.g.: "telegraf")
# prefix = "telegraf"
#
# ### Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# #
# ### Optional flag for ignoring tls certificate check
# insecure_skip_verify = false
#
# ### Connection timeout, defaults to "5s" if not set.
# timeout = "5s"
#
# ### If you want metrics to be treated and reported as delta counters, add the metric names here
# additional_counters = [ ]
#
# ### Optional dimensions to be added to every metric
# # [outputs.dynatrace.default_dimensions]
# # default_key = "default value"
## Configuration for Elasticsearch to send metrics to.

### [outputs.elasticsearch]

### The full HTTP endpoint URL for your Elasticsearch instance

### Multiple urls can be specified as part of the same cluster,

### this means that only ONE of the urls will be written to each interval.

### urls = [ "http://node1.es.example.com:9200" ] # required.

### Elasticsearch client timeout, defaults to "5s" if not set.

### timeout = "5s"

### Set to true to ask Elasticsearch a list of all cluster nodes,

### thus it is not necessary to list all nodes in the urls config option.

### enable_sniffer = false

### Set to true to enable gzip compression

### enable_gzip = false

### Set the interval to check if the Elasticsearch nodes are available

### Setting to "0s" will disable the health check (not recommended in production)

### health_check_interval = "10s"

### HTTP basic authentication details

### username = "telegraf"

### password = "mypassword"

### Index Config

### The target index for metrics (Elasticsearch will create if it not exists).

### You can use the date specifiers below to create indexes per time frame.

### The metric timestamp will be used to decide the destination index name

### %Y - year (2016)

### %y - last two digits of year (00..99)

### %m - month (01..12)

### %d - day of month (e.g., 01)

### %H - hour (00..23)

### %V - week of the year (ISO week) (01..53)

### Additionally, you can specify a tag name using the notation {{tag_name}}

### which will be used as part of the index name. If the tag does not exist,

### the default tag value will be used.

### index_name = "telegraf-{{host}}-%Y.%m.%d"

### default_tag_value = "none"

### index_name = "telegraf-%Y.%m.%d" # required.

### Optional TLS Config

### tls_ca = "/etc/telegraf/ca.pem"

### tls_cert = "/etc/telegraf/cert.pem"

### tls_key = "/etc/telegraf/key.pem"

### Use TLS but skip chain & host verification

### insecure_skip_verify = false

### Template Config

### Set to true if you want telegraf to manage its index template.
```yaml
# ## If enabled it will create a recommended index template for telegraf indexes
# manage_template = true
# ## The template name used for telegraf indexes
# template_name = "telegraf"
# ## Set to true if you want telegraf to overwrite an existing template
# overwrite_template = false
# ## If set to true a unique ID hash will be sent as sha256(concat(timestamp,measurement,series-hash)) string
# ## it will enable data resend and update metric points avoiding duplicated metrics with different id's
# force_document_id = false
#
# ## Specifies the handling of NaN and Inf values.
# ## This option can have the following values:
# ## none -- do not modify field-values (default); will produce an error if NaNs or infs are encountered
# ## drop -- drop fields containing NaNs or infs
# ## replace -- replace with the value in "float_replacement_value" (default: 0.0)
# ## NaNs and inf will be replaced with the given number, -inf with the negative of that number
# # float_handling = "none"
# # float_replacement_value = 0.0

## Configuration for Event Hubs output plugin
[[outputs.event_hubs]]
# ## The full connection string to the Event Hub (required)
# ## The shared access key must have "Send" permissions on the target Event Hub.
# connection_string = "Endpoint=sb://namespace.servicebus.windows.net/;SharedAccessKeyName=RootManageSharedAccessKey;SharedAccessKey=superSecret1234=;EntityPath=hubName"
#
# ## Client timeout (defaults to 30s)
# # timeout = "30s"
#
# ## Data format to output.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "json"

## Send metrics to command as input over stdin
[[outputs.exec]]
# ## Command to ingest metrics via stdin.
# command = ["tee", "-a", "/dev/null"]
#
# ## Timeout for command to complete.
# # timeout = "5s"
#
# ## Data format to output.
# ## Each data format has its own unique set of configuration options, read
```
## Data format = "influx"

## Send telegraf metrics to file(s)
### Files to write to, "stdout" is a specially handled file.
files = ["stdout", "/tmp/metrics.out"]

### Use batch serialization format instead of line based delimiting. The
### batch format allows for the production of non line based output formats and
### may more efficiently encode metric groups.
# use_batch_format = false

### The file will be rotated after the time interval specified. When set
### to 0 no time based rotation is performed.
# rotation_interval = "0d"

### The logfile will be rotated when it becomes larger than the specified
### size. When set to 0 no size based rotation is performed.
# rotation_max_size = "0MB"

### Maximum number of rotated archives to keep, any older logs are deleted.
### If set to -1, no archives are removed.
# rotation_max_archives = 5

### Data format to output.
### Each data format has its own unique set of configuration options, read
### more about them here:
### https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
## Configuration for Graphite server to send metrics to

```
[[outputs.graphite]]

## TCP endpoint for your graphite instance.
## If multiple endpoints are configured, output will be load balanced.
## Only one of the endpoints will be written to with each iteration.

servers = ["localhost:2003"]

## Prefix metrics name
prefix = ""

## Graphite output template
## see https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
template = "host.tags.measurement.field"

## Enable Graphite tags support
# graphite_tag_support = false

## Define how metric names and tags are sanitized; options are "strict", or "compatible"
## strict - Default method, and backwards compatible with previous version of Telegraf
## compatible - More relaxed sanitizing when using tags, and compatible with the graphite spec
# graphite_tag_sanitize_mode = "strict"

## Character for separating metric name and field for Graphite tags
# graphite_separator = "."

## Graphite templates patterns
## 1. Template for cpu
## 2. Template for disk*
## 3. Default template
# templates = [
#  "cpu tags.measurement.host.field",
#  "disk* measurement.field",
#  "host.measurement.tags.field"
# ]

## timeout in seconds for the write connection to graphite
timeout = 2

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# insecure_skip_verify = false
```

## Send telegraf metrics to graylog
```
[[outputs.graylog]]

## Endpoints for your graylog instances.
```
servers = ["udp://127.0.0.1:12201"]

# ### Connection timeout.
# # timeout = "5s"
#
# ### The field to use as the GELF short_message, if unset the static string
# # "telegraf" will be used.
# ### example: short_message_field = "message"
# # short_message_field = ""
#
# ### According to GELF payload specification, additional fields names must be prefixed
# ### with an underscore. Previous versions did not prefix custom field 'name' with underscore.
# ### Set to true for backward compatibility.
# # name_field_no_prefix = false
#
# ### Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ### Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # Send telegraf metrics to GroundWork Monitor
# [[outputs.groundwork]]
# ### URL of your groundwork instance.
# url = "https://groundwork.example.com"
#
# ### Agent uuid for GroundWork API Server.
# # agent_id = ""
#
# ### Username and password to access GroundWork API.
# # username = ""
# # password = ""
#
# ### Default display name for the host with services(metrics).
# # default_host = "telegraf"
#
# ### Default service state.
# # default_service_state = "SERVICE_OK"
#
# ### The name of the tag that contains the hostname.
# # resource_tag = "host"

# # Configurable HTTP health check resource based on metrics
# [[outputs.health]]
# ### Address and port to listen on.
## A plugin that can transmit metrics over HTTP

```
[outputs.http]
## URL is the address to send metrics to
url = "http://127.0.0.1:8080/telegraf"
```

## Timeout for HTTP message

```
# timeout = "5s"
```

## HTTP method, one of: "POST" or "PUT"

```
# method = "POST"
```
# HTTP Basic Auth credentials
# username = "username"
# password = "pa$$word"

# OAuth2 Client Credentials Grant
# client_id = "clientid"
# client_secret = "secret"
# token_url = "https://identityprovider/oauth2/v1/token"
# scopes = ["urn:opc:idm:__myscopes__"]

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Optional Cookie authentication
# cookie_auth_url = "https://localhost/authMe"
# cookie_auth_method = "POST"
# cookie_auth_username = "username"
# cookie_auth_password = "pa$$word"
# cookie_auth_body = {
#   "username": "user",
#   "password": "pa$$word",
#   "authenticate": "me"
# }
# cookie_auth_renewal not set or set to "0" will auth once and never renew the cookie
# cookie_auth_renewal = "5m"

# Data format to output.
# Each data format has it's own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# Use batch serialization format (default) instead of line based format.
# Batch format is more efficient and should be used unless line based
# format is really needed.
# use_batch_format = true

# HTTP Content-Encoding for write request body, can be set to "gzip" to
# compress body or "identity" to apply no encoding.
# content_encoding = "identity"

# Additional HTTP headers
# [outputs.http.headers]
# Should be set manually to "application/json" for json data_format
# Content-Type = "text/plain; charset=utf-8"

# Idle (keep-alive) connection timeout.
# Maximum amount of time before idle connection is closed.
## Configuration for sending metrics to InfluxDB

### [outputs.influxdb_v2]

### The URLs of the InfluxDB cluster nodes.

### Multiple URLs can be specified for a single cluster, only ONE of the
### urls will be written to each interval.

### ex: urls = ["https://us-west-2-1.aws.cloud2.influxdata.com"]

### urls = ["http://127.0.0.1:8086"]

### Token for authentication.

### Organization is the name of the organization you wish to write to; must exist.

### Destination bucket to write into.

### The value of this tag will be used to determine the bucket. If this
### tag is not set the 'bucket' option is used as the default.

### If true, the bucket tag will not be added to the metric.

### Timeout for HTTP messages.

### Additional HTTP headers

### HTTP Proxy override, if unset values the standard proxy environment
### variables are consulted to determine which proxy, if any, should be used.

### HTTP User-Agent

### Content-Encoding for write request body, can be set to "gzip" to
### compress body or "identity" to apply no encoding.

### Enable or disable uint support for writing uints influxdb 2.0.
```
#
# Optional TLS Config for use on HTTP connections.
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Configuration for sending metrics to an Instrumental project
[[outputs.instrumental]]
## Project API Token (required)
api_token = "API Token" # required
## Prefix the metrics with a given name
prefix = ""
## Stats output template (Graphite formatting)
## see https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md#graphite
template = "host.tags.measurement.field"
## Timeout in seconds to connect
timeout = "2s"
## Display Communication to Instrumental
dbg = false

## Configuration for the Kafka server to send metrics to
[[outputs.kafka]]
## URLs of kafka brokers
brokers = ["localhost:9092"]
## Kafka topic for producer messages
topic = "telegraf"

## The value of this tag will be used as the topic. If not set the 'topic'
## option is used.
topic_tag = ""

## If true, the 'topic_tag' will be removed from to the metric.
exclude_topic_tag = false

## Optional Client id
client_id = "Telegraf"

## Set the minimal supported Kafka version. Setting this enables the use of new
## Kafka features and APIs. Of particular interest, lz4 compression
## requires at least version 0.10.0.0.
ex: version = "1.1.0"
version = ""

## Optional topic suffix configuration.
```
# If the section is omitted, no suffix is used.
# Following topic suffix methods are supported:
# measurement - suffix equals to separator + measurement's name
# tags        - suffix equals to separator + specified tags' values
# interleave with separator
#
# Suffix equals to "_" + measurement name
# [outputs.kafka.topic_suffix]
# method = "measurement"
# separator = "_"
#
# Suffix equals to "__" + measurement's "foo" tag value.
# If there's no such a tag, suffix equals to an empty string
# [outputs.kafka.topic_suffix]
# method = "tags"
# keys = ["foo"]
# separator = "__"
#
# Suffix equals to "_" + measurement's "foo" and "bar"
# tag values, separated by "_". If there is no such tags,
# their values treated as empty strings.
# [outputs.kafka.topic_suffix]
# method = "tags"
# keys = ["foo", "bar"]
# separator = "_"
#
# The routing tag specifies a tagkey on the metric whose value is used as
# the message key. The message key is used to determine which partition to
# send the message to. This tag is preferred over the routing_key option.
# routing_tag = "host"
#
# The routing key is set as the message key and used to determine which
# partition to send the message to. This value is only used when no
# routing_tag is set or as a fallback when the tag specified in routing_tag
# is not found.
# 
# If set to "random", a random value will be generated for each message.
# 
# When unset, no message key is added and each message is routed to a random
# partition.
# 
# ex: routing_key = "random"
# routing_key = "telegraf"
# routing_key = ""
#
# Compression codec represents the various compression codecs recognized by
# Kafka in messages.
# 0 : None
# 1 : Gzip
# 2 : Snappy
# 3 : LZ4
# 4 : ZSTD
# compression_codec = 0
#
# Idempotent Writes
# If enabled, exactly one copy of each message is written.
# idempotent_writes = false
#
# RequiredAcks is used in Produce Requests to tell the broker how many
# replica acknowledgements it must see before responding
# 0 : the producer never waits for an acknowledgement from the broker.
# This option provides the lowest latency but the weakest durability
# guarantees (some data will be lost when a server fails).
# 1 : the producer gets an acknowledgement after the leader replica has
# received the data. This option provides better durability as the
# client waits until the server acknowledges the request as successful
# (only messages that were written to the now-dead leader but not yet
# replicated will be lost).
# -1: the producer gets an acknowledgement after all in-sync replicas have
# received the data. This option provides the best durability, we
# guarantee that no messages will be lost as long as at least one in
# sync replica remains.
# required_acks = -1
#
# The maximum number of times to retry sending a metric before failing
# until the next flush.
# max_retry = 3
#
# The maximum permitted size of a message. Should be set equal to or
# smaller than the broker's 'message.max.bytes'.
# max_message_bytes = 1000000
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# Optional SASL Config
# sasl_username = "kafka"
# sasl_password = "secret"
#
# Optional SASL:
# one of: OAUTHBEARER, PLAIN, SCRAM-SHA-256, SCRAM-SHA-512, GSSAPI
# (defaults to PLAIN)
# # sasl_mechanism = ""
#
# ## used if sasl_mechanism is GSSAPI (experimental)
# # sasl_gssapi_service_name = ""
# ### One of: KRB5_USER_AUTH and KRB5_KEYTAB_AUTH
# # sasl_gssapi_auth_type = "KRB5_USER_AUTH"
# # sasl_gssapi_kerberos_config_path = "/"
# # sasl_gssapi_realm = "realm"
# # sasl_gssapi_key_tab_path = ""
# # sasl_gssapi_disable_pafxfast = false
#
# ## used if sasl_mechanism is OAUTHBEARER (experimental)
# # sasl_access_token = ""
#
# ## SASL protocol version. When connecting to Azure EventHub set to 0.
# # sasl_version = 1
#
# ## Disable Kafka metadata full fetch
# # metadata_full = false
#
# ## Data format to output.
# ### Each data format has its own unique set of configuration options, read
# ### more about them here:
# ### https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# # data_format = "influx"

# # Configuration for the AWS Kinesis output.
# [[][outputs.kinesis]]
# ## Amazon REGION of kinesis endpoint.
# # region = "ap-southeast-2"
#
# ## Amazon Credentials
# ## Credentials are loaded in the following order
# ### 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# ### 2) Assumed credentials via STS if role_arn is specified
# ### 3) explicit credentials from 'access_key' and 'secret_key'
# ### 4) shared profile from 'profile'
# ### 5) environment variables
# ### 6) shared credentials file
# ### 7) EC2 Instance Profile
# # access_key = ""
# # secret_key = ""
# # token = ""
# # role_arn = ""
# # web_identity_token_file = ""
# # role_session_name = ""
# # profile = ""
# shared_credential_file = ""
#
# Endpoint to make request against, the correct endpoint is automatically
# determined and this option should only be set if you wish to override the
# default.
# ex: endpoint_url = "http://localhost:8000"
# endpoint_url = ""
#
## Kinesis StreamName must exist prior to starting telegraf.
# streamname = "StreamName"
## DEPRECATED: PartitionKey as used for sharding data.
# partitionkey = "PartitionKey"
## DEPRECATED: If set the partitionKey will be a random UUID on every put.
# This allows for scaling across multiple shards in a stream.
# This will cause issues with ordering.
# use_random_partitionkey = false
# The partition key can be calculated using one of several methods:
#
## Use a static value for all writes:
# [outputs.kinesis.partition]
# method = "static"
# key = "howdy"
#
## Use a random partition key on each write:
# [outputs.kinesis.partition]
# method = "random"
#
## Use the measurement name as the partition key:
# [outputs.kinesis.partition]
# method = "measurement"
#
## Use the value of a tag for all writes, if the tag is not set the empty
# default option will be used. When no default, defaults to "telegraf"
# [outputs.kinesis.partition]
# method = "tag"
# key = "host"
# default = "mykey"
#
## Data format to output.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
#
## debug will show upstream aws messages.
# debug = false
## Configuration for Librato API to send metrics to.

### Librato API Docs

### Librato API user

api_user = "telegraf@influxdb.com" # required.

### Librato API token

api_token = "my-secret-token" # required.

### Debug

# debug = false

### Connection timeout.

# timeout = "5s"

### Output source Template (same as graphite buckets)

## This template is used in librato's source (not metric's name)

# template = "host"

## Send aggregate metrics to Logz.io

### Connection timeout, defaults to "5s" if not set.

# timeout = "5s"

### Optional TLS Config

# tls_ca = "/etc/telegraf/ca.pem"

# tls_cert = "/etc/telegraf/cert.pem"

# tls_key = "/etc/telegraf/key.pem"

### Logz.io account token

# token = "your logz.io token" # required

### Use your listener URL for your Logz.io account region.

# url = "https://listener.logz.io:8071"

## Send logs to Loki

### The domain of Loki

# domain = "https://loki.domain.tld"

### Endpoint to write api

# endpoint = "/loki/api/v1/push"

### Connection timeout, defaults to "5s" if not set.

# timeout = "5s"
# ## Basic auth credential
# # username = "loki"
# # password = "pass"
#
# ## Additional HTTP headers
# # http_headers = {"X-Scope-OrgID" = "1"}
#
# ## If the request must be gzip encoded
# # gzip_request = false
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"

## Sends metrics to MongoDB
[[outputs.mongodb]]
# # connection string examples for mongodb
# dsn = "mongodb://localhost:27017"
# dsn = "mongodb://mongod1:27017,mongod2:27017,mongod3:27017/admin&replicaSet=myReplSet&w=1"
#
# # overrides serverSelectionTimeoutMS in dsn if set
# # timeout = "30s"
#
# # default authentication, optional
# # authentication = "NONE"
#
# # for SCRAM-SHA-256 authentication
# # authentication = "SCRAM"
# # username = "root"
# # password = "***"
#
# # for x509 certificate authentication
# # authentication = "X509"
# # tls_ca = "ca.pem"
# # tls_key = "client.pem"
# # # tls_key_pwd = "changeme" # required for encrypted tls_key
# # insecure_skip_verify = false
#
# # database to store measurements and time series collections
# # database = "telegraf"
#
# # granularity can be seconds, minutes, or hours.
# # configuring this value will be based on your input collection frequency.
# # see https://docs.mongodb.com/manual/core/timeseries-collections/#create-a-time-series-collection
# # granularity = "seconds"
# optionally set a TTL to automatically expire documents from the measurement collections.
# tt1l = "360h"

## Configuration for MQTT server to send metrics to
## [[outputs.mqtt]]
## MQTT Brokers
## The list of brokers should only include the hostname or IP address and the
## port to the broker. This should follow the format '{host}:{port}'. For
## example, "localhost:1883" or "127.0.0.1:8883".
## servers = ["localhost:1883"]
## MQTT Topic for Producer Messages
## MQTT outputs send metrics to this topic format:
## <topic_prefix>/<hostname>/<pluginname>/ (e.g. prefix/web01.example.com/mem)
## topic_prefix = "telegraf"
## QoS policy for messages
## The mqtt QoS policy for sending messages.
## 0 = at most once
## 1 = at least once
## 2 = exactly once
## qos = 2
## Keep Alive
## Defines the maximum length of time that the broker and client may not
## communicate. Defaults to 0 which turns the feature off.
## keep_alive = 0
## username and password to connect MQTT server.
## username = "telegraf"
## password = "metricsmetricsmetricsmetrics"
## client ID
## The unique client id to connect MQTT server. If this parameter is not set
## then a random ID is generated.
## client_id = ""
## Timeout for write operations. default: 5s
## timeout = "5s"
## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# ## When true, metrics will be sent in one MQTT message per flush. Otherwise,
# metrics are written one metric per MQTT message.
# batch = false
#
# ## When true, metric will have RETAIN flag set, making broker cache entries until someone
# ## actually reads it
# retain = false
#
# ## Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# Send telegraf measurements to NATS
[[outputs.nats]]
## URLs of NATS servers
servers = ["nats://localhost:4222"]
#
## Optional client name
name = ""
#
## Optional credentials
username = ""
password = ""
#
## Optional NATS 2.0 and NATS NGS compatible user credentials
credentials = "/etc/telegraf/nats.creds"
#
## NATS subject for producer messages
subject = "telegraf"
#
## Use Transport Layer Security
secure = false
#
## Optional TLS Config
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
insecure_skip_verify = false
```yaml
# Send metrics to New Relic metrics endpoint
# [[outputs.newrelic]]
# ## New Relic Insights API key
# insights_key = "insights api key"
# ## Prefix to add to add to metric name for easy identification.
# metric_prefix = ""
# ## Timeout for writes to the New Relic API.
# timeout = "15s"
#
# ## HTTP Proxy override. If unset use values from the standard
# proxy environment variables to determine proxy, if any.
# http_proxy = "http://corporate.proxy:3128"
#
# ## Metric URL override to enable geographic location endpoints.
# metric_url = "https://metric-api.newrelic.com/metric/v1"

# Send telegraf measurements to NSQD
# [[outputs.nsq]]
# ## Location of nsqd instance listening on TCP
# server = "localhost:4150"
# ## NSQ topic for producer messages
# topic = "telegraf"
#
# ## Data format to output.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# Send OpenTelemetry metrics over gRPC
# [[outputs.opentelemetry]]
# ## Override the default (localhost:4317) OpenTelemetry gRPC service
# ## address:port
# service_address = "localhost:4317"
# ## Override the default (5s) request timeout
```
# # timeout = "5s"
#
# ## Optional TLS Config.
# ##
# ## Root certificates for verifying server certificates encoded in PEM format.
# # tls_ca = "/etc/telegraf/ca.pem"
# ## The public and private keypairs for the client encoded in PEM format.
# ## May contain intermediate certificates.
# # tls_cert = "/etc/telegraf/cert.pem"
# ## Use TLS, but skip TLS chain and host verification.
# # insecure_skip_verify = false
# ## Send the specified TLS server name via SNI.
# # tls_server_name = "foo.example.com"
##
# ## Override the default (gzip) compression used to send data.
# ## Supports: "gzip", "none"
# # compression = "gzip"
#
# ## Additional OpenTelemetry resource attributes
# # [outputs.opentelemetry.attributes]
# # "service.name" = "demo"
# #
# ## Additional gRPC request metadata
# # [outputs.opentelemetry.headers]
# # key1 = "value1"

# # Configuration for OpenTSDB server to send metrics to
# [[outputs.opentsdb]]
# ## prefix for metrics keys
# prefix = "my.specific.prefix."
#
# ## DNS name of the OpenTSDB server
# ## Using "opentsdb.example.com" or "tcp://opentsdb.example.com" will use the
telnet API. "http://opentsdb.example.com" will use the Http API.
# host = "opentsdb.example.com"
#
# ## Port of the OpenTSDB server
# port = 4242
#
# ## Number of data points to send to OpenTSDB in Http requests.
# ## Not used with telnet API.
# http_batch_size = 50
#
# ## URI Path for Http requests to OpenTSDB.
# ## Used in cases where OpenTSDB is located behind a reverse proxy.
# http_path = "/api/put"
# Debug true - Prints OpenTSDB communication
# debug = false
#
# Separator separates measurement name from field
# separator = "_"
#
# Configuration for the Prometheus client to spawn
# [[outputs.prometheus_client]]
# Address to listen on
# listen = ":9273"
#
# Metric version controls the mapping from Telegraf metrics into
# Prometheus format. When using the prometheus input, use the same value in
# both plugins to ensure metrics are round-tripped without modification.
# metric_version = 1
#
# Use HTTP Basic Authentication.
# basic_username = "Foo"
# basic_password = "Bar"
#
# If set, the IP Ranges which are allowed to access metrics.
# ex: ip_range = ["192.168.0.0/24", "192.168.1.0/30"]
# ip_range = []
#
# Path to publish the metrics on.
# path = "/metrics"
#
# Expiration interval for each metric. 0 == no expiration
# expiration_interval = "60s"
#
# Collectors to enable, valid entries are "gocollector" and "process".
# If unset, both are enabled.
# collectors_exclude = ["gocollector", "process"]
#
# Send string metrics as Prometheus labels.
# Unless set to false all string metrics will be sent as labels.
# string_as_label = true
#
# If set, enable TLS with the given certificate.
# tls_cert = "/etc/ssl/telegraf.crt"
# tls_key = "/etc/ssl/telegraf.key"
#
# Set one or more allowed client CA certificate file names to
## enable mutually authenticated TLS connections

```
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
```

## Export metric collection time.

```
# export_timestamp = false
```

## Configuration for the Riemann server to send metrics to

```
[[outputs.riemann]]
url = "tcp://localhost:5555"
# Riemann event TTL, floating-point time in seconds.
# Defines how long that an event is considered valid for in Riemann
# ttl = 30.0
#
# Separator to use between measurement and field name in Riemann service name
# This does not have any effect if 'measurement_as_attribute' is set to 'true'
# separator = "/"
#
# Set measurement name as Riemann attribute 'measurement', instead of prepending it to the Riemann service name
# measurement_as_attribute = false
#
# Send string metrics as Riemann event states.
# Unless enabled all string metrics will be ignored
# string_as_state = false
#
# A list of tag keys whose values get sent as Riemann tags.
# If empty, all Telegraf tag values will be sent as tags
# tag_keys = ["telegraf","custom_tag"]
#
# Additional Riemann tags to send.
# tags = ["telegraf-output"]
#
# Description for Riemann event
# description_text = "metrics collected from telegraf"
#
# Riemann client write timeout, defaults to "5s" if not set.
# timeout = "5s"
```

## Configuration for the Riemann server to send metrics to

```
[[outputs.riemann_legacy]]
# DEPRECATED: The 'riemann_legacy' plugin is deprecated in version 1.3.0, use 'outputs.riemann' instead (see https://github.com/influxdata/telegraf/issues/1878).
url = "localhost:5555"
```
## Transport Protocol

```
# ## transport protocol to use either tcp or udp
# transport = "tcp"
# ## separator to use between input name and field name in Riemann service name
# separator = " "
```

## Send Aggregate Metrics to Sensu Monitor

```
# [[outputs.sensu]]
# ## BACKEND API URL is the Sensu Backend API root URL to send metrics to
# ## (protocol, host, and port only). The output plugin will automatically
# ## append the corresponding backend API path
# ## /api/core/v2/namespaces/:entity_namespace/events/:entity_name/:check_name).
# ## Backend Events API reference:
# ## https://docs.sensu.io/sensu-go/latest/api/events/
# ##
# ## AGENT API URL is the Sensu Agent API root URL to send metrics to
# ## (protocol, host, and port only). The output plugin will automatically
# ## append the corresponding agent API path (/events).
# ## Agent API Events API reference:
# ## https://docs.sensu.io/sensu-go/latest/api/events/
# ##
# ## NOTE: if backend_api_url and agent_api_url and api_key are set, the output
# ## plugin will use backend_api_url. If backend_api_url and agent_api_url are
# ## not provided, the output plugin will default to use an agent_api_url of
# ## http://127.0.0.1:3031
# ##
# # backend_api_url = "http://127.0.0.1:8080"
# # agent_api_url = "http://127.0.0.1:3031"
# #
# ## API KEY is the Sensu Backend API token
# ## Generate a new API token via:
# ##
# ## $ sensuctl cluster-role create telegraf --verb create --resource events,entities
# ## $ sensuctl cluster-role-binding create telegraf --cluster-role telegraf --group telegraf
# ## $ sensuctl user create telegraf --group telegraf --password REDACTED
# ## $ sensuctl api-key grant telegraf
# ##
# ## For more information on Sensu RBAC profiles & API tokens, please visit:
# ## - https://docs.sensu.io/sensu-go/latest/reference/rbac/
# ## - https://docs.sensu.io/sensu-go/latest/reference/apikeys/
# ##
# # api_key = "${SENSU_API_KEY}"
# #
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
```
Open Source Used In BGP TE Controller Version 4.3.0  12228

# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # Timeout for HTTP message
# # timeout = "5s"
#
# # HTTP Content-Encoding for write request body, can be set to "gzip" to
# # compress body or "identity" to apply no encoding.
# # content_encoding = "identity"
#
# # Sensu Event details
#
# # Below are the event details to be sent to Sensu. The main portions of the
# # event are the check, entity, and metrics specifications. For more information
# # on Sensu events and its components, please visit:
# # - Events - https://docs.sensu.io/sensu-go/latest/reference/events
# # - Checks - https://docs.sensu.io/sensu-go/latest/reference/checks
# # - Entities - https://docs.sensu.io/sensu-go/latest/reference/entities
# # - Metrics - https://docs.sensu.io/sensu-go/latest/reference/events#metrics
# #
# # Check specification
# # The check name is the name to give the Sensu check associated with the event
# # created. This maps to check.metadata.name in the event.
# [outputs.sensu.check]
# name = "telegraf"
#
# # Entity specification
# # Configure the entity name and namespace, if necessary. This will be part of
# # the entity.metadata in the event.
# #
# # NOTE: if the output plugin is configured to send events to a
# # backend_api_url and entity_name is not set, the value returned by
# # os.Hostname() will be used; if the output plugin is configured to send
# # events to an agent_api_url, entity_name and entity_namespace are not used.
# [outputs.sensu.entity]
# # name = "server-01"
# # namespace = "default"
#
# # Metrics specification
# # Configure the tags for the metrics that are sent as part of the Sensu event
# [outputs.sensu.tags]
# # source = "telegraf"
#
# # Configure the handler(s) for processing the provided metrics
# [outputs.sensu.metrics]
# # handlers = ["influxdb","elasticsearch"]
# Send metrics and events to SignalFx
# [[outputs.signalfx]]
#  ## SignalFx Org Access Token
#  access_token = "my-secret-token"
#
#  ## The SignalFx realm that your organization resides in
#  signalfx_realm = "us9"  # Required if ingest_url is not set
#
#  ## You can optionally provide a custom ingest url instead of the
#  ## signalfx_realm option above if you are using a gateway or proxy
#  ## instance. This option takes precedence over signalfx_realm.
#  ingest_url = "https://my-custom-ingest/"
#
#  ## Event typed metrics are omitted by default,
#  ## If you require an event typed metric you must specify the
#  ## metric name in the following list.
#  included_event_names = ["plugin.metric_name"]

# Generic socket writer capable of handling multiple socket types.
# [[outputs.socket_writer]]
#  ## URL to connect to
#  # address = "tcp://127.0.0.1:8094"
#  # address = "tcp://example.com:http"
#  # address = "tcp4://127.0.0.1:8094"
#  # address = "tcp6://127.0.0.1:8094"
#  # address = "tcp6://[2001:db8::1]:8094"
#  # address = "udp://127.0.0.1:8094"
#  # address = "udp4://127.0.0.1:8094"
#  # address = "udp6://127.0.0.1:8094"
#  # address = "unix:///tmp/telegraf.sock"
#  # address = "unixgram:///tmp/telegraf.sock"
#
#  ## Optional TLS Config
#  # tls_ca = "/etc/telegraf/ca.pem"
#  # tls_cert = "/etc/telegraf/cert.pem"
#  # tls_key = "/etc/telegraf/key.pem"
#  ## Use TLS but skip chain & host verification
#  # insecure_skip_verify = false
#
#  ## Period between keep alive probes.
#  ## Only applies to TCP sockets.
#  ## 0 disables keep alive probes.
#  ## Defaults to the OS configuration.
#  # keep_alive_period = "5m"
#
#  ## Content encoding for packet-based connections (i.e. UDP, unixgram).
# # Can be set to "gzip" or to "identity" to apply no encoding.
# ## Can be set to "gzip" or to "identity" to apply no encoding.
# # content_encoding = "identity"
#
# # Data format to generate.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"

# # Send metrics to SQL Database
# [outputs.sql]
# ## Database driver
# ## Valid options: mssql (Microsoft SQL Server), mysql (MySQL), pgx (Postgres),
# ## sqlite (SQLite3), snowflake (snowflake.com)
# # driver = ""
#
# ## Data source name
# ## The format of the data source name is different for each database driver.
# ## See the plugin readme for details.
# # data_source_name = ""
#
# ## Timestamp column name
# # timestamp_column = "timestamp"
#
# ## Table creation template
# ## Available template variables:
# # {TABLE} - table name as a quoted identifier
# # {TABLELITERAL} - table name as a quoted string literal
# # {COLUMNS} - column definitions (list of quoted identifiers and types)
# # table_template = "CREATE TABLE {TABLE}({COLUMNS})"
#
# ## Table existence check template
# ## Available template variables:
# # {TABLE} - tablename as a quoted identifier
# # table_exists_template = "SELECT 1 FROM {TABLE} LIMIT 1"
#
# ## Initialization SQL
# # init_sql = ""
#
# ## Metric type to SQL type conversion
# ## The values on the left are the data types Telegraf has and the values on
# ## the right are the data types Telegraf will use when sending to a database.
# ## The database values used must be data types the destination database
# ## understands. It is up to the user to ensure that the selected data type is
# ## available in the database they are using. Refer to your database
# documentation for what data types are available and supported.
# # [outputs.sql.convert]
# # integer = "INT"
# # real = "DOUBLE"
# # text = "TEXT"
# # timestamp = "TIMESTAMP"
# # defaultvalue = "TEXT"
# # unsigned = "UNSIGNED"

# Configuration for Google Cloud Stackdriver to send metrics to
# [outputs.stackdriver]
# # GCP Project
# project = "erudite-bloom-151019"
#
# # The namespace for the metric descriptor
# namespace = "telegraf"
#
# # Custom resource type
# resource_type = "generic_node"
#
# # Additional resource labels
# [outputs.stackdriver.resource_labels]
# node_id = "$HOSTNAME"
# namespace = "myapp"
# location = "eu-north0"

# A plugin that can transmit metrics to Sumo Logic HTTP Source
# [outputs.sumologic]
# # Unique URL generated for your HTTP Metrics Source.
# # This is the address to send metrics to.
# url = "https://events.sumologic.net/receiver/v1/http/<UniqueHTTPCollectorCode>"
#
# # Data format to be used for sending metrics.
# # This will set the "Content-Type" header accordingly.
# # Currently supported formats:
# * graphite - for Content-Type of application/vnd.sumologic.graphite
# * carbon2 - for Content-Type of application/vnd.sumologic.carbon2
# * prometheus - for Content-Type of application/vnd.sumologic.prometheus
#
# # More information can be found at:
# https://help.sumologic.com/03Send-Data/Sources/02Sources-for-Hosted-Collectors/HTTP-Source/Upload-Metrics-to-an-HTTP-Source#content-type-headers-for-metrics
# #
# # NOTE:
# # When unset, telegraf will by default use the influx serializer which is currently unsupported
# # in HTTP Source.
# data_format = "carbon2"
#
## Timeout used for HTTP request
# timeout = "5s"
#
## Max HTTP request body size in bytes before compression (if applied).
## By default 1MB is recommended.
## NOTE:
## Bear in mind that in some serializer a metric even though serialized to multiple
## lines cannot be split any further so setting this very low might not work
## as expected.
# max_request_body_size = 1000000
#
## Additional, Sumo specific options.
## Full list can be found here:
## https://help.sumologic.com/03Send-Data/Sources/02Sources-for-Hosted-Collectors/HTTP-Source/Upload-Metrics-to-an-HTTP-Source#supported-http-headers
#
## Desired source name.
## Useful if you want to override the source name configured for the source.
# source_name = ""
#
## Desired host name.
## Useful if you want to override the source host configured for the source.
# source_host = ""
#
## Desired source category.
## Useful if you want to override the source category configured for the source.
# source_category = ""
#
## Comma-separated key=value list of dimensions to apply to every metric.
## Custom dimensions will allow you to query your metrics at a more granular level.
# dimensions = ""

## Configuration for Syslog server to send metrics to
[[outputs.syslog]]
## URL to connect to
## ex: address = "tcp://127.0.0.1:8094"
# ex: address = "tcp4://127.0.0.1:8094"
# ex: address = "tcp6://127.0.0.1:8094"
# ex: address = "tcp6://[2001:db8::1]:8094"
# ex: address = "udp://127.0.0.1:8094"
# ex: address = "udp4://127.0.0.1:8094"
# ex: address = "udp6://127.0.0.1:8094"
# address = "tcp://127.0.0.1:8094"
#
## Optional TLS Config
tls_ca = "/etc/telegraf/ca.pem"
#   # tls_cert = "/etc/telegraf/cert.pem"
#   # tls_key = "/etc/telegraf/key.pem"
#   # Use TLS but skip chain & host verification
#   # insecureSkipVerify = false
#
#   # Period between keep alive probes.
#   # Only applies to TCP sockets.
#   # 0 disables keep alive probes.
#   # Defaults to the OS configuration.
#   # keep_alive_period = "5m"
#
#   # The framing technique with which it is expected that messages are
#   # transported (default = "octet-counting"). Whether the messages come
#   # using the octect-counting (RFC5425#section-4.3.1, RFC6587#section-3.4.1),
#   # or the non-transparent framing technique (RFC6587#section-3.4.2). Must
#   # be one of "octet-counting", "non-transparent".
#   # framing = "octet-counting"
#
#   # The trailer to be expected in case of non-transparent framing (default = "LF").
#   # Must be one of "LF", or "NUL".
#   # trailer = "LF"
#
#   # Syslog messages can contain key/value pairs within zero or more
#   # structured data sections. For each unrecognized metric tag/field a
#   # SD-PARAMS is created.
#   #
#   # Example:
#   #   [[outputs.syslog]]
#   #     sdparam_separator = "_"
#   #     default_sdid = "default@32473"
#   #     sdids = ["foo@123", "bar@456"]
#   #
#   # input => xyzzy, x=y foo@123_value=42, bar@456_value2=84, something_else=1
#   # output (structured data only) => [foo@123 value=42][bar@456 value2=84][default@32473
# something_else=1 x=y]
#
#   # SD-PARAMs separator between the sdid and tag/field key (default = "_")
#   # sdparam_separator = "_"
#
#   # Default sdid used for tags/fields that don't contain a prefix defined in
#   # the explicit sdids setting below. If no default is specified, no SD-PARAMs
#   # will be used for unrecognized field.
#   # default_sdid = "default@32473"
#
#   # List of explicit prefixes to extract from tag/field keys and use as the
#   # SDID, if they match (see above example for more details):
# # sdids = ["foo@123", "bar@456"]
#
# ### Default severity value. Severity and Facility are used to calculate the
# ### message PRI value (RFC5424#section-6.2.1). Used when no metric field
# ### with key "severity_code" is defined. If unset, 5 (notice) is the default
# # default_severity_code = 5
#
# ### Default facility value. Facility and Severity are used to calculate the
# ### message PRI value (RFC5424#section-6.2.1). Used when no metric field with
# ### key "facility_code" is defined. If unset, 1 (user-level) is the default
# # default_facility_code = 1
#
# ### Default APP-NAME value (RFC5424#section-6.2.5)
# ### Used when no metric tag with key "appname" is defined.
# ### If unset, "Telegraf" is the default
# # default_appname = "Telegraf"
#
# # Configuration for Amazon Timestream output.
# [[outputs.timestream]]
# # Amazon Region
# # region = "us-east-1"
#
# # Amazon Credentials
# # Credentials are loaded in the following order:
# # 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# # 2) Assumed credentials via STS if role_arn is specified
# # 3) explicit credentials from 'access_key' and 'secret_key'
# # 4) shared profile from 'profile'
# # 5) environment variables
# # 6) shared credentials file
# # 7) EC2 Instance Profile
# #access_key = ""
# #secret_key = ""
# #token = ""
# #role_arn = ""
# #web_identity_token_file = ""
# #role_session_name = ""
# #profile = ""
# #shared_credential_file = ""
#
# # Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
# default.
# # ex: endpoint_url = "http://localhost:8000"
# # endpoint_url = ""
#
# # Timestream database where the metrics will be inserted.
# The database must exist prior to starting Telegraf.
# database_name = "yourDatabaseNameHere"
#
# Specifies if the plugin should describe the Timestream database upon starting
# to validate if it has access necessary permissions, connection, etc., as a safety check.
# If the describe operation fails, the plugin will not start
# and therefore the Telegraf agent will not start.
# describe_database_on_start = false
#
# The mapping mode specifies how Telegraf records are represented in Timestream.
# Valid values are: single-table, multi-table.
# For example, consider the following data in line protocol format:
#
# weather,location=us-midwest,season=summer temperature=82,humidity=71 1465839830100400200
# airquality,location=us-west no2=5,pm25=16 1465839830100400200
# where weather and airquality are the measurement names, location and season are tags,
# and temperature, humidity, no2, pm25 are fields.
#
# In multi-table mode:
# - first line will be ingested to table named weather
# - second line will be ingested to table named airquality
# - the tags will be represented as dimensions
# - first table (weather) will have two records:
#   - one with measurement name equals to temperature,
#   - another with measurement name equals to humidity
# - second table (airquality) will have two records:
#   - one with measurement name equals to no2,
#   - another with measurement name equals to pm25
# - the Timestream tables from the example will look like this:
#
# TABLE "weather":
# time | location | season | measure_name | measure_value::bigint
# 2016-06-13 17:43:50 | us-midwest | summer | temperature | 82
# 2016-06-13 17:43:50 | us-midwest | summer | humidity | 71
#
# TABLE "airquality":
# time | location | measure_name | measure_value::bigint
# 2016-06-13 17:43:50 | us-west | no2 | 5
# 2016-06-13 17:43:50 | us-west | pm25 | 16
#
# In single-table mode:
# - the data will be ingested to a single table, which name will be valueOf(single_table_name)
# - measurement name will stored in dimension named valueOf(single_table_dimension_name_for_telegraf_measurement_name)
# - location and season will be represented as dimensions
# - temperature, humidity, no2, pm25 will be represented as measurement name
# - the Timestream table from the example will look like this:
#
# Assuming:
# - single_table_name = "my_readings"
# - single_table_dimension_name_for_telegraf_measurement_name = "namespace"
# TABLE "my_readings":
# time | location | season | namespace | measure_name | measure_value::bigint
# 2016-06-13 17:43:50 | us-midwest | summer | weather | temperature | 82
In most cases, using multi-table mapping mode is recommended. However, you can consider using single-table in situations when you have thousands of measurement names.

```yaml
# mapping_mode = "multi-table"
#
# Only valid and required for mapping_mode = "single-table"
# Specifies the Timestream table where the metrics will be uploaded.
# single_table_name = "yourTableNameHere"
#
# Only valid and required for mapping_mode = "single-table"
# Describes what will be the Timestream dimension name for the Telegraf measurement name.
# single_table_dimension_name_for_telegraf_measurement_name = "namespace"
#
# Specifies if the plugin should create the table, if the table do not exist.
# The plugin writes the data without prior checking if the table exists.
# When the table does not exist, the error returned from Timestream will cause the plugin to create the table, if this parameter is set to true.
# create_table_if_not_exists = true
#
# Only valid and required if create_table_if_not_exists = true
# Specifies the Timestream table magnetic store retention period in days.
# Check Timestream documentation for more details.
# create_table_magnetic_store_retention_period_in_days = 365
#
# Only valid and required if create_table_if_not_exists = true
# Specifies the Timestream table memory store retention period in hours.
# Check Timestream documentation for more details.
# create_table_memory_store_retention_period_in_hours = 24
#
# Only valid and optional if create_table_if_not_exists = true
# Specifies the Timestream table tags.
# Check Timestream documentation for more details
# create_table_tags = { "foo" = "bar", "environment" = "dev" }
#
# Specify the maximum number of parallel go routines to ingest/write data
# If not specified, defaulted to 1 go routines
max_write_go_routines = 25
#
# Write metrics to Warp 10
# [outputs.warp10]
# Prefix to add to the measurement.
# prefix = "telegraf."
#
# URL of the Warp 10 server
```
# warp_url = "http://localhost:8080"
#
# # Write token to access your app on warp 10
# token = "Token"
#
# # Warp 10 query timeout
# # timeout = "15s"
#
# ## Print Warp 10 error body
# # print_error_body = false
#
# ## Max string error size
# # max_string_error_size = 511
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Configuration for Wavefront server to send metrics to
# [[][outputs.wavefront]]
# ## Url for Wavefront Direct Ingestion or using HTTP with Wavefront Proxy
# # If using Wavefront Proxy, also specify port. example: http://proxyserver:2878
# # url = "https://metrics.wavefront.com"
#
# ## Authentication Token for Wavefront. Only required if using Direct Ingestion
# #token = "DUMMY_TOKEN"
#
# ## DNS name of the wavefront proxy server. Do not use if url is specified
# #host = "wavefront.example.com"
#
# ## Port that the Wavefront proxy server listens on. Do not use if url is specified
# #port = 2878
#
# ## prefix for metrics keys
# #prefix = "my.specific.prefix."
#
# ## whether to use "value" for name of simple fields. default is false
# #simple_fields = false
#
# ## character to use between metric and field name. default is . (dot)
# #metric_separator = "."
#
# ## Convert metric name paths to use metricSeparator character
# ## When true will convert all _ (underscore) characters in final metric name. default is true
# #convert_paths = true
#
# # Use Strict rules to sanitize metric and tag names from invalid characters
# # When enabled forward slash (/) and comma (,) will be accepted
# #use_strict = false
#
# Use Regex to sanitize metric and tag names from invalid characters
# Regex is more thorough, but significantly slower. default is false
# #use_regex = false
#
# point tags to use as the source name for Wavefront (if none found, host will be used)
# #source_override = ['hostname', 'address', 'agent_host', 'node_host']
#
# whether to convert boolean values to numeric values, with false -> 0.0 and true -> 1.0. default is true
# #convert_bool = true
#
# Truncate metric tags to a total of 254 characters for the tag name value. Wavefront will reject any
# data point exceeding this limit if not truncated. Defaults to 'false' to provide backwards compatibility.
# #truncate_tags = false
#
# Flush the internal buffers after each batch. This effectively bypasses the background sending of metrics
# normally done by the Wavefront SDK. This can be used if you are experiencing buffer overruns. The sending
# of metrics will block for a longer time, but this will be handled gracefully by the internal buffering in
# # Telegraf.
# #immediate_flush = true
#
# Define a mapping, namespaced by metric prefix, from string values to numeric values
# deprecated in 1.9; use the enum processor plugin
# #[[outputs.wavefront.string_to_number.elasticsearch]]
#  green = 1.0
#  yellow = 0.5
#  red = 0.0
#
# Generic WebSocket output writer.
# #[[outputs.websocket]]
# URL is the address to send metrics to. Make sure ws or wss scheme is used.
# url = "ws://127.0.0.1:8080/telegraf"
#
# Timeouts (make sure read_timeout is larger than server ping interval or set to zero).
# # connect_timeout = "30s"
# # write_timeout = "30s"
# # read_timeout = "30s"
#
# Optionally turn on using text data frames (binary by default).
# # use_text_frames = false
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# # Data format to output.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
#
# # Additional HTTP Upgrade headers
# [outputs.websocket.headers]
# Authorization = "Bearer <TOKEN>"

# Send aggregated metrics to Yandex.Cloud Monitoring
[[outputs.yandex_cloud_monitoring]]
# Timeout for HTTP writes.
# timeout = "20s"
#
# Yandex.Cloud monitoring API endpoint. Normally should not be changed
# endpoint_url = "https://monitoring.api.cloud.yandex.net/monitoring/v2/data/write"
#
# All user metrics should be sent with "custom" service specified. Normally should not be changed
# service = "custom"

# PROCESSOR PLUGINS

# Attach AWS EC2 metadata to metrics
[[processors.aws_ec2]]
# Instance identity document tags to attach to metrics.
# For more information see:
#
# Available tags:
# * accountId
# * architecture
# * availabilityZone
# * billingProducts
# * imageId
# * instanceId
# * instanceType

Open Source Used In BGP TE Controller Version 4.3.0 12239
# ### *kernelId
# ### *pendingTime
# ### *privateIp
# ### *ramdiskId
# ### *region
# ### *version
# imds_tags = []
#
# ### EC2 instance tags retrieved with DescribeTags action.
# ### In case tag is empty upon retrieval it's omitted when tagging metrics.
# ### Note that in order for this to work, role attached to EC2 instance or AWS
# ### credentials available from the environment must have a policy attached, that
# ### allows ec2:DescribeTags.
# ###
# ### For more information see:
# ### https://docs.aws.amazon.com/AWSEC2/latest/APIReference/API_DescribeTags.html
# ec2_tags = []
#
# ### Timeout for http requests made by against aws ec2 metadata endpoint.
# timeout = "10s"
#
# ### ordered controls whether or not the metrics need to stay in the same order
# ### this plugin received them in. If false, this plugin will change the order
# ### with requests hitting cached results moving through immediately and not
# ### waiting on slower lookups. This may cause issues for you if you are
# ### depending on the order of metrics staying the same. If so, set this to true.
# ### Keeping the metrics ordered may be slightly slower.
# ordered = false
#
# ### max_parallel_calls is the maximum number of AWS API calls to be in flight
# ### at the same time.
# max_parallel_calls = 10

# # Clone metrics and apply modifications.
# [[processors.clone]]
# ### All modifications on inputs and aggregators can be overridden:
# # name_override = "new_name"
# # name_prefix = "new_name_prefix"
# # name_suffix = "new_name_suffix"
# #
# ### Tags to be added (all values must be strings)
# # [processors.clone.tags]
# # additional_tag = "tag_value"

# # Convert values to another metric value type
# processors.converter
tags: measurement, string, integer, unsigned, boolean, float

tags:
- measurement = []
- string = []
- integer = []
- unsigned = []
- boolean = []
- float = []

fields:
- measurement = []
- tag = []
- string = []
- integer = []
- unsigned = []
- boolean = []
- float = []

### Dates measurements, tags, and fields that pass through this filter.

# processors.date
tag_key = "month"

tag_key = "month"

date_format = "Jan"

date_format = "unix"

date_offset = "0s"
# Timezone to use when creating the tag or field using a reference time
# string. This can be set to one of "UTC", "Local", or to a location name
# in the IANA Time Zone database.
# example: timezone = "America/Los_Angeles"
# timezone = "UTC"

# Filter metrics with repeating field values
# processors.dedup]
# Maximum time to suppress output
dedup_interval = "600s"

# Defaults sets default value(s) for specified fields that are not set on incoming metrics.
# processors.defaults]
# Ensures a set of fields always exists on your metric(s) with their
# respective default value.
# For any given field pair (key = default), if it's not set, a field
# is set on the metric with the specified default.
#
# A field is considered not set if it is nil on the incoming metric;
# or it is not nil but its value is an empty string or is a string
# of one or more spaces.
# <target-field> = <value>
# [processors.defaults.fields]
# field_1 = "bar"
# time_idle = 0
# is_error = true

# Map enum values according to given table.
# processors.enum]
# processors.enum.mapping]
# Name of the field to map. Globs accepted.
# field = "status"
#
# Name of the tag to map. Globs accepted.
# tag = "status"
#
# Destination tag or field to be used for the mapped value. By default the
# source tag or field is used, overwriting the original value.
# dest = "status_code"
#
# Default value to be used for all values not contained in the mapping
# table. When unset, the unmodified value for the field will be used if no
# match is found.
# default = 0
#
# Table of mappings
# processors.enum.mapping.value_mappings
#  green = 1
#  amber = 2
#  red = 3

## Run executable as long-running processor plugin
[[processors.execd]]
### Program to run as daemon
### eg: command = ["/path/to/your_program", "arg1", "arg2"]
# command = ["cat"]

## Delay before the process is restarted after an unexpected termination
# restart_delay = "10s"

## Performs file path manipulations on tags and fields
[[processors/filepath]]
### Treat the tag value as a path and convert it to its last element, storing the result in a new tag
### processors/filepath.basename
### tag = "path"
### dest = "basepath"

### Treat the field value as a path and keep all but the last element of path, typically the path's directory
### processors/filepath.dirname
### field = "path"

### Treat the tag value as a path, converting it to the last element without its suffix
### processors/filepath.stem
### tag = "path"

### Treat the tag value as a path, converting it to the shortest path name equivalent
to path by purely lexical processing
### processors/filepath.clean
### tag = "path"

### Treat the tag value as a path, converting it to a relative path that is lexically equivalent to the source path when joined to 'base_path'
### processors/filepath.rel
### tag = "path"
### base_path = "/var/log"

### Treat the tag value as a path, replacing each separator character in path with a '/' character. Has only
### effect on Windows
### processors/filepath.toslash
### tag = "path"
## Add a tag of the network interface name looked up over SNMP by interface number

```
[processors.fname]
```

## Name of tag holding the interface number

```
# tag = "ifIndex"
```

## Name of output tag where service name will be added

```
# dest = "ifName"
```

## Name of tag of the SNMP agent to request the interface name from

```
# agent = "agent"
```

## Timeout for each request.

```
# timeout = "5s"
```

## SNMP version; can be 1, 2, or 3.

```
# version = 2
```

## SNMP community string.

```
# community = "public"
```

## Number of retries to attempt.

```
# retries = 3
```

## The GETBULK max-repetitions parameter.

```
# max_repetitions = 10
```

## SNMPv3 authentication and encryption options.

```
## Security Name.
# sec_name = "myuser"
```

## Authentication protocol; one of "MD5", "SHA", or "."

```
# auth_protocol = "MD5"
```

## Authentication password.

```
# auth_password = "pass"
```

## Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".

```
# sec_level = "authNoPriv"
```

## Context Name.

```
# context_name = ""
```

## Privacy protocol used for encrypted messages; one of "DES", "AES" or "."

```
# priv_protocol = ""
```

## Privacy password used for encrypted messages.

```
# priv_password = ""
```

## max_parallel_lookups is the maximum number of SNMP requests to

```
# make at the same time.
```

```
# max_parallel_lookups = 100
```
### ordered controls whether or not the metrics need to stay in the same order this plugin received them in. If false, this plugin may change the order when data is cached. If you need metrics to stay in order set this to true. Keeping the metrics ordered may be slightly slower.

- ordered = false

### cache_ttl is the amount of time interface names are cached for a given agent. After this period elapses if names are needed they will be retrieved again.

- cache_ttl = "8h"

### Apply metric modifications using override semantics.

- [[processors.override]]

  - All modifications on inputs and aggregators can be overridden:
    - name_override = "new_name"
    - name_prefix = "new_name_prefix"
    - name_suffix = "new_name_suffix"

- Tags to be added (all values must be strings)

  - processors.override.tags
    - additional_tag = "tag_value"

### Parse a value in a specified field/tag(s) and add the result in a new metric

- [[processors.parser]]

  - The name of the fields whose value will be parsed.
    - parse_fields = []

  - If true, incoming metrics are not emitted.
    - drop_original = false

  - If set to override, emitted metrics will be merged by overriding the original metric using the newly parsed metrics.
    - merge = "override"

  - The dataformat to be read from files
    - Each data format has its own unique set of configuration options, read more about them here:
    - https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
    - data_format = "influx"

### Rotate a single valued metric into a multi field metric

- [[processors.pivot]]

  - Tag to use for naming the new field.
    - tag_key = "name"
## Field to use as the value of the new field.
value_key = "value"

## Given a tag/field of a TCP or UDP port number, add a tag/field of the service name looked up in the system services file
# [[processors.port_name]]
# [[processors.port_name]]
# Name of tag holding the port number
tag = "port"
# Or name of the field holding the port number
field = "port"
#
# Name of output tag or field (depending on the source) where service name will be added
dest = "service"
#
# Default tcp or udp
default_protocol = "tcp"
#
# Tag containing the protocol (tcp or udp, case-insensitive)
protocol_tag = "proto"
#
# Field containing the protocol (tcp or udp, case-insensitive)
protocol_field = "proto"

## Print all metrics that pass through this filter.
# [[processors.printer]]

## Transforms tag and field values as well as measurement, tag and field names with regex pattern
# [[processors.regex]]
# Tag and field conversions defined in a separate sub-tables
# # Tag to change
# # key = "resp_code"
# # Regular expression to match on a tag value
# # pattern = "^(\d)\d\d$"
# # Matches of the pattern will be replaced with this string. Use $[1]
# # notation to use the text of the first submatch.
# # replacement = "$[1]xx"
#
# # [[processors.regex.tags]]
# # Field to change
# # key = "request"
# # All the power of the Go regular expressions available here
# # For example, named subgroups
# # pattern = "~/api(?P<method>[/\w/]+)\S*"
replacement = "${method}"  

# ## If result_key is present, a new field will be created  
# ## instead of changing existing field  
# ## result_key = "method"  
# 

# ## Multiple conversions may be applied for one field sequentially  
# Let's extract one more value  
# # [[processors.regex.fields]] 
# # key = "request"  
# # pattern = ".*category=(\w+).*"  
# # replacement = "$1"  
# # result_key = "search_category"  
# 

# ## Rename metric fields  
# # [[processors.regex.field_rename]]  
# # Regular expression to match on a field name  
# # pattern = "^search_(\w+)d$"  
# # Matches of the pattern will be replaced with this string. Use $1  
# # notation to use the text of the first submatch.  
# # replacement = "$1"  
# # If the new field name already exists, you can either "overwrite" the  
# # existing one with the value of the renamed field OR you can "keep"  
# # both the existing and source field.  
# # result_key = "keep"  
# 

# ## Rename metric tags  
# # [[processors.regex.tag_rename]]  
# # Regular expression to match on a tag name  
# # pattern = "^search_(\w+)d$"  
# # Matches of the pattern will be replaced with this string. Use $1  
# # notation to use the text of the first submatch.  
# # replacement = "$1"  
# # If the new tag name already exists, you can either "overwrite" the  
# # existing one with the value of the renamed tag OR you can "keep"  
# # both the existing and source tag.  
# # result_key = "keep"  
# 

# ## Rename metrics  
# # [[processors.regex.metric_rename]]  
# # Regular expression to match on an metric name  
# # pattern = "^search_(\w+)d$"  
# # Matches of the pattern will be replaced with this string. Use $1  
# # notation to use the text of the first submatch.  
# # replacement = "$1"  

# Rename measurements, tags, and fields that pass through this filter.  
# # [[processors.rename]]
ReverseDNS does a reverse lookup on IP addresses to retrieve the DNS name.
# [processors.reverse_dns]
# For optimal performance, you may want to limit which metrics are passed to this
# processor. eg:
# namepass = ["my_metric_*"]
#
# cache_ttl is how long the dns entries should stay cached for.
# generally longer is better, but if you expect a large number of diverse lookups
# you'll want to consider memory use.
# cache_ttl = "24h"
#
# lookup_timeout is how long should you wait for a single dns request to respond.
# this is also the maximum acceptable latency for a metric travelling through
# the reverse_dns processor. After lookup_timeout is exceeded, a metric will
# be passed on unaltered.
# multiple simultaneous resolution requests for the same IP will only make a
# single rDNS request, and they will all wait for the answer for this long.
# lookup_timeout = "3s"
#
# max_parallel_lookups is the maximum number of dns requests to be in flight
# at the same time. Requesting hitting cached values do not count against this
# total, and neither do multiple requests for the same IP.
# It's probably best to keep this number fairly low.
# max_parallel_lookups = 10
#
# ordered controls whether or not the metrics need to stay in the same order
# this plugin received them in. If false, this plugin will change the order
# with requests hitting cached results moving through immediately and not
# waiting on slower lookups. This may cause issues for you if you are
# depending on the order of metrics staying the same. If so, set this to true.
# keeping the metrics ordered may be slightly slower.
# ordered = false
#
# get the ip from the field "source_ip", and put the result in the field "source_name"
# field = "source_ip"
# dest = "source_name"
#
# get the ip from the tag "destination_ip", and put the result in the tag
# "destination_name".
# tag = "destination_ip"
# dest = "destination_name"
#
# If you would prefer destination_name to be a field instead, you can use a
# processors.converter after this one, specifying the order attribute.
Add the S2 Cell ID as a tag based on latitude and longitude fields

```python
[[processors.s2geo]]
```  
The name of the lat and lon fields containing WGS-84 latitude and longitude in decimal degrees.

```python
# lat_field = "lat"
# lon_field = "lon"
```

## New tag to create

```python
# tag_key = "s2_cell_id"
```

## Cell level (see https://s2geometry.io/resources/s2cell_statistics.html)

```python
# cell_level = 9
```

Process metrics using a Starlark script

```python
[[processors.starlark]]
```  
The Starlark source can be set as a string in this configuration file, or by referencing a file containing the script. Only one source or script should be set at once.

```python
## Source of the Starlark script.
# source = \\
# def apply(metric):
#
# return metric
#
```

## File containing a Starlark script.

```python
# script = "/usr/local/bin/myscript.star"
```

## The constants of the Starlark script.

```python
# [processors.starlark.constants]
# max_size = 10
# threshold = 0.75
# default_name = "Julia"
# debug_mode = true
```

Perform string processing on tags, fields, and measurements

```python
[[processors.strings]]
```  
Convert a tag value to uppercase

```python
[[processors.strings.uppercase]]
```  
Convert a field value to lowercase and store in a new field

```python
[[processors.strings.lowercase]]
```
# # dest = "uri_stem_normalised"
#
# # # Convert a field value to titlecase
# # # [processors.strings.titlecase]
# # # field = "status"
#
# # # Trim leading and trailing whitespace using the default cutset
# # # [processors.strings.trim]
# # # field = "message"
#
# # # Trim leading characters in cutset
# # # [processors.strings.trim_left]
# # # field = "message"
# # # cutset = "\t"
#
# # # Trim trailing characters in cutset
# # # [processors.strings.trim_right]
# # # field = "message"
# # # cutset = "\r\n"
#
# # # Trim the given prefix from the field
# # # [processors.strings.trim_prefix]
# # # field = "my_value"
# # # prefix = "my_
#
# # # Trim the given suffix from the field
# # # [processors.strings.trim_suffix]
# # # field = "read_count"
# # # suffix = "_count"
#
# # # Replace all non-overlapping instances of old with new
# # # [processors.strings.replace]
# # # measurement = "\""
# # # old = ":\"
# # # new = "\""
#
# # # Trims strings based on width
# # # [processors.strings.left]
# # # field = "message"
# # # width = 10
#
# # # Decode a base64 encoded utf-8 string
# # # [processors.strings.base64decode]
# # # field = "message"
#
# # # Sanitize a string to ensure it is a valid utf-8 string
# # # Each run of invalid UTF-8 byte sequences is replaced by the replacement string, which may be empty
# # # [processors.strings.valid_utf8]
```
field = "message"
replacement = ""

Restricts the number of tags that can pass through this filter and chooses which tags to preserve when over the limit.
[[processors.tag_limit]]
## Maximum number of tags to preserve
limit = 10

## List of tags to preferentially preserve
keep = ["foo", "bar", "baz"]

Uses a Go template to create a new tag
[[processors.template]]
## Tag to set with the output of the template.
tag = "topic"

## Go template used to create the tag value. In order to ease TOML escaping requirements, you may wish to use single quotes around the template string.
template = '{{ .Tag "hostname" }}.{ .Tag "level" }'

Print all metrics that pass through this filter.
[[processors.topk]]
## How many seconds between aggregations
period = 10

## How many top metrics to return
k = 10

## Over which tags should the aggregation be done. Globs can be specified, in which case any tag matching the glob will aggregated over. If set to an empty list no aggregation over tags is done
group_by = ["*"]

## Over which fields are the top k are calculated
fields = ["value"]

## What aggregation to use. Options: sum, mean, min, max
aggregation = "mean"

## Instead of the top k largest metrics, return the bottom k lowest metrics
bottomk = false

## The plugin assigns each metric a GroupBy tag generated from its name and
```
# tags. If this setting is different than "" the plugin will add a
# tag (which name will be the value of this setting) to each metric with
# the value of the calculated GroupBy tag. Useful for debugging
# add_groupby_tag = ""
#
# These settings provide a way to know the position of each metric in
# the top k. The 'add_rank_field' setting allows to specify for which
# fields the position is required. If the list is non empty, then a field
# will be added to each and every metric for each string present in this
# setting. This field will contain the ranking of the group that
# the metric belonged to when aggregated over that field.
# The name of the field will be set to the name of the aggregation field,
# suffixed with the string '_topk_rank'
# add_rank_fields = []
#
# These settings provide a way to know what values the plugin is generating
# when aggregating metrics. The 'add_aggregate_field' setting allows to
# specify for which fields the final aggregation value is required. If the
# list is non empty, then a field will be added to each metric for
# each field present in this setting. This field will contain
# the computed aggregation for the group that the metric belonged to when
# aggregated over that field.
# The name of the field will be set to the name of the aggregation field,
# suffixed with the string '_topk_aggregate'
# add_aggregate_fields = []
#
# Rotate multi field metric into several single field metrics
# [[processors.unpivot]]
# Tag to use for the name.
# tag_key = "name"
# Field to use for the name of the value.
# value_key = "value"

# Keep the aggregate basicstats of each metric passing through.
# [[aggregators.basicstats]]
# The period on which to flush & clear the aggregator.
# period = "30s"
#
# If true, the original metric will be dropped by the
# aggregator and will not get sent to the output plugins.
# drop_original = false
# # # Configures which basic stats to push as fields
# stats = ["count", "min", "max", "mean", "stdev", "s2", "sum"]

# # Calculates a derivative for every field.
# [[aggregators.derivative]]
# The period in which to flush the aggregator.
# period = "30s"
# #
# If true, the original metric will be dropped by the
# aggregator and will not get sent to the output plugins.
# drop_original = false
# #
# This aggregator will estimate a derivative for each field, which is
# contained in both the first and last metric of the aggregation interval.
# Without further configuration the derivative will be calculated with
# respect to the time difference between these two measurements in seconds.
# The formula applied is for every field:
# #
# value_last - value_first
# derivative = --------------------------
# time_difference_in_seconds
# #
# The resulting derivative will be named *fieldname_rate*. The suffix
# "_rate" can be configured by the *suffix* parameter. When using a
derivation variable you can include its name for more clarity.
# suffix = "_rate"
# #
# As an abstraction the derivative can be calculated not only by the time
# difference but by the difference of a field, which is contained in the
# measurement. This field is assumed to be monotonously increasing. This
# feature is used by specifying a *variable*.
# Make sure the specified variable is not filtered and exists in the metrics
# passed to this aggregator!
# variable = ""
# #
# When using a field as the derivation parameter the name of that field will
# be used for the resulting derivative, e.g. *fieldname_by_parameter*.
# #
# Note, that the calculation is based on the actual timestamp of the
# measurements. When there is only one measurement during that period, the
# measurement will be rolled over to the next period. The maximum number of
# such roll-overs can be configured with a default of 10.
# max_roll_over = 10
# #
## Report the final metric of a series
# [[aggregators.final]]
#  ### The period on which to flush & clear the aggregator.
#  period = "30s"
#  ### If true, the original metric will be dropped by the
#  ### aggregator and will not get sent to the output plugins.
#  drop_original = false
#
#  ### The time that a series is not updated until considering it final.
#  series_timeout = "5m"

## Create aggregate histograms.
# [[aggregators.histogram]]
#  ### The period in which to flush the aggregator.
#  period = "30s"
#
#  ### If true, the original metric will be dropped by the
#  ### aggregator and will not get sent to the output plugins.
#  drop_original = false
#
#  ### If true, the histogram will be reset on flush instead
#  ### of accumulating the results.
#  reset = false
#
#  ### Whether bucket values should be accumulated. If set to false, "gt" tag will be added.
#  ### Defaults to true.
#  cumulative = true
#
#  ### Example config that aggregates all fields of the metric.
#  # [[aggregators.histogram.config]]
#  #  ### Right borders of buckets (with +Inf implicitly added).
#  #  buckets = [0.0, 15.6, 34.5, 49.1, 71.5, 80.5, 94.5, 100.0]
#  #  ### The name of metric.
#  #  measurement_name = "cpu"
#
#  ### Example config that aggregates only specific fields of the metric.
#  # [[aggregators.histogram.config]]
#  #  ### Right borders of buckets (with +Inf implicitly added).
#  #  buckets = [0.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0]
#  #  ### The name of metric.
#  #  measurement_name = "diskio"
#  #  ### The concrete fields of metric
#  #  fields = ["io_time", "read_time", "write_time"]

## Merge metrics into multifield metrics by series key
# [[aggregators.merge]]
## General Aggregator Arguments:

- **period**: The period on which to flush & clear the aggregator.
  - *Default*: "30s"
- **drop_original**: If true, the original metric will be dropped by the aggregator and will not get sent to the output plugins.
  - *Default*: false

### Quantiles to output in the range [0,1]

- Quantiles = [0.25, 0.5, 0.75]
- **algorithm**: Type of aggregation algorithm
  - Supported are:
    - "t-digest" -- approximation using centroids, can cope with large number of samples
    - "exact R7" -- exact computation also used by Excel or NumPy (Hyndman & Fan 1996 R7)
    - "exact R8" -- exact computation (Hyndman & Fan 1996 R8)
    - **NOTE**: Do not use "exact" algorithms with large number of samples to not impair performance or memory consumption!
    - **Default**: "t-digest"

- **compression**: Compression for approximation (t-digest). The value needs to be greater or equal to 1.0. Smaller values will result in more performance but less accuracy.
  - *Default*: 100.0

## Aggregate metrics using a Starlark script

### The Starlark source can be set as a string in this configuration file, or by referencing a file containing the script. Only one source or script should be set at once.
# Source of the Starlark script.
# source = ""
# state = {}
#
# def add(metric):
#   state["last"] = metric
#
# def push():
#   return state.get("last")
#
# def reset():
#   state.clear()
# ""
#
# File containing a Starlark script.
# # script = "/usr/local/bin/myscript.star"
#
# The constants of the Starlark script.
# # [aggregators.starlark.constants]
# # max_size = 10
# # threshold = 0.75
# # default_name = "Julia"
# # debug_mode = true
#
# Count the occurrence of values in fields.
# [[aggregators.valuecounter]]
# ### General Aggregator Arguments:
# ### The period on which to flush & clear the aggregator.
# # period = "30s"
# ### If true, the original metric will be dropped by the
# ### aggregator and will not get sent to the output plugins.
# # drop_original = false
# ### The fields for which the values will be counted
# # fields = []

# Read metrics about cpu usage
[[inputs.cpu]]
### Whether to report per-cpu stats or not
percpu = true
### Whether to report total system cpu stats or not
totalcpu = true
## If true, collect raw CPU time metrics
collect_cpu_time = false
## If true, compute and report the sum of all non-idle CPU states
report_active = false

# Read metrics about disk usage by mount point
[[inputs.disk]]
## By default stats will be gathered for all mount points.
## Set mount_points will restrict the stats to only the specified mount points.
# mount_points = ["/"]

## Ignore mount points by filesystem type.
ignore_fs = ["tmpfs", "devtmpfs", "devfs", "iso9660", "overlay", "aufs", "squashfs"]

# Read metrics about disk IO by device
[[inputs.diskio]]
## By default, telegraf will gather stats for all devices including
## disk partitions.
## Setting devices will restrict the stats to the specified devices.
# devices = ["sda", "sdb", "vd*"]
## Uncomment the following line if you need disk serial numbers.
# skip_serial_number = false

## On systems which support it, device metadata can be added in the form of
## tags.
## Currently only Linux is supported via udev properties. You can view
## available properties for a device by running:
## `udevadm info -q property -n /dev/sda`
## Note: Most, but not all, udev properties can be accessed this way. Properties
## that are currently inaccessible include DEVTYPE, DEVNAME, and DEVPATH.
# device_tags = ["ID_FS_TYPE", "ID_FS_USAGE"]

## Using the same metadata source as device_tags, you can also customize the
## name of the device via templates.
## The 'name_templates' parameter is a list of templates to try and apply to
## the device. The template may contain variables in the form of '$PROPERTY' or
## '${PROPERTY}'. The first template which does not contain any variables not
## present for the device is used as the device name tag.
## The typical use case is for LVM volumes, to get the VG/LV name instead of
## the near-meaningless DM-0 name.
# name_templates = ["$ID_FS_LABEL","$DM_VG_NAME/$DM_LV_NAME"]

# Get kernel statistics from /proc/stat
[[inputs.kernel]]
# no configuration

# Read metrics about memory usage
[[inputs.mem]]
# no configuration

# Get the number of processes and group them by status
[[inputs.processes]]
# no configuration

# Read metrics about swap memory usage
[[inputs.swap]]
# no configuration

# Read metrics about system load & uptime
[[inputs.system]]
## Uncomment to remove deprecated metrics.
# fielddrop = ["uptime_format"]

## Gather ActiveMQ metrics
# [[inputs.activemq]]
# ## ActiveMQ WebConsole URL
# url = "http://127.0.0.1:8161"
#
# ## Required ActiveMQ Endpoint
# ## deprecated in 1.11; use the url option
# # server = "127.0.0.1"
# # port = 8161
#
# ## Credentials for basic HTTP authentication
# # username = "admin"
# # password = "admin"
#
# ## Required ActiveMQ webadmin root path
# # webadmin = "admin"
#
# ## Maximum time to receive response.
# # response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Read stats from aerospike server(s)
# [inputs.aerospike]
# Aerospike servers to connect to (with port)
# This plugin will query all namespaces the aerospike server has configured and get stats for them.
# servers = ["localhost:3000"]
#
# username = "telegraf"
# password = "pa$$word"
#
# Optional TLS Config
# enable_tls = false
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# If false, skip chain & host verification
# insecure_skip_verify = true
#
# Feature Options
# Add namespace variable to limit the namespaces executed on
# Leave blank to do all
# disable_query_namespaces = true # default false
# namespaces = ["namespace1", "namespace2"]
#
# Enable set level telemetry
# query_sets = true # default: false
# Add namespace set combinations to limit sets executed on
# Leave blank to do all sets
# sets = ["namespace1/set1", "namespace1/set2", "namespace3"]
#
# Histograms
# enable_ttl_histogram = true # default: false
# enable_object_size_linear_histogram = true # default: false
#
# by default, aerospike produces a 100 bucket histogram
# this is not great for most graphing tools, this will allow
# the ability to squash this to a smaller number of buckets
# To have a balanced histogram, the number of buckets chosen
# should divide evenly into 100.
# num_histogram_buckets = 100 # default: 10

## Query statistics from AMD Graphics cards using rocm-smi binary
# [inputs.amd_rocm_smi]
# Optional: path to rocm-smi binary, defaults to $PATH via exec.LookPath
# bin_path = "/opt/rocm/bin/rocm-smi"
#
# Optional: timeout for GPU polling
# timeout = "5s"

# Read Apache status information (mod_status)
 [[inputs.apache]]

# An array of URLs to gather from, must be directed at the machine
# readable version of the mod_status page including the auto query string.
# Default is "http://localhost/server-status?auto".
# urls = ["http://localhost/server-status?auto"]

# Credentials for basic HTTP authentication.
# username = "myuser"
# password = "mypassword"

# Maximum time to receive response.
# response_timeout = "5s"

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Monitor APC UPSes connected to apcupsd
[inputs.apcupsd]

# A list of running apcupsd server to connect to.
# If not provided will default to tcp://127.0.0.1:3551
# servers = ["tcp://127.0.0.1:3551"]

# Timeout for dialing server.
# timeout = "5s"

# Gather metrics from Apache Aurora schedulers
[inputs.aurora]

# Schedulers are the base addresses of your Aurora Schedulers
# schedulers = ["http://127.0.0.1:8081"]

# Set of role types to collect metrics from.
#
# The scheduler roles are checked each interval by contacting the
# scheduler nodes; zookeeper is not contacted.
# roles = ["leader", "follower"]
#
# ### Timeout is the max time for total network operations.
# timeout = "5s"
#
# ### Username and password are sent using HTTP Basic Auth.
# username = "username"
# password = "password"
#
# ### Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# ### Use TLS but skip chain & host verification
# insecure_skip_verify = false

### Gather Azure Storage Queue metrics
[
  [inputs.azure_storage_queue]
  account_name = "mystorageaccount"
  account_key = "storageaccountaccesskey"
  peek_oldest_message_age = true

### Read metrics of bcache from stats_total and dirty_data
[
  [inputs.bcache]
  bcachePath = "/sys/fs/bcache"
  bcacheDevs = ["bcache0"]

### Collects Beanstalkd server and tubes stats
[
  [inputs.beanstalkd]
  server = "localhost:11300"
  tubes = ["all"]
## tubes = ["notifications"]

```
# Read metrics exposed by Beat
# [[[inputs.beat]]]

# ## An URL from which to read Beat-formatted JSON
# ## Default is "http://127.0.0.1:5066".
# # url = "http://127.0.0.1:5066"
#
# ## Enable collection of the listed stats
# ## An empty list means collect all. Available options are currently
# ## "beat", "libbeat", "system” and "filebeat".
# # include = ["beat", "libbeat", "filebeat"]
#
# ## HTTP method
# # method = "GET"
#
# ## Optional HTTP headers
# # headers = {
# #   "X-Special-Header" = "Special-Value"
# #}
#
# ## Override HTTP "Host" header
# # host_header = "logstash.example.com"
#
# ## Timeout for HTTP requests
# # timeout = "5s"
#
# ## Optional HTTP Basic Auth credentials
# # username = "username"
# # password = "pa$$word"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Read BIND nameserver XML statistics
# [[[inputs.bind]]]

# ## An array of BIND XML statistics URI to gather stats.
# ## Default is "http://localhost:8053/xml/v3".
# # urls = ["http://localhost:8053/xml/v3"]
# # gather_memory_contexts = false
# # gather_views = false
#
# ## Timeout for http requests made by bind nameserver
# # timeout = "4s"
```
### Collect bond interface status, slaves statuses and failures count

```
# [inputs.bond]
# ### Sets 'proc' directory path
# ### If not specified, then default is /proc
# # host_proc = "/proc"
#
# ### By default, telegraf gather stats for all bond interfaces
# ### Setting interfaces will restrict the stats to the specified
# ### bond interfaces.
# # bond_interfaces = ["bond0"]
```

### Collect Kafka topics and consumers status from Burrow HTTP API.

```
# [inputs.burrow]
# ### Burrow API endpoints in format "schema://host:port".
# ### Default is "http://localhost:8000".
# servers = ["http://localhost:8000"]
#
# ### Override Burrow API prefix.
# ### Useful when Burrow is behind reverse-proxy.
# # api_prefix = "/v3/kafka"
#
# ### Maximum time to receive response.
# # response_timeout = "5s"
#
# ### Limit per-server concurrent connections.
# ### Useful in case of large number of topics or consumer groups.
# # concurrent_connections = 20
#
# ### Filter clusters, default is no filtering.
# ### Values can be specified as glob patterns.
# # clusters_include = []
# # clusters_exclude = []
#
# ### Filter consumer groups, default is no filtering.
# ### Values can be specified as glob patterns.
# # groups_include = []
# # groups_exclude = []
#
# ### Filter topics, default is no filtering.
# ### Values can be specified as glob patterns.
# # topics_include = []
# # topics_exclude = []
#
# ### Credentials for basic HTTP authentication.
# # username = ""
```
```plaintext
# # password = ""
#
# ## Optional SSL config
# # ssl_ca = "/etc/telegraf/ca.pem"
# # ssl_cert = "/etc/telegraf/cert.pem"
# # ssl_key = "/etc/telegraf/key.pem"
# # insecure_skip_verify = false

# # Collects performance metrics from the MON, OSD, MDS and RGW nodes in a Ceph storage cluster.
# [[inputs.ceph]]
# ## This is the recommended interval to poll. Too frequent and you will lose
# ## data points due to timeouts during rebalancing and recovery
# interval = '1m'
#
# ## All configuration values are optional, defaults are shown below
# # location of ceph binary
# ceph_binary = "/usr/bin/ceph"
#
# directory in which to look for socket files
# socket_dir = "/var/run/ceph"
#
# prefix of MON and OSD socket files, used to determine socket type
# mon_prefix = "ceph-mon"
# osd_prefix = "ceph-osd"
# mds_prefix = "ceph-mds"
# rgw_prefix = "ceph-client"
#
# suffix used to identify socket files
# socket_suffix = "asok"
#
# Ceph user to authenticate as, ceph will search for the corresponding keyring
# e.g. client.admin.keyring in /etc/ceph, or the explicit path defined in the
# client section of ceph.conf for example:
# #
# # [client.telegraf]
# # keyring = /etc/ceph/client.telegraf.keyring
# #
# Consult the ceph documentation for more detail on keyring generation.
# ceph_user = "client.admin"
#
# Ceph configuration to use to locate the cluster
# ceph_config = "/etc/ceph/ceph.conf"
#
# Whether to gather statistics via the admin socket
# gather_admin_socket_stats = true
```
# # Whether to gather statistics via ceph commands, requires ceph_user and ceph_config
# # to be specified
# gather_cluster_stats = false

# # Read specific statistics per cgroup
# [[inputs.cgroup]]
# # Directories in which to look for files, globs are supported.
# # Consider restricting paths to the set of cgroups you really
# # want to monitor if you have a large number of cgroups, to avoid
# # any cardinality issues.
# # paths = [
# #   "/sys/fs/cgroup/memory",
# #   "/sys/fs/cgroup/memory/child1",
# #   "/sys/fs/cgroup/memory/child2/*",
# # ]
# # cgroup stat fields, as file names, globs are supported.
# # these file names are appended to each path from above.
# # files = ["memory.*usage*", "memory.limit_in_bytes"]

# # Get standard chrony metrics, requires chronyc executable.
# [[inputs.chrony]]
# # If true, chronyc tries to perform a DNS lookup for the time server.
# # dns_lookup = false

# # Pull Metric Statistics from Amazon CloudWatch
# [[inputs.cloudwatch]]
# # Amazon Region
# # region = "us-east-1"
# # Amazon Credentials
# # Credentials are loaded in the following order
# # 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# # 2) Assumed credentials via STS if role_arn is specified
# # 3) explicit credentials from 'access_key' and 'secret_key'
# # 4) shared profile from 'profile'
# # 5) environment variables
# # 6) shared credentials file
# # 7) EC2 Instance Profile
# # access_key = ""
# # secret_key = ""
# # token = ""
# # role_arn = ""
# # web_identity_token_file = ""
# # role_session_name = ""
# # profile = ""
```yaml
# # shared_credential_file = ""
#
# ## Endpoint to make request against, the correct endpoint is automatically
# determined and this option should only be set if you wish to override the
# default.
# ex: endpoint_url = "http://localhost:8000"
# endpoint_url = ""
#
# ## Set http_proxy (telegraf uses the system wide proxy settings if it's is not set)
# http_proxy_url = "http://localhost:8888"
#
# ## The minimum period for Cloudwatch metrics is 1 minute (60s). However not all
# metrics are made available to the 1 minute period. Some are collected at
# 3 minute, 5 minute, or larger intervals. See https://aws.amazon.com/cloudwatch/faqs/#monitoring.
# Note that if a period is configured that is smaller than the minimum for a
# particular metric, that metric will not be returned by the Cloudwatch API
# and will not be collected by Telegraf.
#
# ## Requested CloudWatch aggregation Period (required - must be a multiple of 60s)
# period = "5m"
#
# ## Collection Delay (required - must account for metrics availability via CloudWatch API)
# delay = "5m"
#
# ## Recommended: use metric 'interval' that is a multiple of 'period' to avoid
# gaps or overlap in pulled data
# interval = "5m"
#
# ## Recommended if "delay" and "period" are both within 3 hours of request time. Invalid values will be ignored.
# ## Recently Active feature will only poll for CloudWatch ListMetrics values that occurred within the last 3
# Hours.
# ## If enabled, it will reduce total API usage of the CloudWatch ListMetrics API and require less memory to
# retain.
# ## Do not enable if "period" or "delay" is longer than 3 hours, as it will not return data more than 3 hours old.
# ## See https://docs.aws.amazon.com/AmazonCloudWatch/latest/APIReference/API_ListMetrics.html
# recently_active = "PT3H"
#
# ## Configure the TTL for the internal cache of metrics.
# cache_ttl = "1h"
#
# ## Metric Statistic Namespaces (required)
# namespaces = ["AWS/ELB"]
# A single metric statistic namespace that will be appended to namespaces on startup
# namespace = "AWS/ELB"
#
# ## Maximum requests per second. Note that the global default AWS rate limit is
# 50 reqs/sec, so if you define multiple namespaces, these should add up to a
# maximum of 50.
```
# See http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/cloudwatch_limits.html
# ratelimit = 25
#
# Timeout for http requests made by the cloudwatch client.
# timeout = "5s"
#
# Namespace-wide statistic filters. These allow fewer queries to be made to
# cloudwatch.
# statistic_include = ['average', 'sum', 'minimum', 'maximum', 'sample_count']
# statistic_exclude = []

# Metrics to Pull
# Defaults to all Metrics in Namespace if nothing is provided
# Refreshes Namespace available metrics every 1h
# names = ['Latency', 'RequestCount']

# Statistic filters for Metric. These allow for retrieving specific
# statistics for an individual metric.
# statistic_include = ['average', 'sum', 'minimum', 'maximum', 'sample_count']
# statistic_exclude = []

# Dimension filters for Metric. All dimensions defined for the metric names
# must be specified in order to retrieve the metric statistics.
# 'value' has wildcard / 'glob' matching support such as 'p-*'.
# name = "LoadBalancerName"
# value = "p-example"

# Collects conntrack stats from the configured directories and files.
# The following defaults would work with multiple versions of conntrack.
# Note the nf_ and ip_ filename prefixes are mutually exclusive across
# kernel versions, as are the directory locations.
# Superset of filenames to look for within the conntrack dirs.
# Missing files will be ignored.
# files = ["ip_conntrack_count","ip_conntrack_max",
#        "nf_conntrack_count","nf_conntrack_max"]
#
# Directories to search within for the conntrack files above.
# Missing directories will be ignored.
# dirs = ["/proc/sys/net/ipv4/netfilter","/proc/sys/net/netfilter"]

# Gather health check statuses from services registered in Consul
# [inputs.consul]
# Consul server address
# address = "localhost:8500"
#
# URI scheme for the Consul server, one of "http", "https"
# scheme = "http"
#
# Metric version controls the mapping from Consul metrics into
# Telegraf metrics.
#
# example: metric_version = 1; deprecated in 1.15
# metric_version = 2; recommended version
# metric_version = 1
#
# ACL token used in every request
# token = ""
#
# HTTP Basic Authentication username and password.
# username = ""
# password = ""
#
# Data center to query the health checks from
# datacenter = ""
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# insecure_skip_verify = true
#
# Consul checks' tag splitting
# When tags are formatted like "key:value" with ":" as a delimiter then
# they will be splitted and reported as proper key:value in Telegraf
# tag_delimiter = ":"
# Filter bucket fields to include only here.
# bucket_stats_included = ["quota_percent_used", "ops_per_sec", "disk_fetches", "item_count", "disk_used", "data_used", "mem_used"]
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification (defaults to false)
# insecure_skip_verify = false

## Read CouchDB Stats from one or more servers
[[inputs.couchdb]]
## Works with CouchDB stats endpoints out of the box
## Multiple Hosts from which to read CouchDB stats:
hosts = ["http://localhost:8086/_stats"]
#
## Use HTTP Basic Authentication.
# basic_username = "telegraf"
# basic_password = "p@ssw0rd"

## Fetch metrics from a CSGO SRCDS
[[inputs.csgo]]
## Specify servers using the following format:
## servers = [
##   ["ip1:port1", "rcon_password1"],
##   ["ip2:port2", "rcon_password2"],
## ]
#
## If no servers are specified, no data will be collected
# servers = []

## Input plugin for DC/OS metrics
[[inputs.dcos]]
## The DC/OS cluster URL.
cluster_url = "https://dcos-ee-master-1"
#
## The ID of the service account.
# service_account_id = "telegraf"
## The private key file for the service account.
# service_account_private_key = "/etc/telegraf/telegraf-sa-key.pem"
#
## Path containing login token. If set, will read on every gather.
# token_file = "/home/dcos/dcos/token"
#
## In all filter options if both include and exclude are empty all items
## will be collected. Arrays may contain glob patterns.
##
## Node IDs to collect metrics from. If a node is excluded, no metrics will
## be collected for its containers or apps.
# node_include = []
# node_exclude = []
## Container IDs to collect container metrics from.
# container_include = []
# container_exclude = []
## Container IDs to collect app metrics from.
# app_include = []
# app_exclude = []
#
## Maximum concurrent connections to the cluster.
# max_connections = 10
## Maximum time to receive a response from cluster.
# response_timeout = "20s"
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## If false, skip chain & host verification
# insecure_skip_verify = true
#
## Recommended filtering to reduce series cardinality.
# [inputs.dcos.tagdrop]
#   path = ["/var/lib/mesos/slave/slaves/*"]

## Read metrics from one or many disque servers
[[inputs.disque]]
## An array of URI to gather stats about. Specify an ip or hostname
## with optional port and password.
## ie disque://localhost, disque://10.10.3.33:18832, 10.0.0.1:10000, etc.
## If no servers are specified, then localhost is used as the host.
## servers = ["localhost"]

## Provide a native collection for dmsetup based statistics for dm-cache
[[inputs.dmcache]]
## Whether to report per-device stats or not
## per_device = true
### Query given DNS server and gives statistics
```
[[inputs.dns_query]]
```

#### servers to query
```
# servers = ["8.8.8.8"]
```

#### Network is the network protocol name.
```
# network = "udp"
```

#### Domains or subdomains to query.
```
# domains = ["."]
```

#### Query record type.
```
# Possible values: A, AAAA, CNAME, MX, NS, PTR, TXT, SOA, SPF, SRV.
# record_type = "A"
```

#### Dns server port.
```
# port = 53
```

#### Query timeout in seconds.
```
# timeout = 2
```

### Read metrics about docker containers
```
[[inputs.docker]]
```

#### Docker Endpoint
```
# To use TCP, set endpoint = "tcp://[ip]:[port]"
# To use environment variables (ie, docker-machine), set endpoint = "ENV"
# endpoint = "unix:///var/run/docker.sock"
```

#### Set to true to collect Swarm metrics(desired_replicas, running_replicas)
```
# gather_services = false
```

#### Only collect metrics for these containers, collect all if empty
```
# container_names = []
```

#### Set the source tag for the metrics to the container ID hostname, eg first 12 chars
```
# source_tag = false
```

#### Containers to include and exclude. Globs accepted.
```
# Note that an empty array for both will include all containers
# container_name_include = []
# container_name_exclude = []
```

#### Container states to include and exclude. Globs accepted.
```
# When empty only containers in the "running" state will be captured.
# example: container_state_include = ["created", "restarting", "running", "removing", "paused", "exited", "dead"]
# example: container_state_exclude = ["created", "restarting", "running", "removing", "paused", "exited", "dead"]
```
# container_state_include = []
# container_state_exclude = []

# Timeout for docker list, info, and stats commands
# timeout = "5s"

# Whether to report for each container per-device blkio (8:0, 8:1...),
# network (eth0, eth1, ...) and cpu (cpu0, cpu1, ...) stats or not.
# Usage of this setting is discouraged since it will be deprecated in favor of 'perdevice_include'.
# Default value is 'true' for backwards compatibility, please set it to 'false' so that 'perdevice_include' setting
# is honored.
perdevice = true

# Specifies for which classes a per-device metric should be issued
# Possible values are 'cpu' (cpu0, cpu1, ...), 'blkio' (8:0, 8:1, ...) and 'network' (eth0, eth1, ...)
# Please note that this setting has no effect if 'perdevice' is set to 'true'
perdevice_include = ['cpu']

# Whether to report for each container total blkio and network stats or not.
# Usage of this setting is discouraged since it will be deprecated in favor of 'total_include'.
# Default value is 'false' for backwards compatibility, please set it to 'true' so that 'total_include' setting
# is honored.
total = false

# Specifies for which classes a total metric should be issued. Total is an aggregated of the 'perdevice' values.
# Possible values are 'cpu', 'blkio' and 'network'
# Total 'cpu' is reported directly by Docker daemon, and 'network' and 'blkio' totals are aggregated by this
# plugin.
# Please note that this setting has no effect if 'total' is set to 'false'
total_include = ['cpu', 'blkio', 'network']

# Which environment variables should we use as a tag
#tag_env = ['JAVA_HOME', 'HEAP_SIZE']

# docker labels to include and exclude as tags. Globs accepted.
# Note that an empty array for both will include all labels as tags
docker_label_include = []
docker_label_exclude = []

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
# # Read statistics from one or many dovecot servers
# [[inputs.dovecot]]
# ## specify dovecot servers via an address:port list
# ## e.g.
# ## localhost:24242
# ##
# ## If no servers are specified, then localhost is used as the host.
# servers = ["localhost:24242"]
#
# ## Type is one of "user", "domain", "ip", or "global"
# type = "global"
#
# ## Wildcard matches like ".com". An empty string "" is same as "*
# ## If type = "ip" filters should be <IP/network>
# filters = [""

# # Reads metrics from DPDK applications using v2 telemetry interface.
# [[inputs.dpdk]]
# ## Path to DPDK telemetry socket. This shall point to v2 version of DPDK telemetry interface.
# # socket_path = "/var/run/dpdk/rte/dpdk_telemetry.v2"
#
# ## Duration that defines how long the connected socket client will wait for a response before terminating connection.
# ## This includes both writing to and reading from socket. Since it's local socket access
# ## to a fast packet processing application, the timeout should be sufficient for most users.
# ## Setting the value to 0 disables the timeout (not recommended)
# # socket_access_timeout = "200ms"
#
# ## Enables telemetry data collection for selected device types.
# ## Adding "ethdev" enables collection of telemetry from DPDK NICs (stats, xstats, link_status).
# ## Adding "rawdev" enables collection of telemetry from DPDK Raw Devices (xstats).
# # device_types = ["ethdev"]
#
# ## List of custom, application-specific telemetry commands to query
# ## The list of available commands depend on the application deployed. Applications can register their own commands
# ## via telemetry library API http://doc.dpdk.org/guides/prog_guide/telemetry_lib.html#registering-commands
# ## For e.g. L3 Forwarding with Power Management Sample Application this could be:
# ## additional_commands = ["/l3fwd-power/stats"]
# # additional_commands = []
#
# ## Allows turning off collecting data for individual "ethdev" commands.
# ## Remove "/ethdev/link_status" from list to start getting link status metrics.
# [inputs.dpdk.ethdev]
# exclude_commands = ["/ethdev/link_status"]
#
# ## When running multiple instances of the plugin it's recommended to add a unique tag to each instance to
identify
# ## metrics exposed by an instance of DPDK application. This is useful when multiple DPDK apps run on a
# ## single host.
# ## [inputs.dpdk.tags]
# ## dpdk_instance = "my-fwd-app"

## Read metrics about docker containers from Fargate/ECS v2, v3 meta endpoints.
## [[inputs.ecs]]
## ECS metadata url.
## Metadata v2 API is used if set explicitly. Otherwise,
## v3 metadata endpoint API is used if available.
## # endpoint_url = ""
##
## Containers to include and exclude. Globs accepted.
## Note that an empty array for both will include all containers
## # container_name_include = []
## # container_name_exclude = []
##
## Container states to include and exclude. Globs accepted.
## When empty only containers in the "RUNNING" state will be captured.
## Possible values are "NONE", "PULLED", "CREATED", "RUNNING",
## "RESOURCES_PROVISIONED", "STOPPED".
## # container_status_include = []
## # container_status_exclude = []
##
## ecs labels to include and exclude as tags. Globs accepted.
## Note that an empty array for both will include all labels as tags
## # ecs_label_include = [ "com.amazonaws.ecs.*" ]
## # ecs_label_exclude = []
##
## Timeout for queries.
## # timeout = "5s"

## Read stats from one or more Elasticsearch servers or clusters
## [[inputs.elasticsearch]]
## specify a list of one or more Elasticsearch servers
## you can add username and password to your url to use basic authentication:
## # servers = ["http://user:pass@localhost:9200"]
## servers = ["http://localhost:9200"]
##
## Timeout for HTTP requests to the elastic search server(s)
## # http_timeout = "5s"
##
## When local is true (the default), the node will read only its own stats.
## Set local to false when you want to read the node stats from all nodes
## of the cluster.
# local = true
#
# ## Set cluster_health to true when you want to also obtain cluster health stats
# cluster_health = false
#
# ## Adjust cluster_health_level when you want to also obtain detailed health stats
# # The options are
# # - indices (default)
# # - cluster
# # cluster_health_level = "indices"
##
# ## Set cluster_stats to true when you want to also obtain cluster stats.
# cluster_stats = false
#
# ## Only gather cluster_stats from the master node. To work this require local = true
# cluster_stats_only_from_master = true
#
# ## Indices to collect; can be one or more indices names or _all
# Use of wildcards is allowed. Use a wildcard at the end to retrieve index names that end with a changing value, like a date.
# indices_include = ["_all"]
#
# ## One of "shards", "cluster", "indices"
# indices_level = "shards"
#
# ## node_stats is a list of sub-stats that you want to have gathered. Valid options
# ## are "indices", "os", "process", "jvm", "thread_pool", "fs", "transport", "http",
# ## "breaker". Per default, all stats are gathered.
# node_stats = ["jvm", "http"]
#
# ## HTTP Basic Authentication username and password.
# username = ""
# password = ""
#
# ## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# ## Sets the number of most recent indices to return for indices that are configured with a date-stamped suffix.
# ## Each 'indices_include' entry ending with a wildcard (*) or glob matching pattern will group together all
# ## indices that match it, and sort them
# ## by the date or number after the wildcard. Metrics then are gathered for only the 'num_most_recent_indices'
# ## amount of most recent indices.
# num_most_recent_indices = 0
## Derive metrics from aggregating Elasticsearch query results

### [inputs.elasticsearch_query]

#### The full HTTP endpoint URL for your Elasticsearch instance

#### Multiple urls can be specified as part of the same cluster,

#### this means that only ONE of the urls will be written to each interval.

#### urls = [ "http://node1.es.example.com:9200" ] # required.

#### Elasticsearch client timeout, defaults to "5s".

#### # timeout = "5s"

#### Set to true to ask Elasticsearch a list of all cluster nodes,

#### thus it is not necessary to list all nodes in the urls config option

#### # enable_sniffer = false

#### Set the interval to check if the Elasticsearch nodes are available

#### This option is only used if enable_sniffer is also set (0s to disable it)

#### # health_check_interval = "10s"

#### HTTP basic authentication details (eg. when using x-pack)

#### # username = "telegraf"

#### # password = "mypassword"

#### Optional TLS Config

#### # tls_ca = "/etc/telegraf/ca.pem"

#### # tls_cert = "/etc/telegraf/cert.pem"

#### # tls_key = "/etc/telegraf/key.pem"

#### Use TLS but skip chain & host verification

#### # insecure_skip_verify = false

### [inputs.elasticsearch_query.aggregation]

#### measurement name for the results of the aggregation query

#### measurement_name = "measurement"

#### Elasticsearch indexes to query (accept wildcards).

#### index = "index-*"

#### The date/time field in the Elasticsearch index (mandatory).

#### date_field = "@timestamp"

#### If the field used for the date/time field in Elasticsearch is also using

#### a custom date/time format it may be required to provide the format to

#### correctly parse the field.

#### If using one of the built in elasticsearch formats this is not required.

#### # date_field_custom_format = ""
# ## Normally should be set to same as collection interval
# query_period = "1m"
#
# ## Lucene query to filter results
# # filter_query = "*"
#
# ## Fields to aggregate values (must be numeric fields)
# # metric_fields = ["metric"]
#
# ## Aggregation function to use on the metric fields
# ## Must be set if 'metric_fields' is set
# ## Valid values are: avg, sum, min, max, sum
# # metric_function = "avg"
#
# ## Fields to be used as tags
# ## Must be text, non-analyzed fields. Metric aggregations are performed per tag
# # tags = ["field.keyword", "field2.keyword"]
#
# ## Set to true to not ignore documents when the tag(s) above are missing
# # include_missing_tag = false
#
# ## String value of the tag when the tag does not exist
# ## Used when include_missing_tag is true
# # missing_tag_value = "null"

## Returns ethtool statistics for given interfaces
# [[[inputs.ethtool]]]
# ## List of interfaces to pull metrics for
# # interface_include = ["eth0"]
#
# ## List of interfaces to ignore when pulling metrics.
# # interface_exclude = ["eth1"]
#
# ## Some drivers declare statistics with extra whitespace, different spacing,
# ## and mix cases. This list, when enabled, can be used to clean the keys.
# ## Here are the current possible normalizations:
# ## * snakecase: converts fooBarBaz to foo_bar_baz
# ## * trim: removes leading and trailing whitespace
# ## * lower: changes all capitalized letters to lowercase
# ## * underscore: replaces spaces with underscores
# # normalize_keys = ["snakecase", "trim", "lower", "underscore"]

## Read metrics from one or more commands that can output to stdout
# [[[inputs.exec]]]
# ## Commands array
# commands = [
## Measurement Suffix

```
# name_suffix = "mycollector"
```

## Datat format to consume

```
data_format = "influx"
```

## Read metrics from fail2ban

```
[[inputs.fail2ban]]
manage_sudo = false
```

## Read devices value(s) from a Fibaro controller

```
[[inputs.fibaro]]
url = "http://<controller>:80"
username = "<username>
password = "<password>
```

## Parse a complete file each interval

```
[[inputs.file]]
files = ["/tmp/metrics.out"]
```

## Name a tag containing the name of the file the data was parsed from

```
# Name a tag containing the name of the file the data was parsed from. Leave empty
# to disable. Cautious when file name variation is high, this can increase the cardinality
# significantly. Read more about cardinality here:
```
# ## Character encoding to use when interpreting the file contents. Invalid
# ## characters are replaced using the unicode replacement character. When set
# ## to the empty string the data is not decoded to text.
# ## ex: character_encoding = "utf-8"
# ## character_encoding = "utf-16le"
# ## character_encoding = "utf-16be"
# ## character_encoding = ""
# # character_encoding = ""
#
# ## The dataformat to be read from files
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# ## Count files in a directory
# [[inputs.filecount]]
# ## Directory to gather stats about.
# ## deprecated in 1.9; use the directories option
# # directory = "/var/cache/apt/archives"
#
# ## Directories to gather stats about.
# ## This accept standard unit glob matching rules, but with the addition of
# # ** as a "super asterisk". ie:
# # /var/log/**   -> recursively find all directories in /var/log and count files in each directories
# # /var/log/*/   -> find all directories with a parent dir in /var/log and count files in each directories
# # /var/log   -> count all files in /var/log and all of its subdirectories
# directories = ["/var/cache/apt/archives"]
#
# ## Only count files that match the name pattern. Defaults to ".*".
# name = "*.deb"
#
# ## Count files in subdirectories. Defaults to true.
# recursive = false
#
# ## Only count regular files. Defaults to true.
# regular_only = true
#
# ## Follow all symlinks while walking the directory tree. Defaults to false.
# follow_symlinks = false
#
# ## Only count files that are at least this size. If size is
# ## a negative number, only count files that are smaller than the
# ## absolute value of size. Acceptable units are B, KiB, MiB, KB, ...
# ## Without quotes and units, interpreted as size in bytes.
# size = "0B"
#
# ## Only count files that have not been touched for at least this
# ## duration. If mtime is negative, only count files that have been
# ## touched in this duration. Defaults to "0s".
# mtime = "0s"

## Read stats about given file(s)
[[inputs.filestat]]
# Files to gather stats about.
# These accept standard unix glob matching rules, but with the addition of
# "**" as a "super asterisk". ie:
# "/var/log/**.log" -> recursively find all .log files in /var/log
# "/var/log/*/log" -> find all .log files with a parent dir in /var/log
# "/var/log/apache.log" -> just tail the apache log file
# See https://github.com/gobwas/glob for more examples
#
# files = ["/var/log/**.log"]
#
# If true, read the entire file and calculate an md5 checksum.
# md5 = false

## Read real time temps from fireboard.io servers
[[inputs.fireboard]]
# Specify auth token for your account
# auth_token = "invalidAuthToken"
# You can override the fireboard server URL if necessary
# url = https://fireboard.io/api/v1/devices.json
# You can set a different http_timeout if you need to
# You should set a string using an number and time indicator
# for example "12s" for 12 seconds.
# http_timeout = "4s"

## Read metrics exposed by fluentd in_monitor plugin
[[inputs.fluentd]]
# This plugin reads information exposed by fluentd (using /api/plugins.json endpoint).
#
# ## Endpoint:
# - only one URI is allowed
# - https is not supported
# endpoint = "http://localhost:24220/api/plugins.json"
# Define which plugins have to be excluded (based on "type" field - e.g. monitor_agent)
# exclude = [
#  "monitor_agent",
#  "dummy",
# ]

## Gather repository information from GitHub hosted repositories.
## [inputs.github]
## List of repositories to monitor.
# repositories = [
#  "influxdata/telegraf",
#  "influxdata/influxdb"
# ]

## Github API access token. Unauthenticated requests are limited to 60 per hour.
# access_token = ""

## Github API enterprise url. Github Enterprise accounts must specify their base url.
# enterprise_base_url = ""

## Timeout for HTTP requests.
# http_timeout = "5s"

## List of additional fields to query.
## Note: Getting those fields might involve issuing additional API-calls, so please
## make sure you do not exceed the rate-limit of GitHub.
##
## Available fields are:
## - pull-requests-- number of open and closed pull requests (2 API-calls per repository)
# additional_fields = []

## Read flattened metrics from one or more GrayLog HTTP endpoints
## [inputs.graylog]
## API endpoint, currently supported API:
##
## - multiple (e.g. http://<host>:9000/api/system/metrics/multiple)
## - namespace (e.g. http://<host>:9000/api/system/metrics/namespace/{namespace})
##
## For namespace endpoint, the metrics array will be ignored for that call.
## Endpoint can contain namespace and multiple type calls.
##
## Please check http://[graylog-server-ip]:9000/api/api-browser for full list
## of endpoints
# servers = [
#  "http://[graylog-server-ip]:9000/api/system/metrics/multiple",
# ]
# ## Metrics list
# ## List of metrics can be found on Graylog webservice documentation.
# ## Or by hitting the web service api at:
# ## http://[graylog-host]:9000/api/system/metrics
# metrics = [
#   "jvm.cl.loaded",
#   "jvm.memory.pools.Metaspace.committed"
# ]
#
# ## Username and password
# username = ""
# password = ""
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # Read metrics of haproxy, via socket or csv stats page
# [[inputs.haproxy]]
# ## An array of address to gather stats about. Specify an ip on hostname
# ## with optional port. ie localhost, 10.10.3.33:1936, etc.
# ## Make sure you specify the complete path to the stats endpoint
# ## including the protocol, ie http://10.10.3.33:1936/haproxy?stats
# # servers = ["http://myhaproxy.com:1936/haproxy?stats"
# # ## Credentials for basic HTTP authentication
# # username = "admin"
# # password = "admin"
# # ## You can also use local socket with standard wildcard globbing.
# # ## Server address not starting with 'http' will be treated as a possible
# # ## socket, so both examples below are valid.
# # servers = ["socket:/run/haproxy/admin.sock", "/run/haproxy/*.sock"]
# # ## By default, some of the fields are renamed from what haproxy calls them.
# ## Setting this option to true results in the plugin keeping the original
# ## field names.
# # keep_field_names = false
# # ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Monitor disks' temperatures using hddtemp
[[inputs.hddtemp]]
## By default, telegraf gathers temps data from all disks detected by the
## hddtemp.
## Only collect temps from the selected disks.
## A * as the device name will return the temperature values of all disks.
## address = "127.0.0.1:7634"
## devices = ["sda", "*" ]

## Read formatted metrics from one or more HTTP endpoints
[[inputs.http]]
## One or more URLs from which to read formatted metrics
## urls = [ "http://localhost/metrics" ]
## HTTP method
## method = "GET"
## Optional HTTP headers
## headers = { "X-Special-Header" = "Special-Value" }
## Optional file with Bearer token
## file content is added as an Authorization header
## bearer_token = "/path/to/file"
## Optional HTTP Basic Auth Credentials
## username = "username"
## password = "pa$$word"
## HTTP entity-body to send with POST/PUT requests.
## body = ""
## HTTP Content-Encoding for write request body, can be set to "gzip" to
## compress body or "identity" to apply no encoding.
## content_encoding = "identity"
## HTTP Proxy support
# # http_proxy_url = ""
#
# ## OAuth2 Client Credentials Grant
# # client_id = "clientid"
# # client_secret = "secret"
# # token_url = "https://identityprovider/oauth2/v1/token"
# # scopes = ["urn:opc:idm:__myscopes__"]
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Optional Cookie authentication
# # cookie_auth_url = "https://localhost/authMe"
# # cookie_auth_method = "POST"
# # cookie_auth_username = "username"
# # cookie_auth_password = "password"
# # cookie_auth_body = '{"username": "user", "password": "password", "authenticate": "me"}'
# # cookie_auth_renewal not set or set to "0" will auth once and never renew the cookie
# # cookie_auth_renewal = "5m"
#
# ## Amount of time allowed to complete the HTTP request
# # timeout = "5s"
#
# ## List of success status codes
# # success_status_codes = [200]
#
# ## Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"
#
# ## HTTP/HTTPS request given an address a method and a timeout
# [[inputs.http_response]]
# ## Deprecated in 1.12, use 'urls'
# ## Server address (default http://localhost)
# # address = "http://localhost"
#
# ## List of urls to query.
# # urls = ["http://localhost"]
#
# ## Set http_proxy (telegraf uses the system wide proxy settings if it's is not set)
# # http_proxy = "http://localhost:8888"
#   ## Set response_timeout (default 5 seconds)
#   # response_timeout = "5s"
#
#   ## HTTP Request Method
#   # method = "GET"
#
#   ## Whether to follow redirects from the server (defaults to false)
#   # follow_redirects = false
#
#   ## Optional file with Bearer token
#   ## file content is added as an Authorization header
#   # bearer_token = "/path/to/file"
#
#   ## Optional HTTP Basic Auth Credentials
#   # username = "username"
#   # password = "pa$$word"
#
#   ## Optional HTTP Request Body
#   # body = ""
#   # {’fake’:’data’}
#   # ""
#
#   ## Optional name of the field that will contain the body of the response.
#   ## By default it is set to an empty String indicating that the body’s content won’t be added
#   # response_body_field = ""
#
#   ## Maximum allowed HTTP response body size in bytes.
#   ## 0 means to use the default of 32MiB.
#   ## If the response body size exceeds this limit a "body_read_error" will be raised
#   # response_body_max_size = "32MiB"
#
#   ## Optional substring or regex match in body of the response (case sensitive)
#   # response_string_match = "\"service_status\": \"up\""
#   # response_string_match = "ok"
#   # response_string_match = "\".*_status\".?:.?\"up\"
#
#   ## Expected response status code.
#   ## The status code of the response is compared to this value. If they match, the field
#   ## "response_status_code_match" will be 1, otherwise it will be 0. If the
#   ## expected status code is 0, the check is disabled and the field won’t be added.
#   # response_status_code = 0
#
#   ## Optional TLS Config
#   # tls_ca = "/etc/telegraf/ca.pem"
#   # tls_cert = "/etc/telegraf/cert.pem"
#   # tls_key = "/etc/telegraf/key.pem"
#   ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## HTTP Request Headers (all values must be strings)
# ## [inputs.http_response.headers]
# # Host = "github.com"
#
# ## Optional setting to map response http headers into tags
# ## If the http header is not present on the request, no corresponding tag will be added
# ## If multiple instances of the http header are present, only the first value will be used
# # http_header_tags = { "HTTP_HEADER" = "TAG_NAME" }
#
# ## Interface to use when dialing an address
# # interface = "eth0"

# # Read flattened metrics from one or more JSON HTTP endpoints
# [[inputs.httpjson]]
# ## DEPRECATED: The 'httpjson' plugin is deprecated in version 1.6.0, use 'inputs.http' instead.
# ## NOTE This plugin only reads numerical measurements, strings and booleans
# ## will be ignored.
# # Name for the service being polled. Will be appended to the name of the
# # measurement e.g. httpjson_webserver_stats
# ## Deprecated (1.3.0): Use name_override, name_suffix, name_prefix instead.
# # name = "webserver_stats"
#
# ## URL of each server in the service's cluster
# servers = [
#   "http://localhost:9999/stats/",
#   "http://localhost:9998/stats/",
# ]
# ## Set response_timeout (default 5 seconds)
# # response_timeout = "5s"
#
# ## HTTP method to use: GET or POST (case-sensitive)
# # method = "GET"
#
# ## List of tag names to extract from top-level of JSON server response
# # tag_keys = [
#   "my_tag_1",
#   "my_tag_2"
# ]
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf.cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
#
# # HTTP parameters (all values must be strings). For "GET" requests, data
# # will be included in the query. For "POST" requests, data will be included
# # in the request body as "x-www-form-urlencoded".
# # [inputs.httpjson.parameters]
# #   event_type = "cpu_spike"
# #   threshold = "0.75"
#
# # HTTP Headers (all values must be strings)
# # [inputs.httpjson.headers]
# #   X-Auth-Token = "my-xauth-token"
# #   apiVersion = "v1"

# # Gather Icinga2 status
# [[inputs.icinga2]]
# # Required Icinga2 server address
# # server = "https://localhost:5665"
#
# # Required Icinga2 object type ("services" or "hosts")
# # object_type = "services"
#
# # Credentials for basic HTTP authentication
# # username = "admin"
# # password = "admin"
#
# # Maximum time to receive response.
# # response_timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = true

# # Gets counters from all InfiniBand cards and ports installed
# [[inputs.infiniband]]
# # no configuration

# # Read InfluxDB-formatted JSON metrics from one or more HTTP endpoints
# [[inputs.influxdb]]
# # Works with InfluxDB debug endpoints out of the box,
# # but other services can use this format too.
# See the influxdb plugin's README for more details.
#
# Multiple URLs from which to read InfluxDB-formatted JSON
# Default is "http://localhost:8086/debug/vars".
# urls = [
#   "http://localhost:8086/debug/vars"
# ]
#
# Username and password to send using HTTP Basic Authentication.
# # username = ""
# # password = ""
#
# Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# http request & header timeout
# timeout = "5s"
#
# Intel PowerStat plugin enables monitoring of platform metrics (power, TDP) and Core metrics like temperature, power and utilization.
# [[inputs.intel_powerstat]]
# # All global metrics are always collected by Intel PowerStat plugin.
# # User can choose which per-CPU metrics are monitored by the plugin in cpu_metrics array.
# # Empty array means no per-CPU specific metrics will be collected by the plugin - in this case only platform level
# # telemetry will be exposed by Intel PowerStat plugin.
# # Supported options:
# # "cpu_frequency", "cpu_busy_frequency", "cpu_temperature", "cpu_c1_state_residency",
# "cpu_c6_state_residency", "cpu_busy_cycles"
# # cpu_metrics = []
#
# Collect statistics about itself
# [[inputs.internal]]
# # If true, collect telegraf memory stats.
# # collect_memstats = true
#
# Monitors internet speed using speedtest.net service
# [[inputs.internet_speed]]
# # Sets if runs file download test
# # Default: false
# # enable_file_download = false
This plugin gathers interrupts data from /proc/interrupts and /proc/softirqs.

```
[[inputs.interrupts]]
```

When set to true, cpu metrics are tagged with the cpu. Otherwise cpu is stored as a field.

```
[[inputs.interrupts]]
```

The default is false for backwards compatibility, and will be changed to true in a future version. It is recommended to set to true on new deployments.

```
[[inputs.interrupts]]
```

To filter which IRQs to collect, make use of tagpass / tagdrop, i.e.

```
[[inputs.interrupts.tagdrop]]
```

Read metrics from the bare metal servers via IPMI

```
[[inputs.ipmi_sensor]]
```

optionally specify the path to the ipmitool executable

```
[[inputs.ipmi_sensor]]
```

Setting `use_sudo` to true will make use of sudo to run ipmitool.

```
[[inputs.ipmi_sensor]]
```

Sudo must be configured to allow the telegraf user to run ipmitool without a password.

```
[[inputs.ipmi_sensor]]
```

optionally force session privilege level. Can be CALLBACK, USER, OPERATOR, ADMINISTRATOR

```
[[inputs.ipmi_sensor]]
```

optionally specify one or more servers via a url matching

```
[[inputs.ipmi_sensor]]
```

e.g.

```
root:passwd@lan(127.0.0.1)
```

if no servers are specified, local machine sensor stats will be queried

```
[[inputs.ipmi_sensor]]
```

Recommended: use metric `interval` that is a multiple of `timeout` to avoid gaps or overlap in pulled data

```
[[inputs.ipmi_sensor]]
```

Timeout for the ipmitool command to complete

```
[[inputs.ipmi_sensor]]
```

Schema Version: (Optional, defaults to version 1)

```
metric_version = 2
```
# Optionally provide the hex key for the IMPI connection.
# hex_key = ""
#
# If ipmitool should use a cache
# for me ipmitool runs about 2 to 10 times faster with cache enabled on HP G10 servers (when using ubuntu20.04)
# the cache file may not work well for you if some sensors come up late
# use_cache = false
#
# Path to the ipmitools cache file (defaults to OS temp dir)
# The provided path must exist and must be writable
# cache_path = ""

## Gather packets and bytes counters from Linux ipsets
# [inputs.ipset]
# By default, we only show sets which have already matched at least 1 packet.
# set include_unmatched_sets = true to gather them all.
# include_unmatched_sets = false
# Adjust your sudo settings appropriately if using this option ("sudo ipset save")
# use_sudo = false
# The default timeout of 1s for ipset execution can be overridden here:
# timeout = "1s"

## Gather packets and bytes throughput from iptables
# [inputs.iptables]
# iptables require root access on most systems.
# Setting 'use_sudo' to true will make use of sudo to run iptables.
# Users must configure sudo to allow telegraf user to run iptables with no password.
# iptables can be restricted to only list command "iptables -nvL".
# use_sudo = false
# Setting 'use_lock' to true runs iptables with the "-w" option.
# Adjust your sudo settings appropriately if using this option ("iptables -w5 -nvL")
# use_lock = false
# Define an alternate executable, such as "ip6tables". Default is "iptables".
# binary = "ip6tables"
# defines the table to monitor:
# table = "filter"
# defines the chains to monitor.
# NOTE: iptables rules without a comment will not be monitored.
# Read the plugin documentation for more information.
# chains = [ "INPUT" ]

## Collect virtual and real server stats from Linux IPVS
# [inputs.ipvs]
# no configuration

# Read jobs and cluster metrics from Jenkins instances
# [[inputs.jenkins]]
# ### The Jenkins URL in the format "schema://host:port"
# url = "http://my-jenkins-instance:8080"
# username = "admin"
# password = "admin"
#
# ### Set response_timeout
# response_timeout = "5s"
#
# Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use SSL but skip chain & host verification
# insecure_skip_verify = false
#
# ### Default 1 hour, ignore builds older than max_build_age
# max_build_age = "1h"
#
# Optional Sub Job Depth filter
# Jenkins can have unlimited layer of sub jobs
# This config will limit the layers of pulling, default value 0 means
# unlimited pulling until no more sub jobs
# max_subjob_depth = 0
#
# Optional Sub Job Per Layer
# In workflow-multibranch-plugin, each branch will be created as a sub job.
# This config will limit to call only the lasted branches in each layer,
# empty will use default value 10
# max_subjob_per_layer = 10
#
# Jobs to include or exclude from gathering
# When using both lists, job_exclude has priority.
# Wildcards are supported: [ "jobA/*", "jobB/subjob1/*/" ]
# job_include = [ "*" ]
# job_exclude = [ ]
#
# Nodes to include or exclude from gathering
# When using both lists, node_exclude has priority.
# node_include = [ "*" ]
# node_exclude = [ ]
#
# Worker pool for jenkins plugin only
# Empty this field will use default value 5
# max_connections = 5

## Read JMX metrics through Jolokia
# [[inputs.jolokia]]
# DEPRECATED: The 'jolokia' plugin is deprecated in version 1.5.0, use 'inputs.jolokia2' instead.
# DEPRECATED: the jolokia plugin has been deprecated in favor of the
# jolokia2 plugin
# see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/jolokia2
#
# This is the context root used to compose the jolokia url
#
# NOTE that Jolokia requires a trailing slash at the end of the context root
#
# NOTE that your jolokia security policy must allow for POST requests.
# context = "/jolokia/"
#
# This specifies the mode used
# mode = "proxy"
#
# When in proxy mode this section is used to specify further
# proxy address configurations.
# Remember to change host address to fit your environment.
# [inputs.jolokia.proxy]
# host = "127.0.0.1"
# port = "8080"
#
# Optional http timeouts
#
# response_header_timeout, if non-zero, specifies the amount of time to wait
# for a server's response headers after fully writing the request.
# response_header_timeout = "3s"
#
# client_timeout specifies a time limit for requests made by this client.
# Includes connection time, any redirects, and reading the response body.
# client_timeout = "4s"
#
# Attribute delimiter
#
# When multiple attributes are returned for a single
# [inputs.jolokia.metrics], the field name is a concatenation of the metric
# name, and the attribute name, separated by the given delimiter.
# delimiter = "_"
#
# List of servers exposing jolokia read service
# [[inputs.jolokia.servers]]
# name = "as-server-01"
# host = "127.0.0.1"
# port = "8080"
# username = "myuser"
# password = "mypassword"

# ## List of metrics collected on above servers
# ## Each metric consists in a name, a jmx path and either
# ## a pass or drop slice attribute.
# ## This collect all heap memory usage metrics.
# [[inputs.jolokia.metrics]]
# name = "heap_memory_usage"
# mbean = "java.lang:type=Memory"
# attribute = "HeapMemoryUsage"
#
# ## This collect thread counts metrics.
# [[inputs.jolokia.metrics]]
# name = "thread_count"
# mbean = "java.lang:type=Threading"
# attribute = "TotalStartedThreadCount,ThreadCount,DaemonThreadCount,PepThreadCount"
#
# ## This collect number of class loaded/unloaded counts metrics.
# [[inputs.jolokia.metrics]]
# name = "class_count"
# mbean = "java.lang:type=ClassLoading"
# attribute = "LoadedClassCount,UnloadedClassCount,TotalLoadedClassCount"

# # Read JMX metrics from a Jolokia REST agent endpoint
# [[inputs.jolokia2_agent]]
# # default_tag_prefix = ""
# # default_field_prefix = ""
# # default_field_separator = "."
#
# # Add agents URLs to query
# urls = ["http://localhost:8080/jolokia"]
# # username = ""
# # password = ""
# # response_timeout = "5s"
#
# # ## Optional TLS config
# # tls_ca = "/var/private/ca.pem"
# # tls_cert = "/var/private/client.pem"
# # tls_key = "/var/private/client-key.pem"
# # insecure_skip_verify = false
#
# # ## Add metrics to read
# # [[inputs.jolokia2_agent.metric]]
# # name = "java_runtime"
# # mbean = "java.lang:type=Runtime"
# # paths = ["Uptime"]
# # Read JMX metrics from a Jolokia REST proxy endpoint
# [[inputs.jolokia2_proxy]]
# # default_tag_prefix = ""
# # default_field_prefix = ""
# # default_field_separator = "."
# # Proxy agent
# url = "http://localhost:8080/jolokia"
# # username = ""
# # password = ""
# # response_timeout = "5s"
#
# # Optional TLS config
# # tls_ca = "/var/private/ca.pem"
# # tls_cert = "/var/private/client.pem"
# # tls_key = "/var/private/client-key.pem"
# # insecure_skip_verify = false
#
# # Add proxy targets to query
# # default_target_username = ""
# # default_target_password = ""
# [[inputs.jolokia2_proxy.target]]
# url = "service:jmx:rmi:///jndi/rmi://targethost:9999/jmxrmi"
# # username = ""
# # password = ""
#
# # Add metrics to read
# [[inputs.jolokia2_proxy.metric]]
# name = "java_runtime"
# mbean = "java.lang:type=Runtime"
# paths = ["Uptime"]

# # Read Kapacitor-formatted JSON metrics from one or more HTTP endpoints
# [[inputs.kapacitor]]
# # Multiple URLs from which to read Kapacitor-formatted JSON
# # Default is "http://localhost:9092/kapacitor/v1/debug/vars".
# urls = ["http://localhost:9092/kapacitor/v1/debug/vars"
# ]
#
# # Time limit for http requests
# timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Get kernel statistics from /proc/vmstat
# [[inputs.kernel_vmstat]]
# # no configuration

# Read status information from one or more Kibana servers
# [inputs.kibana]
# # Specify a list of one or more Kibana servers
# servers = ["http://localhost:5601"]
#
# Timeout for HTTP requests
# timeout = "5s"

# HTTP Basic Auth credentials
# # username = "username"
# # password = "pa$$word"
#
# Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Read metrics from the Kubernetes API
# [inputs.kube_inventory]
# # URL for the Kubernetes API
# url = "https://127.0.0.1"
#
# Namespace to use. Set to "" to use all namespaces.
# namespace = "default"
#
# Use bearer token for authorization. (bearer_token' takes priority)
# # If both of these are empty, we'll use the default serviceaccount:
# # at: /run/secrets/kubernetes.io/serviceaccount/token
# # bearer_token = "/path/to/bearer/token"
# OR
# # bearer_token_string = "abc_123"
#
# Set response_timeout (default 5 seconds)
# response_timeout = "5s"
## Optional Resources to exclude from gathering
## Leave them with blank with try to gather everything available.
## Values can be - "daemonsets", deployments", "endpoints", "ingress", "nodes",
## "persistentvolumes", "persistentvolumeclaims", "pods", "services", "statefulsets"
# resource_exclude = [ "deployments", "nodes", "statefulsets" ]
#
## Optional Resources to include when gathering
## Overrides resource_exclude if both set.
# resource_include = [ "deployments", "nodes", "statefulsets" ]
#
## selectors to include and exclude as tags.  Globs accepted.
## Note that an empty array for both will include all selectors as tags
## selector_exclude overrides selector_include if both set.
# selector_include = []
# selector_exclude = ["*"]
#
## Optional TLS Config
# tls_ca = "/path/to/cafile"
# tls_cert = "/path/to/certfile"
# tls_key = "/path/to/keyfile"
# tls_server_name = "kubernetes.example.com"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Read metrics from the kubernetes kubelet api
[[inputs.kubernetes]]
## URL for the kubelet
url = "http://127.0.0.1:10255"
#
## Use bearer token for authorization. ('bearer_token' takes priority)
## If both of these are empty, we'll use the default serviceaccount:
## at: /run/secrets/kubernetes.io/serviceaccount/token
# bearer_token = "/path/to/bearer/token"
## OR
# bearer_token_string = "abc_123"
#
## Pod labels to be added as tags. An empty array for both include and
## exclude will include all labels.
# label_include = []
# label_exclude = ["*"]
#
## Set response_timeout (default 5 seconds)
# response_timeout = "5s"
#
## Optional TLS Config
# tls_ca = /path/to/cafile
# tls_cert = /path/to/certfile
# tls_key = /path/to/keyfile
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Read metrics from a LeoFS Server via SNMP
[inputs.leofs]
## An array of URLs of the form:
## host [":" port]
servers = ["127.0.0.1:4020"]

## Provides Linux sysctl fs metrics
[inputs.linux_sysctl_fs]
## no configuration

## Read metrics exposed by Logstash
[inputs.logstash]
The URL of the exposed Logstash API endpoint.
url = "http://127.0.0.1:9600"
## Use Logstash 5 single pipeline API, set to true when monitoring
## Logstash 5.
single_pipeline = false
## Enable optional collection components. Can contain
## "pipelines", "process", and "jvm".
collect = ["pipelines", "process", "jvm"]
## Timeout for HTTP requests.
timeout = "5s"
## Optional HTTP Basic Auth credentials.
username = "username"
password = "pa$$word"
## Optional TLS Config.
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification.
insecure_skip_verify = false
## Optional HTTP headers.
[inputs.logstash.headers]
# Read metrics from local Lustre service on OST, MDS
# [[inputs.lustre2]]
# ### An array of /proc globs to search for Lustre stats
# ### If not specified, the default will work on Lustre 2.5.x
# ###
# # ost_procfiles = [
# #   "/proc/fs/lustre/obdfilter/*/stats",
# #   "/proc/fs/lustre/osd-ldiskfs/*/stats",
# #   "/proc/fs/lustre/obdfilter/*/job_stats",
# #]
# # mds_procfiles = [
# #   "/proc/fs/lustre/mdt/*/md_stats",
# #   "/proc/fs/lustre/mdt/*/job_stats",
# #]

# Read metrics about LVM physical volumes, volume groups, logical volumes.
# [[inputs.lvm]]
# ### Use sudo to run LVM commands
# use_sudo = false

# Gathers metrics from the /3.0/reports MailChimp API
# [[inputs.mailchimp]]
# ### MailChimp API key
# # get from https://admin.mailchimp.com/account/api/
# # api_key = "" # required
# # Reports for campaigns sent more than days_old ago will not be collected.
# # 0 means collect all.
# # days_old = 0
# # Campaign ID to get, if empty gets all campaigns, this option overrides days_old
# # campaign_id = ""

# Retrieves information on a specific host in a MarkLogic Cluster
# [[inputs.marklogic]]
# ### Base URL of the MarkLogic HTTP Server.
# # url = "http://localhost:8002"
# #
# # List of specific hostnames to retrieve information. At least (1) required.
# # hosts = ["hostname1", "hostname2"]
# #
# # Using HTTP Basic Authentication. Management API requires 'manage-user' role privileges
# # username = "myuser"
# # password = "mypassword"
## Optional TLS Config

### # tls_ca = "/etc/telegraf/ca.pem"
### # tls_cert = "/etc/telegraf/cert.pem"
### # tls_key = "/etc/telegraf/key.pem"
### # Use TLS but skip chain & host verification
### # insecure_skip_verify = false

### # Read metrics from one or many mcrouter servers
### [inputs.mcrouter]
### ### An array of address to gather stats about. Specify an ip or hostname
### ### with port. ie tcp://localhost:11211, tcp://10.0.0.1:11211, etc.
### servers = ["tcp://localhost:11211", "unix:///var/run/mcrouter.sock"]
### ### Timeout for metric collections from all servers. Minimum timeout is "1s".
### # timeout = "5s"

### # Get md array statistics from /proc/mdstat
### [inputs.mdstat]
### ### Sets file path
### ### If not specified, then default is /proc/mdstat
### # file_name = "/proc/mdstat"

### # Read metrics from one or many memcached servers
### [inputs.memcached]
### ### An array of address to gather stats about. Specify an ip on hostname
### ### with optional port. ie localhost, 10.0.0.1:11211, etc.
### servers = ["localhost:11211"]
### # unix_sockets = ["/var/run/memcached.sock"]

### # Telegraf plugin for gathering metrics from N Mesos masters
### [inputs.mesos]
### ### Timeout, in ms.
### # timeout = 100
### # ### A list of Mesos masters.
### # masters = ["http://localhost:5050"]
### # ### Master metrics groups to be collected, by default, all enabled.
### # master_collections = ["resources", "master", "system", "agents"]
# "frameworks",
# "framework_offers",
# "tasks",
# "messages",
# "evqueue",
# "registrar",
# "allocator",
# ]
#
#
# ## A list of Mesos slaves, default is []
# # slaves = []
#
# ## Slave metrics groups to be collected, by default, all enabled.
# # slave_collections = [
# #   "resources",
# #   "agent",
# #   "system",
# #   "executors",
# #   "tasks",
# #   "messages",
# # ]
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Collects scores from a Minecraft server's scoreboard using the RCON protocol
# [[inputs.minecraft]]
# ## Address of the Minecraft server.
# # server = "localhost"
#
# ## Server RCON Port.
# # port = "25575"
#
# ## Server RCON Password.
# # password = ""
#
# ## Uncomment to remove deprecated metric components.
# # tagdrop = ["server"]
#
# ## Retrieve data from MODBUS slave devices
# [[inputs.modbus]]
# ## Connection Configuration
# The plugin supports connections to PLCs via MODBUS/TCP, RTU over TCP, ASCII over TCP or
# via serial line communication in binary (RTU) or readable (ASCII) encoding
#
# Device name
# name = "Device"
#
# Slave ID - addresses a MODBUS device on the bus
# Range: 0 - 255 [0 = broadcast; 248 - 255 = reserved]
# slave_id = 1
#
# Timeout for each request
# timeout = "1s"
#
# Maximum number of retries and the time to wait between retries
# when a slave-device is busy.
# busy_retries = 0
# busy_retries_wait = "100ms"
#
# TCP - connect via Modbus/TCP
# controller = "tcp://localhost:502"
#
# Serial (RS485; RS232)
# controller = "file:///dev/ttyUSB0"
# baud_rate = 9600
# data_bits = 8
# parity = "N"
# stop_bits = 1
# transmission_mode = "RTU"
#
# Trace the connection to the modbus device as debug messages
# Note: You have to enable telegat's debug mode to see those messages!
# debug_connection = false
#
# For Modbus over TCP you can choose between "TCP", "RTUoverTCP" and "ASCIIoverTCP"
# default behaviour is "TCP" if the controller is TCP
# For Serial you can choose between "RTU" and "ASCII"
# transmission_mode = "RTU"
#
# Measurements
#
# Digital Variables, Discrete Inputs and Coils
# measurement - the (optional) measurement name, defaults to "modbus"
# name - the variable name
# address - variable address
#
# discrete_inputs = [
```
#     { name = "start",          address = [0] },
#     { name = "stop",           address = [1] },
#     { name = "reset",          address = [2] },
#     { name = "emergency_stop", address = [3] },
# ]
# coils = [
#     { name = "motor1_run",     address = [0] },
#     { name = "motor1_jog",     address = [1] },
#     { name = "motor1_stop",    address = [2] },
# ]
#
# # Analog Variables, Input Registers and Holding Registers
# # measurement - the (optional) measurement name, defaults to "modbus"
# # name        - the variable name
# # byte_order  - the ordering of bytes
# #             |---AB, ABCD - Big Endian
# #             |---BA, DCBA - Little Endian
# #             |---BADC       - Mid-Big Endian
# #             |---CDAB       - Mid-Little Endian
# # data_type  - INT16, UINT16, INT32, UINT32, INT64, UINT64,
# #             FLOAT32-IEEE, FLOAT64-IEEE (the IEEE 754 binary representation)
# #             FLOAT32, FIXED, UFIXED (fixed-point representation on input)
# # scale      - the final numeric variable representation
# # address    - variable address
#
# holding_registers = [
#     { name = "power_factor", byte_order = "AB",   data_type = "FIXED", scale=0.01,  address = [8] },
#     { name = "voltage",      byte_order = "AB",   data_type = "FIXED", scale=0.1,   address = [0] },
#     { name = "energy",       byte_order = "ABCD", data_type = "FIXED", scale=0.001, address = [5,6] },
#     { name = "current",      byte_order = "ABCD", data_type = "FIXED", scale=0.001, address = [1,2] },
#     { name = "frequency",    byte_order = "AB",   data_type = "UFIXED", scale=0.1,  address = [7] },
#     { name = "power",        byte_order = "ABCD", data_type = "UFIXED", scale=0.1,  address = [3,4] },
# ]
# input_registers = [
#     { name = "tank_level",   byte_order = "AB",   data_type = "INT16", scale=1.0,     address = [0] },
#     { name = "tank_ph",      byte_order = "AB",   data_type = "INT16", scale=1.0,     address = [1] },
#     { name = "pump1_speed",  byte_order = "ABCD", data_type = "INT32",   scale=1.0,     address = [3,4] },
# ]
#
# # Enable workarounds required by some devices to work correctly
# [inputs.modbus.workarounds]
# # Pause between read requests sent to the device. This might be necessary for (slow) serial devices.
# # pause_between_requests = "0ms"
# # Close the connection after every gather cycle. Usually the plugin closes the connection after a certain
# # idle-timeout, however, if you query a device with limited simultaneous connectivity (e.g. serial devices)
# # from multiple instances you might want to only stay connected during gather and disconnect afterwards.
# # close_connection_after_gather = false
```
## Read metrics from one or many MongoDB servers

### [inputs.mongodb]

- **An array of URLs of the form:**
  - "mongodb://" [user ":" pass "@"] host [ ":" port]
  - For example:
    - `mongodb://user:auth_key@10.10.3.30:27017`
    - `mongodb://10.10.3.33:18832`
  - `servers = ["mongodb://127.0.0.1:27017?connect=direct"]`

- **When true, collect cluster status**
  - Note that the query that counts jumbo chunks triggers a COLLSCAN, which may have an impact on performance.
  - `# gather_cluster_status = true`

- **When true, collect per database stats**
  - `# gather_perdb_stats = false`

- **When true, collect per collection stats**
  - `# gather_col_stats = false`

- **When true, collect usage statistics for each collection**
  - `(insert, update, queries, remove, getmore, commands etc...)`
  - `# gather_top_stat = false`

- **List of db where collections stats are collected**
  - `# col_stats_dbs = ["local"]`

- **Optional TLS Config**
  - `# tls_ca = "/etc/telegraf/ca.pem"
  - `# tls_cert = "/etc/telegraf/cert.pem"
  - `# tls_key = "/etc/telegraf/key.pem"
  - `# Use TLS but skip chain & host verification`
  - `# insecure_skip_verify = false`

## Read metrics and status information about processes managed by Monit

### [inputs.monit]

- **Monit HTTPD address**
  - `# address = "http://127.0.0.1:2812"

- **Username and Password for Monit**
  - `# username = ""
  - `# password = ""

- **Amount of time allowed to complete the HTTP request**
  - `# timeout = "5s"`
## Optional TLS Config
###tls_ca = "/etc/telegraf/ca.pem"
###tls_cert = "/etc/telegraf/cert.pem"
###tls_key = "/etc/telegraf/key.pem"
### Use TLS but skip chain & host verification
###insecure_skip_verify = false

### Aggregates the contents of multiple files into a single point
[[inputs.multifile]]
### Base directory where telegraf will look for files.
### Omit this option to use absolute paths.
###base_dir = "/sys/bus/i2c/devices/1-0076/iio:device0"

### If true, Telegraf discard all data when a single file can't be read.
### Else, Telegraf omits the field generated from this file.
###fail_early = true

### Files to parse each interval.
[[inputs.multifile.file]]
### file = "in_pressure_input"
### dest = "pressure"
### conversion = "float"
[[inputs.multifile.file]]
### file = "in_temp_input"
### dest = "temperature"
### conversion = "float(3)"
[[inputs.multifile.file]]
### file = "in_humidityrelative_input"
### dest = "humidityrelative"
### conversion = "float(3)"

### Read metrics from one or many mysql servers
[[inputs.mysql]]
### specify servers via a url matching:
### [username[:password]@[protocol[(address)]/[?tls=[true|false|skip-verify|custom]]]
### see https://github.com/go-sql-driver/mysql#dsn-data-source-name
### e.g.
### servers = ["user:passwd@tcp(127.0.0.1:3306)/?tls=false"]
### servers = ["user@tcp(127.0.0.1:3306)/?tls=false"]
### servers = ["tcp(127.0.0.1:3306)/"]
### Selects the metric output format.
###
# ## This option exists to maintain backwards compatibility, if you have
# ## existing metrics do not set or change this value until you are ready to
# ## migrate to the new format.
# ##
# ## If you do not have existing metrics from this plugin set to the latest
# ## version.
# ##
# ## Telegraf >=1.6: metric_version = 2
# ## <1.6: metric_version = 1 (or unset)
# metric_version = 2
#
# ## if the list is empty, then metrics are gathered from all database tables
# # table_schema_databases = []
#
# ## gather metrics from INFORMATION_SCHEMA.TABLES for databases provided above list
# # gather_table_schema = false
#
# ## gather thread state counts from INFORMATION_SCHEMA.PROCESSLIST
# # gather_process_list = false
#
# ## gather user statistics from INFORMATION_SCHEMA.USER_STATISTICS
# # gather_user_statistics = false
#
# ## gather auto_increment columns and max values from information schema
# # gather_info_schema_auto_inc = false
#
# ## gather metrics from INFORMATION_SCHEMA.INNODB_METRICS
# # gather_innodb_metrics = false
#
# ## gather metrics from SHOW SLAVE STATUS command output
# # gather_slave_status = false
#
# ## gather metrics from all channels from SHOW SLAVE STATUS command output
# # gather_all_slave_channels = false
#
# ## use MariaDB dialect for all channels SHOW SLAVE STATUS
# # mariadb_dialect = false
#
# ## gather metrics from SHOW BINARY LOGS command output
# # gather_binary_logs = false
#
# ## gather metrics from PERFORMANCE_SCHEMA.GLOBAL_VARIABLES
# # gather_global_variables = true
#
# ## gather metrics from PERFORMANCE_SCHEMA.TABLE_IO_WAITS_SUMMARY_BY_TABLE
# # gather_table_io_waits = false
#
# ## gather metrics from PERFORMANCE_SCHEMA.TABLE_LOCK_WAITS
# # gather_table_lock_waits = false
# #
# # gather metrics from PERFORMANCE_SCHEMA.TABLE_IO_WAITS_SUMMARY_BY_INDEX_USAGE
# # gather_index_io_waits = false
# #
# # gather metrics from PERFORMANCE_SCHEMA.EVENT_WAITS
# # gather_event_waits = false
# #
# # gather metrics from PERFORMANCE_SCHEMA.FILE_SUMMARY_BY_EVENT_NAME
# # gather_file_events_stats = false
# #
# # gather metrics from PERFORMANCE_SCHEMA.EVENTS_STATEMENTS_SUMMARY_BY_DIGEST
# # gather_perf_events_statements = false
# #
# ## the limits for metrics form perf_events_statements
# # perf_events_statements_digest_text_limit = 120
# # perf_events_statements_limit = 250
# # perf_events_statements_time_limit = 86400
# #
# # gather metrics from 
# PERFORMANCE_SCHEMA.EVENTS_STATEMENTS_SUMMARY_BY_ACCOUNT_BY_EVENT_NAME
# # gather_perf_sum_per_acc_per_event = false
# #
# ## list of events to be gathered for gather_perf_sum_per_acc_per_event
# # in case of empty list all events will be gathered
# # perf_summary_events = []
# #
# # Some queries we may want to run less often (such as SHOW GLOBAL VARIABLES)
# # example: interval_slow = "30m"
# # interval_slow = ""
# #
# # Optional TLS Config (will be used if tls=custom parameter specified in server uri)
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false
# #
# # Provides metrics about the state of a NATS server
# [inputs.nats]
# # The address of the monitoring endpoint of the NATS server
# server = "http://localhost:8222"
# #
# # Maximum time to receive response
# response_timeout = "5s"
## Neptune Apex data collector

```
[[inputs.neptune_apex]]
```

### The Neptune Apex plugin reads the publicly available status.xml data from a local Apex.
### Measurements will be logged under "apex".

### The base URL of the local Apex(es). If you specify more than one server, they will be differentiated by the "source" tag.
```bash
# servers = [
  "http://apex.local",
] #
```

### The response_timeout specifies how long to wait for a reply from the Apex.
```bash
# response_timeout = "5s"
```

## Read metrics about network interface usage

```
[[inputs.net]]
```

### By default, telegraf gathers stats from any up interface (excluding loopback)
### Setting interfaces will tell it to gather these explicit interfaces, regardless of status.
```bash
# interfaces = ["eth0"]
```

### On linux systems telegraf also collects protocol stats.
### Setting ignore_protocol_stats to true will skip reporting of protocol metrics.

```bash
# ignore_protocol_stats = false
```

## Collect response time of a TCP or UDP connection

```
[[inputs.net_response]]
```

### Protocol, must be "tcp" or "udp"
### NOTE: because the "udp" protocol does not respond to requests, it requires a send/expect string pair (see below).
```bash
# protocol = "tcp"
```

### Server address (default localhost)
```bash
# address = "localhost:80"
```

### Set timeout
```bash
# timeout = "1s"
```

### Set read timeout (only used if expecting a response)
```bash
# read_timeout = "1s"
```

### The following options are required for UDP checks. For TCP, they are optional. The plugin will send the given string to the server and then expect to receive the given 'expect' string back.
# # string sent to the server
# # send = "ssh"
# # expected string in answer
# # expect = "ssh"
#
# # Uncomment to remove deprecated fields
# # fielddrop = ["result_type", "string_found"]

# # Read TCP metrics such as established, time wait and sockets counts.
# #[[inputs.netstat]]
# # no configuration

# # Read per-mount NFS client metrics from /proc/self/mountstats
# #[[inputs.nfsclient]]
# # Read more low-level metrics (optional, defaults to false)
# # fullstat = false
#
# # List of mounts to explicitly include or exclude (optional)
# # The pattern (Go regexp) is matched against the mount point (not the
# # device being mounted). If include_mounts is set, all mounts are ignored
# # unless present in the list. If a mount is listed in both include_mounts
# # and exclude_mounts, it is excluded. Go regexp patterns can be used.
# # include_mounts = []
# # exclude_mounts = []
#
# # List of operations to include or exclude from collecting. This applies
# # only when fullstat=true. Symantics are similar to {include,exclude}_mounts:
# # the default is to collect everything; when include_operations is set, only
# # those OPs are collected; when exclude_operations is set, all are collected
# # except those listed. If include and exclude are set, the OP is excluded.
# # See /proc/self/mountstats for a list of valid operations; note that
# # NFSv3 and NFSv4 have different lists. While it is not possible to
# # have different include/exclude lists for NFSv3/4, unused elements
# # in the list should be okay. It is possible to have different lists
# # for different mountpoints: use multiple [[input.nfsclient]] stanzas,
# # with their own lists. See "include_mounts" above, and be careful of
# # duplicate metrics.
# # include_operations = []
# # exclude_operations = []

# # Read Nginx's basic status information (ngx_http_stub_status_module)
# #[[inputs.nginx]]
# # An array of Nginx stub_status URI to gather stats.
# # urls = ["http://localhost/server_status"]
# 

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# HTTP response timeout (default: 5s)
# response_timeout = "5s"

## Read Nginx Plus' full status information (ngx_http_status_module)
# [inputs.nginx_plus]
# An array of ngx_http_status_module or status URI to gather stats.
# urls = ["http://localhost/status"]
#
# HTTP response timeout (default: 5s)
# response_timeout = "5s"

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Read Nginx Plus API documentation
# [inputs.nginx_plus_api]
# An array of API URI to gather stats.
# urls = ["http://localhost/api"]
#
# Nginx API version, default: 3
# api_version = 3
#
# HTTP response timeout (default: 5s)
# response_timeout = "5s"

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Read Nginx virtual host traffic status module information (nginx-module-sts)
# [inputs.nginx_sts]
An array of ngx_http_status_module or status URI to gather stats.

```
urls = ['http://localhost/status']
```

HTTP response timeout (default: 5s)

```
response_timeout = "5s"
```

Optional TLS Config

```
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
```

Use TLS but skip chain & host verification

```
insecure_skip_verify = false
```

Read nginx_upstream_check module status information

```
[[inputs.nginx_upstream_check]]
```

An URL where Nginx Upstream check module is enabled

```
url = "http://127.0.0.1/status?format=json"
```

HTTP method

```
method = "GET"
```

Optional HTTP headers

```
headers = {"X-Special-Header" = "Special-Value"}
```

Override HTTP "Host" header

```
host_header = "check.example.com"
```

Timeout for HTTP requests

```
timeout = "5s"
```

Optional HTTP Basic Auth credentials

```
username = "username"
password = "pa$$word"
```

Optional TLS Config

```
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
```

Use TLS but skip chain & host verification

```
insecure_skip_verify = false
```

Read Nginx virtual host traffic status module information

```
[[inputs.nginx_vts]]
```

An array of ngx_http_status_module or status URI to gather stats.
# urls = ["http://localhost/status"]
#
# ## HTTP response timeout (default: 5s)
# response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
## A plugin to collect stats from the NSD authoritative DNS name server
# [[inputs.nsd]]
## Address of server to connect to, optionally ':port'. Defaults to the
## address in the nsd config file.
## server = "127.0.0.1:8953"
#
## If running as a restricted user you can prepend sudo for additional access:
## use_sudo = false
#
## The default location of the nsd-control binary can be overridden with:
## binary = "/usr/sbin/nsd-control"
#
## The default location of the nsd config file can be overridden with:
## config_file = "/etc/nsd/nsd.conf"
#
## The default timeout of 1s can be overridden with:
## timeout = "1s"
#
## Read NSQ topic and channel statistics.
# [[inputs.nsq]]
## An array of NSQD HTTP API endpoints
## endpoints = ["http://localhost:4151"]
#
## Optional TLS Config
## # tls_ca = "/etc/telegraf/ca.pem"
## # tls_cert = "/etc/telegraf/cert.pem"
## # tls_key = "/etc/telegraf/key.pem"
## ## Use TLS but skip chain & host verification
## # insecure_skip_verify = false
#
## Collect kernel snmp counters and network interface statistics
# [[inputs.nstat]]
## file paths for proc files. If empty default paths will be used:
# proc/net/netstat, /proc/net/snmp, /proc/net/snmp6
# These can also be overridden with env variables, see README.
# proc_net_netstat = "/proc/net/netstat"
# proc_net_snmp = "/proc/net/snmp"
# proc_net_snmp6 = "/proc/net/snmp6"
# dump metrics with 0 values too
# dump_zeros = true

# Get standard NTP query metrics, requires ntpq executable.
# [[inputs.ntpq]]
# If false, set the -n ntpq flag. Can reduce metric gather time.
# dns_lookup = true

# Pulls statistics from nvidia GPUs attached to the host
# [[inputs.nvidia_smi]]
# Optional: path to nvidia-smi binary, defaults "/usr/bin/nvidia-smi"
# We will first try to locate the nvidia-smi binary with the explicitly specified value (or default value),
# if it is not found, we will try to locate it on PATH(exec.LookPath), if it is still not found, an error will be returned
# bin_path = "/usr/bin/nvidia-smi"
#
# Optional: timeout for GPU polling
# timeout = "5s"

# Retrieve data from OPCUA devices
# [[inputs.opcua]]
# Metric name
# name = "opcua"
# 
# OPC UA Endpoint URL
# endpoint = "opc.tcp://localhost:4840"
# 
# Maximum time allowed to establish a connect to the endpoint.
# connect_timeout = "10s"
# 
# Maximum time allowed for a request over the established connection.
# request_timeout = "5s"
# 
# Security policy, one of "None", "Basic128Rsa15", "Basic256",
# "Basic256Sha256", or "auto"
# security_policy = "auto"
# 
# Security mode, one of "None", "Sign", "SignAndEncrypt", or "auto"
# security_mode = "auto"
## Path to cert.pem. Required when security mode or policy isn't "None".
## If cert path is not supplied, self-signed cert and key will be generated.
# certificate = "/etc/telegraf/cert.pem"
##
## Path to private key.pem. Required when security mode or policy isn't "None".
## If key path is not supplied, self-signed cert and key will be generated.
# private_key = "/etc/telegraf/key.pem"
##
## Authentication Method, one of "Certificate", "UserName", or "Anonymous". To
## authenticate using a specific ID, select 'Certificate' or 'UserName'
# auth_method = "Anonymous"
##
## Username. Required for auth_method = "UserName"
# username = ""
##
## Password. Required for auth_method = "UserName"
# password = ""
##
## Option to select the metric timestamp to use. Valid options are:
## "gather" -- uses the time of receiving the data in telegraf
## "server" -- uses the timestamp provided by the server
## "source" -- uses the timestamp provided by the source
# timestamp = "gather"
##
## Node ID configuration
## name              - field name to use in the output
## namespace         - OPC UA namespace of the node (integer value 0 thru 3)
## identifier_type   - OPC UA ID type (s=string, i=numeric, g=guid, b=opaque)
## identifier        - OPC UA ID (tag as shown in opcua browser)
## Example:
## {name="ProductUri", namespace="0", identifier_type="i", identifier="2262"}
##
## {name="", namespace="", identifier_type="", identifier=""},
##
## Node Group
## Sets defaults for OPC UA namespace and ID type so they aren't required in
## every node. A group can also have a metric name that overrides the main
## plugin metric name.
##
## Multiple node groups are allowed
## @[[inputs.opcua.group]]
## Group Metric name. Overrides the top level name. If unset, the
## top level name is used.
## name =
##
## Group default namespace. If a node in the group doesn't set its
# ## namespace, this is used.
# # namespace =
# #
# ## Group default identifier type. If a node in the group doesn't set its
# ## namespace, this is used.
# # identifier_type =
# #
# ## Node ID Configuration. Array of nodes with the same settings as above.
# # nodes = [
# #  {name="", namespace="", identifier_type="", identifier=""},
# #  {name="", namespace="", identifier_type="", identifier=""},
# # #]

## OpenLDAP cn=Monitor plugin
[[inputs.openldap]]
# host = "localhost"
# port = 389
#
# # Idaps, starttls, or no encryption. default is an empty string, disabling all encryption.
# # note that port will likely need to be changed to 636 for Idaps
# # valid options: "" | "starttls" | "ldaps"
# tls = ""
#
# # skip peer certificate verification. Default is false.
# insecure_skip_verify = false
#
# # Path to PEM-encoded Root certificate to use to verify server certificate
# tls_ca = "/etc/ssl/certs.pem"
#
# # dn/password to bind with. If bind_dn is empty, an anonymous bind is performed.
# bind_dn = ""
# bind_password = ""
#
# # Reverse metric names so they sort more naturally. Recommended.
# # This defaults to false if unset, but is set to true when generating a new config
# reverse_metric_names = true

## Get standard NTP query metrics from OpenNTPD.
[[inputs.openntpd]]
# # Run ntpctl binary with sudo.
# use_sudo = false
#
# # Location of the ntpctl binary.
# binary = "/usr/sbin/ntpctl"
# # timeout = "5ms"

# # A plugin to collect stats from Opensmtpd - a validating, recursive, and caching DNS resolver
# [[inputs.opensmtpd]]
# ## If running as a restricted user you can prepend sudo for additional access:
# # use_sudo = false
# # ## The default location of the smtpctl binary can be overridden with:
# # binary = "/usr/sbin/smtpctl"
# # ## The default timeout of 1000ms can be overridden with (in milliseconds):
# # timeout = 1000

# # Collects performance metrics from OpenStack services
# [[inputs.openstack]]
# ## The recommended interval to poll is '30m'
# # ## The identity endpoint to authenticate against and get the service catalog from.
# # authentication_endpoint = "https://my.openstack.cloud:5000"
# # ## The domain to authenticate against when using a V3 identity endpoint.
# # domain = "default"
# # ## The project to authenticate as.
# # project = "admin"
# # ## User authentication credentials. Must have admin rights.
# # username = "admin"
# # password = "password"
# # ## Available services are:
# # ## "agents", "aggregates", "flavors", "hypervisors", "networks", "nova_services",
# # ## "ports", "projects", "servers", "services", "stacks", "storage_pools", "subnets", "volumes"
# # ## Collect Server Diagnostics
# # server_diagnostics = false
# # ## output secrets (such as adminPass(for server) and UserID(for volume)).
# # output_secrets = false
# # ## Amount of time allowed to complete the HTTP(s) request.
# # timeout = "5s"
# # ## HTTP Proxy support
# # http_proxy_url = ""
# Optional TLS Config
# tls_ca = /path/to/cafile
# tls_cert = /path/to/certfile
# tls_key = /path/to/keyfile
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# Options for tags received from Openstack
# tag_prefix = "openstack_tag_
# tag_value = "true"
#
# Optional chain & host verification
# insecure_skip_verify = false
#
# Human-readable timestamp format for timestamp data received from Openstack.
# If false format is unix nanoseconds.
# human_readable_timestamps = false
#
# Measure Openstack call duration
# measure_openstack_requests = false
#
## Read current weather and forecasts data from openweathermap.org
[[inputs.openweathermap]]
## OpenWeatherMap API key.
# app_id = "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"
#
## City ID's to collect weather data from.
# city_id = ["5391959"]
#
## Language of the description field. Can be one of "ar", "bg",
## "ca", "cz", "de", "el", "en", "fa", "fi", "fr", "gl", "hr", "hu",
## "it", "ja", "kr", "la", "lt", "mk", "nl", "pl", "pt", "ro", "ru",
## "se", "sk", "sl", "es", "tr", "ua", "vi", "zh_cn", "zh_tw"
# lang = "en"
#
## APIs to fetch; can contain "weather" or "forecast".
# fetch = ["weather", "forecast"]
#
## OpenWeatherMap base URL
# base_url = "https://api.openweathermap.org/"
#
## Timeout for HTTP response.
# response_timeout = "5s"
#
## Preferred unit system for temperature and wind speed. Can be one of
## "metric", "imperial", or "standard".
# units = "metric"
#
## Query interval; OpenWeatherMap updates their weather data every 10
# # minutes.
# interval = "10m"

## Read metrics of passenger using passenger-status
## [[inputs.passenger]]
# ## Path of passenger-status.
# 
# ## Plugin gather metric via parsing XML output of passenger-status
# ## More information about the tool:
# ## If no path is specified, then the plugin simply execute passenger-status
# ## hopefully it can be found in your PATH
# command = "passenger-status -v --show=xml"

## Gather counters from PF
## [[inputs.pf]]
# ## PF require root access on most systems.
# ## Setting 'use_sudo' to true will make use of sudo to run pfctl.
# ## Users must configure sudo to allow telegraf user to run pfctl with no password.
# ## pfctl can be restricted to only list command "pfctl -s info".
# use_sudo = false

## Read metrics of phpfpm, via HTTP status page or socket
## [[inputs.phpfpm]]
# ## An array of addresses to gather stats about. Specify an ip or hostname
# ## with optional port and path
# 
# ## Plugin can be configured in three modes (either can be used):
# ## - http: the URL must start with http:// or https://, ie:
# ##   "http://localhost/status"
# ##   "http://192.168.130.1/status?full"
# 
# ## - unixsocket: path to fpm socket, ie:
# ##   "/var/run/php5-fpm.sock"
# ## or using a custom fpm status path:
# ##   "/var/run/php5-fpm.sock:fpm-custom-status-path"
# 
# ## - fcgi: the URL must start with fcgi:// or cgi://, and port must be present, ie:
# ##   "fcgi://10.0.0.12:9000/status"
# ##   "cgi://10.0.10.12:9001/status"
# 
# ## Example of multiple gathering from local socket and remote host
# urls = ["http://192.168.1.20/status", "/tmp/fpm.sock"]
# urls = ["http://localhost/status"]
## Duration allowed to complete HTTP requests.
# timeout = "5s"

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Ping given url(s) and return statistics
[[inputs.ping]]
## Hosts to send ping packets to.
urls = ["example.org"]

## Method used for sending pings, can be either "exec" or "native". When set
## to "exec" the systems ping command will be executed. When set to "native"
## the plugin will send pings directly.
##
## While the default is "exec" for backwards compatibility, new deployments
## are encouraged to use the "native" method for improved compatibility and
## performance.
# method = "exec"

## Number of ping packets to send per interval. Corresponds to the "-c"
## option of the ping command.
# count = 1

## Time to wait between sending ping packets in seconds. Operates like the
## "-i" option of the ping command.
# ping_interval = 1.0

## If set, the time to wait for a ping response in seconds. Operates like
## the "-W" option of the ping command.
# timeout = 1.0

## If set, the total ping deadline, in seconds. Operates like the -w option
## of the ping command.
# deadline = 10

## Interface or source address to send ping from. Operates like the -I or -S
## option of the ping command.
# interface = ""

## Percentiles to calculate. This only works with the native method.
# percentiles = [50, 95, 99]
#  
#   ## Specify the ping executable binary.
#   # binary = "ping"
#  
#   ## Arguments for ping command. When arguments is not empty, the command from
#   ## the binary option will be used and other options (ping_interval, timeout,
#   ## etc) will be ignored.
#   # arguments = ["-c", "3"]
#  
#   ## Use only IPv6 addresses when resolving a hostname.
#   # ipv6 = false
#  
#   ## Number of data bytes to be sent. Corresponds to the ".s"
#   ## option of the ping command. This only works with the native method.
#   # size = 56
#  
# # Measure postfix queue statistics
# [[inputs.postfix]]
#   ## Postfix queue directory. If not provided, telegraf will try to use
#   ## 'postconf -h queue_directory' to determine it.
#   # queue_directory = "/var/spool/postfix"
#  
# # Read metrics from one or many PowerDNS servers
# [[inputs.powerdns]]
#   ## An array of sockets to gather stats about.
#   ## Specify a path to unix socket.
#   # unix_sockets = ["/var/run/pdns.controlsocket"]
#  
# # Read metrics from one or many PowerDNS Recursor servers
# [[inputs.powerdns_recursor]]
#   ## Path to the Recursor control socket.
#   # unix_sockets = ["/var/run/pdns_recursor.controlsocket"]
#  
#   ## Directory to create receive socket. This default is likely not writable,
#   ## please reference the full plugin documentation for a recommended setup.
#   # socket_dir = "/var/run/
#   ## Socket permissions for the receive socket.
#   # socket_mode = "0666"
#  
# # Monitor process cpu and memory usage
# [[inputs.procstat]]
#   ## PID file to monitor process
#   # pid_file = "/var/run/nginx.pid"
#   ## executable name (ie, pgrep <exe>)


`# # exe = "nginx"
# ## pattern as argument for pgrep (ie, pgrep -f <pattern>)
# # pattern = "nginx"
# ## user as argument for pgrep (ie, pgrep -u <user>)
# # user = "nginx"
# ## Systemd unit name, supports globs when include_systemd_children is set to true
# # systemd_unit = "nginx.service"
# # include_systemd_children = false
# ## CGroup name or path, supports globs
# # cgroup = "systemd/system.slice/nginx.service"
# #
# ## Windows service name
# # win_service = ""
# #
# ## override for process_name
# ## This is optional; default is sourced from /proc/<pid>/status
# # process_name = "bar"
# #
# ## Field name prefix
# # prefix = ""
# #
# ## When true add the full cmdline as a tag.
# # cmdline_tag = false
# #
# ## Mode to use when calculating CPU usage. Can be one of 'solaris' or 'irix'.
# # mode = "irix"
# #
# ## Add the PID as a tag instead of as a field. When collecting multiple
# ## processes with otherwise matching tags this setting should be enabled to
# ## ensure each process has a unique identity.
# ##
# ## Enabling this option may result in a large number of series, especially
# ## when processes have a short lifetime.
# # pid_tag = false
# #
# ## Method to use when finding process IDs. Can be one of 'pgrep', or
# ## 'native'. The pgrep finder calls the pgrep executable in the PATH while
# ## the native finder performs the search directly in a manor dependent on the
# ## platform. Default is 'pgrep'
# # pid_finder = "pgrep"


## Provides metrics from Proxmox nodes (Proxmox Virtual Environment > 6.2).
# [[inputs.proxmox]]
# ## API connection configuration. The API token was introduced in Proxmox v6.2. Required permissions for user
# and token: PVEAuditor role on /.
# # base_url = "https://localhost:8006/api2/json"
# # api_token = "USER@REALM!TOKENID=UUID"
## Node name, defaults to OS hostname
# node_name = ""
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
## HTTP response timeout (default: 5s)
# response_timeout = "5s"

## Reads last_run_summary.yaml file and converts to measurements
## Location of puppet last run summary file
## location = "/var/lib/puppet/state/last_run_summary.yaml"

## Reads metrics from RabbitMQ servers via the Management Plugin
## Tag added to rabbitmq_overview series; deprecated: use tags
## Credentials
## username = "guest"
## password = "guest"
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
## Optional request timeouts
## ResponseHeaderTimeout, if non-zero, specifies the amount of time to wait
## for a server's response headers after fully writing the request.
## client_timeout specifies a time limit for requests made by this client.
## Includes connection time, any redirects, and reading the response body.
## A list of nodes to gather as the rabbitmq_node measurement. If not
# ## specified, metrics for all nodes are gathered.
# # nodes = ["rabbit@node1", "rabbit@node2"]
#
# ## A list of queues to gather as the rabbitmq_queue measurement. If not
# ## specified, metrics for all queues are gathered.
# # queues = ["telegraf"]
#
# ## A list of exchanges to gather as the rabbitmq_exchange measurement. If not
# ## specified, metrics for all exchanges are gathered.
# # exchanges = ["telegraf"]
#
# ## Metrics to include and exclude. Globs accepted.
# # Note that an empty array for both will include all metrics
# # Currently the following metrics are supported: "exchange", "federation", "node", "overview", "queue"
# # metric_include = []
# # metric_exclude = []
#
# ## Queues to include and exclude. Globs accepted.
# # Note that an empty array for both will include all queues
# # queue_name_include = []
# # queue_name_exclude = []
#
# ## Federation upstreams include and exclude when gathering the rabbitmq_federation measurement.
# # If neither are specified, metrics for all federation upstreams are gathered.
# # Federation link metrics will only be gathered for queues and exchanges
# # whose non-federation metrics will be collected (e.g a queue excluded
# # by the 'queue_name_exclude' option will also be excluded from federation).
# # Glob accepted.
# # federation_upstream_include = ["dataCentre-*"]
# # federation_upstream_exclude = []
#
## Read raindrops stats (raindrops - real-time stats for preforking Rack servers)
## [[inputs.raindrops]]
# # An array of raindrops middleware URI to gather stats.
# # urls = ["http://localhost:8080/_raindrops"]
#
## Reads metrics from RavenDB servers via the Monitoring Endpoints
## [[inputs.ravendb]]
# # Node URL and port that RavenDB is listening on
# # url = "https://localhost:8080"
#
# # RavenDB X509 client certificate setup
# # tls_cert = "/etc/telegraf/raven.crt"
# # tls_key = "/etc/telegraf/raven.key"
#
# # Optional request timeout
## Timeout, specifies the amount of time to wait

### # Timeout, specifies the amount of time to wait for a server's response headers after fully writing the request and time limit for requests made by this client
### # timeout = "5s"

### List of statistics which are collected
### # At least one is required
### # Allowed values: server, databases, indexes, collections
### #
### # stats_include = ["server", "databases", "indexes", "collections"]
### #
### List of db where database stats are collected
### ### If empty, all db are concerned
### # db_stats_dbs = []
### #
### List of db where index status are collected
### ### If empty, all indexes from all db are concerned
### # index_stats_dbs = []
### #
### List of db where collection status are collected
### ### If empty, all collections from all db are concerned
### # collection_stats_dbs = []

## Read CPU, Fans, Powersupply and Voltage metrics of hardware server through redfish APIs

### [inputs.redfish]
### # Server url
### # address = "https://127.0.0.1:5000"
### #
### # Username, Password for hardware server
### # username = "root"
### # password = "password123456"
### #
### # ComputerSystemId
### # computer_system_id="2M220100SL"
### #
### # Amount of time allowed to complete the HTTP request
### # timeout = "5s"
### #
### # Optional TLS Config
### # tls_ca = "/etc/telegraf/ca.pem"
### # tls_cert = "/etc/telegraf/cert.pem"
### # tls_key = "/etc/telegraf/key.pem"
### # Use TLS but skip chain & host verification
### # insecure_skip_verify = false
Read metrics from one or many Redis servers
[[inputs.redis]]

specify servers via a url matching:
[[protocol://][:password]@address[:port]]
e.g.
tcp://localhost:6379
tcp://:password@192.168.99.100
unix:///var/run/redis.sock

If no servers are specified, then localhost is used as the host.
If no port is specified, 6379 is used
servers = ["tcp://localhost:6379"]

Optional. Specify Redis commands to retrieve values
[[inputs.redis.commands]]
The command to run where each argument is a separate element
command = ["get", "sample-key"]
The field to store the result in
field = "sample-key-value"
The type of the result
Can be "string", "integer", or "float"
type = "string"

specify server password
password = "s#cr@t%"

Optional TLS Config
[[tls_ca = "/etc/telegraf/ca.pem"
[[tls_cert = "/etc/telegraf/cert.pem"
[[tls_key = "/etc/telegraf/key.pem"
Use TLS but skip chain & host verification
insecure_skip_verify = true

Read metrics from one or many RethinkDB servers
[[inputs.rethinkdb]]
An array of URI to gather stats about. Specify an ip or hostname
with optional port add password. i.e.,
rethinkdb://user:auth_key@10.10.3.30:28105,
rethinkdb://10.10.3.33:18832,
10.0.0.1:10000, etc.
servers = ["127.0.0.1:28015"]

If you use actual rethinkdb of > 2.3.0 with username/password authorization,
protocol have to be named "rethinkdb2" - it will use 1_0 H.
servers = ["rethinkdb2://username:password@127.0.0.1:28015"]

If you use older versions of rethinkdb (<2.2) with auth_key, protocol
## have to be named "rethinkdb".
## servers = ["rethinkdb://username:auth_key@127.0.0.1:28015"]

## Read metrics one or many Riak servers
## servers = ["http://localhost:8098"]

## Read API usage and limits for a Salesforce organisation
## specify your credentials
## username = "your_username"
## password = "your_password"
## (optional) security token
## security_token = "your_security_token"
## (optional) environment type (sandbox or production)
## environment = "production"
## (optional) API version (default: "39.0")
## version = "39.0"

## Monitor sensors, requires lm-sensors package
## Remove numbers from field names.
## If true, a field name like 'temp1_input' will be changed to 'temp_input'.
## remove_numbers = true
## Timeout is the maximum amount of time that the sensors command can run.
## timeout = "5s"

## Read metrics from storage devices supporting S.M.A.R.T.
## Optionally specify the path to the smartctl executable
## path_smartctl = "/usr/bin/smartctl"
## Optionally specify the path to the nvme-cli executable
## path_nvme = "/usr/bin/nvme"
## Optional

### Specify if vendor specific attributes should be propagated for NVMe disk case
### ['auto-on'] - automatically find and enable additional vendor specific disk info
### ['vendor1", "vendor2", ...] - e.g. "Intel" enable additional Intel specific disk info
### enable_extensions = ['auto-on']

### On most platforms used cli utilities requires root access.
### Setting use_sudo to true will make use of sudo to run smartctl or nvme-cli.
### Sudo must be configured to allow the telegraf user to run smartctl or nvme-cli
### without a password.
### use_sudo = false

### Skip checking disks in this power mode. Defaults to
### "standby" to not wake up disks that have stopped rotating.
### See --nocheck in the man pages for smartctl.
### smartctl version 5.41 and 5.42 have faulty detection of
### power mode and might require changing this value to
### "never" depending on your disks.
### nocheck = "standby"

### Gather all returned S.M.A.R.T. attribute metrics and the detailed
### information from each drive into the 'smart_attribute' measurement.
### attributes = false

### Optionally specify devices to exclude from reporting if disks auto-discovery is performed.
### excludes = [ "/dev/pass6" ]

### Optionally specify devices and device type, if unset
### a scan (smartctl --scan and smartctl --scan -d nvme) for S.M.A.R.T. devices will be done
### and all found will be included except for the excluded in excludes.
### devices = [ "/dev/ada0 -d atacam", "/dev/nvme0"

### Timeout for the cli command to complete.
### timeout = "30s"

### Optionally call smartctl and nvme-cli with a specific concurrency policy.
### By default, smartctl and nvme-cli are called in separate threads (goroutines) to gather disk attributes.
### Some devices (e.g. disks in RAID arrays) may have access limitations that require sequential reading of
### SMART data - one individual array drive at the time. In such case please set this configuration option
### to "sequential" to get readings for all drives.
### valid options: concurrent, sequential
### read_method = "concurrent"

## SNMP Values

### Retrieves SNMP values from remote agents
### inputs.snmp
### Agent addresses to retrieve values from.
### format: agents = ["<scheme://>/<hostname>:<port>"]
### scheme: optional, either udp, udp4, udp6, tcp, tcp4, tcp6.
# --- default is udp
# --- port: optional
# --- example: agents = ["udp://127.0.0.1:161"]
# --- agents = ["tcp://127.0.0.1:161"]
# --- agents = ["udp4://v4only-snmp-agent"]
# agents = ["udp://127.0.0.1:161"]
#
# --- Timeout for each request.
# # timeout = "5s"
#
# --- SNMP version; can be 1, 2, or 3.
# # version = 2
#
# --- Path to mib files
# # path = ["/usr/share/snmp/mibs"]
#
# --- Agent host tag; the tag used to reference the source host
# # agent_host_tag = "agent_host"
#
# --- SNMP community string.
# # community = "public"
#
# --- Number of retries to attempt.
# # retries = 3
#
# --- The GETBULK max-repetitions parameter.
# # max_repetitions = 10
#
# --- SNMPv3 authentication and encryption options.
# ---
# --- Security Name.
# # sec_name = "myuser"
# --- Authentication protocol; one of "MD5", "SHA", "SHA224", "SHA256", "SHA384", "SHA512" or "".
# # auth_protocol = "MD5"
# --- Authentication password.
# # auth_password = "pass"
# --- Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".
# # sec_level = "authNoPriv"
# --- Context Name.
# # context_name = ""
# --- Privacy protocol used for encrypted messages; one of "DES", "AES" or "".
# # priv_protocol = ""
# --- Privacy password used for encrypted messages.
# # priv_password = ""
#
# --- example collects the system uptime and interface variables. Reference the
# --- full plugin documentation for configuration details.
## DEPRECATED! PLEASE USE inputs.snmp INSTEAD.

`[[inputs.snmp_legacy]]`

### DEPRECATED: The 'snmp_legacy' plugin is deprecated in version 1.0.0, use 'inputs.snmp' instead.

### Use 'oids.txt' file to translate oids to names

### To generate 'oids.txt' you need to run:

```bash
snmptranslate -m all -Tz -On | sed -e 's"/\//g' > /tmp/oids.txt
```

### Or if you have an other MIB folder with custom MIBs

```bash
snmptranslate -M /mycustommibfolder -Tz -On -m all | sed -e 's"/\//g' > oids.txt
```

`snmptranslate_file = "/tmp/oids.txt"

```yaml
[[inputs.snmp.host]]
address = "192.168.2.2:161"
# SNMP community
community = "public" # default public
# SNMP version (1, 2 or 3)
# Version 3 not supported yet
version = 2 # default 2
# SNMP response timeout
timeout = 2.0 # default 2.0
# SNMP request retries
retries = 2 # default 2
# Which get/bulk do you want to collect for this host
collect = ["mybulk", "sysServices", "sysDescr"]
# Simple list of OIDs to get, in addition to "collect"
get_oids = []

[[inputs.snmp.host]]
address = "192.168.2.3:161"
community = "public"
version = 2
timeout = 2.0
retries = 2
collect = ["mybulk"]
get_oids = [
  "ifNumber",
  ".1.3.6.1.2.1.3.0",
]

[[inputs.snmp.get]]
name = "ifnumber"
oid = "ifNumber"

[[inputs.snmp.get]]
name = "interface_speed"
oid = "ifSpeed"
instance = "0"
# [[inputs.snmp.get]]
# name = "sysuptime"
# oid = ".1.3.6.1.2.1.1.3.0"
# unit = "second"
#
# [[inputs.snmp.bulk]]
# name = "mybulk"
# max_repetition = 127
# oid = ".1.3.6.1.2.1.1"
#
# [[inputs.snmp.bulk]]
# name = "ifoutoctets"
# max_repetition = 127
# oid = "ifOutOctets"
#
# [[inputs.snmp.host]]
# address = "192.168.2.13:161"
# #address = "127.0.0.1:161"
# community = "public"
# version = 2
# timeout = 2.0
# retries = 2
# #collect = ["mybulk", "syservices", "sysdescr", "systype"]
# collect = ["sysuptime"]
# [[inputs.snmp.host.table]]
# name = "iftable3"
# include_instances = ["enp5s0", "eth1"]
#
# # SNMP TABLEs
# # table without mapping neither subtables
# [[inputs.snmp.table]]
# name = "iftable1"
# oid = ".1.3.6.1.2.1.31.1.1.1"
#
# # table without mapping but with subtables
# [[inputs.snmp.table]]
# name = "iftable2"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# sub_tables = [".1.3.6.1.2.1.2.2.1.13"]
#
# # table with mapping but without subtables
# [[inputs.snmp.table]]
# name = "iftable3"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# # if empty. get all instances
# mapping_table = ".1.3.6.1.2.1.31.1.1.1.1"
# # if empty, get all subtables
#
---

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# table with both mapping and subtables
# [[inputs.snmp.table]]
# name = "iftable4"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# # if empty get all instances
# mapping_table = ".1.3.6.1.2.1.31.1.1.1.1"
# # if empty get all subtables
# # sub_tables could be not "real subtables"
# sub_tables=[".1.3.6.1.2.1.2.2.1.13", "bytes_recv", "bytes_send"]

## Read stats from one or more Solr servers or cores
[[inputs.solr]]
# ### specify a list of one or more Solr servers
# servers = ["http://localhost:8983"]
#
# ### specify a list of one or more Solr cores (default - all)
# cores = ["main"]
#
# ### Optional HTTP Basic Auth Credentials
# # username = "username"
# # password = "pa$$word"

## Gather timeseries from Google Cloud Platform v3 monitoring API
[[inputs.stackdriver]]
# ### GCP Project
# project = "erudite-bloom-151019"
#
# ### Include timeseries that start with the given metric type.
# metric_type_prefix_include = [
#   "compute.googleapis.com/",
# ]
#
# ### Exclude timeseries that start with the given metric type.
# metric_type_prefix_exclude = []
#
# ### Many metrics are updated once per minute; it is recommended to override
# ### the agent level interval with a value of 1m or greater.
# interval = "1m"
#
# ### Maximum number of API calls to make per second. The quota for accounts
# ### varies, it can be viewed on the API dashboard:
# ### https://cloud.google.com/monitoring/quotas#quotas_and_limits
# rate_limit = 14
#
# ### The delay and window options control the number of points selected on
# ### each gather. When set, metrics are gathered between:
# ## start: now() - delay - window
# ## end: now() - delay
#
# ## Collection delay; if set too low metrics may not yet be available.
# ## delay = "5m"
#
# ## If unset, the window will start at 1m and be updated dynamically to span
# ## the time between calls (approximately the length of the plugin interval).
# ## window = "1m"
#
# ## TTL for cached list of metric types. This is the maximum amount of time
# ## it may take to discover new metrics.
# ## cache_ttl = "1h"
#
# ## If true, raw bucket counts are collected for distribution value types.
# ## For a more lightweight collection, you may wish to disable and use
# ## distribution_aggregation_aligners instead.
# ## gather_raw_distribution_buckets = true
#
# ## Aggregate functions to be used for metrics whose value type is
# ## distribution. These aggregate values are recorded in in addition to raw
# ## bucket counts; if they are enabled.
# ##
# ## For a list of aligner strings see:
# ## https://cloud.google.com/monitoring/api/ref_v3/rpc/google.monitoring.v3#aligner
# ## distribution_aggregation_aligners = [
# ##   "ALIGN_PERCENTILE_99",
# ##   "ALIGN_PERCENTILE_95",
# ##   "ALIGN_PERCENTILE_50",
# ## ]
#
# ## Filters can be added to reduce the number of time series matched. All
# ## functions are supported: starts_with, ends_with, has_substring, and
# ## one_of. Only the ‘=’ operator is supported.
# ##
# ## The logical operators when combining filters are defined statically using
# ## the following values:
# ## filter ::= <resource_labels> [AND <metric_labels>]
# ## resource_labels ::= <resource_labels> [OR <resource_label>]
# ## metric_labels ::= <metric_labels> [OR <metric_label>]
# ##
# ## For more details, see https://cloud.google.com/monitoring/api/v3/filters
#
# ## Resource labels refine the time series selection with the following expression:
# ## resource.labels.<key> = <value>
# ## [inputs.stackdriver.filter.resource_labels]
# ## key = "instance_name"
# ## value = 'starts_with("localhost")'
### Metric labels refine the time series selection with the following expression:

```yaml
metric.labels.<key> = <value>
```

### [inputs.stackdriver.filter.metric_labels]

- **key**: "device_name"
- **value**: 'one_of("sda", "sdb")'

### Get synproxy counter statistics from procfs

### [inputs.synproxy]]

### # no configuration

### Sysstat metrics collector

### [inputs.sysstat]]

- **Path to the sadc command**.

### #

- **Common Defaults:**
  - Debian/Ubuntu: `/usr/lib/sysstat/sadc`
  - Arch: `/usr/lib/sa/sadc`
  - RHEL/CentOS: `/usr/lib64/sa/sadc`

- **sadc_path** = "/usr/lib/sa/sadc" # required

### # Path to the sadf command, if it is not in PATH

### # sadf_path = "/usr/bin/sadf"

### # Activities is a list of activities, that are passed as argument to the
### sadc collector utility (e.g: DISK, SNMP etc...)

### # The more activities that are added, the more data is collected.

### # activities = ["DISK"]

### # Group metrics to measurements.

### #

### # If group is false each metric will be prefixed with a description

### # and represents itself a measurement.

### #

### # If Group is true, corresponding metrics are grouped to a single measurement.

### # group = true

### # Options for the sadf command. The values on the left represent the sadf
### # options and the values on the right their description (which are used for
### # grouping and prefixing metrics).

### #

### # Run 'sar -h' or 'man sar' to find out the supported options for your
### # sysstat version.

### # [inputs.sysstat.options]

### -C = "cpu"

### -B = "paging"
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# -b = "io"           # requires DISK activity
# -d = "disk"           # requires DISK activity
# "-n ALL" = "network"
# "-P ALL" = "per_cpu"
# -q = "queue"
# -R = "mem"
# -r = "mem_util"
# -S = "swap_util"
# -u = "cpu_util"
# -v = "inode"
# -W = "swap"
# -w = "task"
# # -H = "hugepages"     # only available for newer linux distributions
# # "-I ALL" = "interrupts" # requires INT activity

## Device tags can be used to add additional tags for devices.
## For example the configuration below adds a tag vg with value rootvg for
## all metrics with sda devices.
# # [inputs.sysstat.device_tags.sda]
# # vg = "rootvg"

## Gather systemd units state
# [[inputs.systemd_units]]
## Set timeout for systemctl execution
# # timeout = "1s"

## Filter for a specific unit type, default is "service", other possible
## values are "socket", "target", "device", "mount", "automount", "swap".
## "timer", "path", "slice" and "scope ":
## unittype = "service"

## Filter for a specific pattern, default is "" (i.e. all), other possible
## values are valid pattern for systemctl, e.g. "a*" for all units with
## names starting with "a"
## pattern = ""
## pattern = "telegraf* influxdb*"
## pattern = "a*"

## Reads metrics from a Teamspeak 3 Server via ServerQuery
# [[inputs.teamspeak]]
## Server address for Teamspeak 3 ServerQuery
# # server = "127.0.0.1:10011"
## Username for ServerQuery
# username = "serverqueryuser"
## Password for ServerQuery
# password = "secret"
# ## Array of virtual servers
# # virtual_servers = [1]

## Read metrics about temperature
# [[inputs.temp]]
# # no configuration

## Read Tengine's basic status information (ngx_http_reqstat_module)
# [[inputs.tengine]]
# # An array of Tengine reqstat module URI to gather stats.
# urls = ["http://127.0.0.1/us"]
#
# # HTTP response timeout (default: 5s)
# # response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.cer"
# # tls_key = "/etc/telegraf/key.key"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Gather metrics from the Tomcat server status page.
# [[inputs.tomcat]]
# ### URL of the Tomcat server status
# # url = "http://127.0.0.1:8080/manager/status/all?XML=true"
#
# ### HTTP Basic Auth Credentials
# # username = "tomcat"
# # password = "s3cret"
#
# ### Request timeout
# # timeout = "5s"
#
# ### Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ### Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Inserts sine and cosine waves for demonstration purposes
# [[inputs.trig]]
# # Set the amplitude
# amplitude = 10.0

# # Read Twemproxy stats data
# [[inputs.twemproxy]]
# ## Twemproxy stats address and port (no scheme)
# addr = "localhost:22222"
# ## Monitor pool name
# pools = ["redis_pool", "mc_pool"]

# # A plugin to collect stats from the Unbound DNS resolver
# [[inputs.unbound]]
# ## Address of server to connect to, read from unbound conf default, optionally ':port'
# ## Will lookup IP if given a hostname
# server = "127.0.0.1:8953"
#
# ## If running as a restricted user you can prepend sudo for additional access:
# # use_sudo = false
#
# ## The default location of the unbound-control binary can be overridden with:
# # binary = "/usr/sbin/unbound-control"
#
# ## The default location of the unbound config file can be overridden with:
# # config_file = "/etc/unbound/unbound.conf"
#
# ## The default timeout of 1s can be overridden with:
# # timeout = "1s"
#
# When set to true, thread metrics are tagged with the thread id.
# ## thread_as_tag = false
#
# ## The default is false for backwards compatibility, and will be changed to
# ## true in a future version. It is recommended to set to true on new
# ## deployments.
# # thread_as_tag = false

# # Read uWSGI metrics.
# [[inputs.uwsgi]]
# ## List with urls of uWSGI Stats servers. URL must match pattern:
# ## scheme://address[:port]
# ##
# ## For example:
# # servers = ["tcp://127.0.0.1:1717"]
#
# ## General connection timeout
# # timeout = "5s"
### A plugin to collect stats from Varnish HTTP Cache

### [inputs.varnish]

- If running as a restricted user you can prepend sudo for additional access:
  
  ```
  #use_sudo = false
  ```

- The default location of the varnishstat binary can be overridden with:
  
  ```
  binary = "/usr/bin/varnishstat"
  ```

- By default, telegraf gather stats for 3 metric points.
- Setting stats will override the defaults shown below.
- Glob matching can be used, ie, stats = ["MAIN.*"]
- stats may also be set to ["*"], which will collect all stats
  
  ```
  stats = ["MAIN.cache_hit", "MAIN.cache_miss", "MAIN.uptime"]
  ```

- Optional name for the varnish instance (or working directory) to query
  
  ```
  # instance_name = instanceName
  ```

- Timeout for varnishstat command
  
  ```
  # timeout = "1s"
  ```

### Collect Wireguard server interface and peer statistics

### [inputs.wireguard]

- Optional list of Wireguard device/interface names to query.
- If omitted, all Wireguard interfaces are queried.
  
  ```
  # devices = ["wg0"]
  ```

### Monitor wifi signal strength and quality

### [inputs.wireless]

- Sets 'proc' directory path
- If not specified, then default is /proc
  
  ```
  # host_proc = "/proc"
  ```

### Reads metrics from a SSL certificate

### [inputs.x509_cert]

- List certificate sources
- Prefix your entry with 'file://' if you intend to use relative paths
  
  ```
             "udp://127.0.0.1:4433", "/etc/ssl/certs/ssl-cert-snakeoil.pem",
             "/etc/mycerts/*.*.mydomain.org.pem", "file:///path/to/*.pem"]
  ```

- Timeout for SSL connection
  
  ```
  # timeout = "5s"
  ```
# # ## Pass a different name into the TLS request (Server Name Indication)
# #   ## example: server_name = "myhost.example.org"
# #   server_name = ""
#
# # ## Optional TLS Config
# #   tls_ca = "/etc/telegraf/ca.pem"
# #   tls_cert = "/etc/telegraf/cert.pem"
# #   tls_key = "/etc/telegraf/key.pem"

## Read metrics of ZFS from arcstats, zfetchstats, vdev_cache_stats, pools and datasets
# [inputs.zfs]
## ZFS kstat path. Ignored on FreeBSD
## If not specified, then default is:
## kstatPath = "/proc/spl/kstat/zfs"
#
## By default, telegraf gather all zfs stats
## If not specified, then default is:
## kstatMetrics = ["arcstats", "zfetchstats", "vdev_cache_stats"]
## For Linux, the default is:
## kstatMetrics = ["abdstats", "arcstats", "dnodestats", "dbufcachestats",
##  "dbuftx", "fm", "vdev_mirror_stats", "zfetchstats", "zil"]
## By default, don't gather zpool stats
## poolMetrics = false
## By default, don't gather zdataset stats
## datasetMetrics = false

## Reads 'mntr' stats from one or many zookeeper servers
# [inputs.zookeeper]
## An array of address to gather stats about. Specify an ip or hostname
## with port. ie localhost:2181, 10.0.0.1:2181, etc.
#
## If no servers are specified, then localhost is used as the host.
## If no port is specified, 2181 is used
## servers = ["":2181]"]
#
## Timeout for metric collections from all servers. Minimum timeout is "1s".
## timeout = "5s"
#
## Optional TLS Config
## enable_tls = true
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## If false, skip chain & host verification
## insecure_skip_verify = true
## SERVICE INPUT PLUGINS

### Pull Metric Statistics from Aliyun CMS

```
[inputs.aliyuncms]
```

### Aliyun Credentials

- **Access_key_id** = ""
- **Access_key_secret** = ""
- **Access_key_sts_token** = ""
- **role_arn** = ""
- **role_session_name** = ""
- **private_key** = ""
- **public_key_id** = ""
- **role_name** = ""

### Specify the ali cloud region list to be queried for metrics and objects discovery

- **regions** = ["cn-hongkong"]

---

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# The minimum period for AliyunCMS metrics is 1 minute (60s). However not all
# metrics are made available to the 1 minute period. Some are collected at
# 3 minute, 5 minute, or larger intervals.
# See: https://help.aliyun.com/document_detail/51936.html?spm=a2c4g.11186623.2.18.2bc1750eeOw1Pv
# Note that if a period is configured that is smaller than the minimum for a
# particular metric, that metric will not be returned by the Aliyun OpenAPI
# and will not be collected by Telegraf.
#
# ## Requested AliyunCMS aggregation Period (required - must be a multiple of 60s)
# period = "5m"
#
# ## Collection Delay (required - must account for metrics availability via AliyunCMS API)
# delay = "1m"
#
# ## Recommended: use metric 'interval' that is a multiple of 'period' to avoid
# ## gaps or overlap in pulled data
# interval = "5m"
#
# ## Metric Statistic Project (required)
# project = "acs_slb_dashboard"
#
# ## Maximum requests per second, default value is 200
# ratelimit = 200
#
# ## How often the discovery API call executed (default 1m)
# discovery_interval = "1m"
#
# ## Metrics to Pull (Required)
# [inputs.aliyuncms.metrics]
# ## Metrics names to be requested,
# ## described here (per project):
# https://help.aliyun.com/document_detail/28619.html?spm=a2c4g.11186623.6.690.1938ad41wg8QSq
# names = ["InstanceActiveConnection", "InstanceNewConnection"]
#
# ## Dimension filters for Metric (these are optional).
# ## This allows to get additional metric dimension. If dimension is not specified it can be returned or
# ## the data can be aggregated - it depends on particular metric, you can find details here:
# https://help.aliyun.com/document_detail/28619.html?spm=a2c4g.11186623.6.690.1938ad41wg8QSq
# ##
# ## Note, that by default dimension filter includes the list of discovered objects in scope (if discovery is enabled)
# ## Values specified here would be added into the list of discovered objects.
# ## You can specify either single dimension:
# #dimensions = '{"instanceId": "p-example"}'
# #
# ## Or you can specify several dimensions at once:
# #dimensions = ['{"instanceId": "p-example"},{"instanceId": "q-example"}']
# #
## Enrichment tags, can be added from discovery (if supported)

- Notation is `<measurement_tag_name>:<JMES query path>`
- To figure out which fields are available, consult the Describe<ObjectType> API per project.
- For example, for SLB: https://api.aliyun.com/#/?product=Slb&version=2014-05-15&api=DescribeLoadBalancers&params={ }&tab=MOCK&lang=GO

```yaml
# tag_query_path = [
  "address:Address",
  "name:LoadBalancerName",
  "cluster_owner:Tags.Tag[?TagKey=='cs.cluster.name'].TagValue | [0]"
]
```

The following tags added by default: regionId (if discovery enabled), userId, instanceId.

- Allow metrics without discovery data, if discovery is enabled. If set to true, then metric without discovery data would be emitted, otherwise dropped. This can be of help, in case debugging dimension filters, or partial coverage of discovery scope vs monitoring scope.

```yaml
# allow_dps_without_discovery = false
```

### AMQP consumer plugin

```yaml
[[inputs.amqp_consumer]]
```

- Broker to consume from.
- Deprecated in 1.7; use the brokers option.
- URL: `amqp://localhost:5672/influxdb`

```yaml
# brokers = ["amqp://localhost:5672/influxdb"]
```

- **Note:** exchange will be selected anytime a connection is established. This can be helpful for load balancing when not using a dedicated load balancer.

- **Note:** exchange will be passively declared.

- **Note:** Additional exchange arguments.

```yaml
# exchange = "telegraf"
```

- **Note:** Exchange durability can be either "transient" or "durable".

```yaml
# exchange_durable = "durable"
```

- **Note:** Additional exchange arguments.

```yaml
# exchange_arguments = { }
```
# exchange_arguments = {"hash_property" = "timestamp"}
#
## AMQP queue name.
# queue = "telegraf"
#
## AMQP queue durability can be "transient" or "durable".
# queue_durability = "durable"
#
## If true, queue will be passively declared.
# queue_passive = false
#
## A binding between the exchange and queue using this binding key is
## created. If unset, no binding is created.
# binding_key = "#"
#
## Maximum number of messages server should give to the worker.
# prefetch_count = 50
#
## Maximum messages to read from the broker that have not been written by an
## output. For best throughput set based on the number of metrics within
## each message and the size of the output's metric_batch_size.
##
## For example, if each message from the queue contains 10 metrics and the
## output metric_batch_size is 1000, setting this to 100 will ensure that a
## full batch is collected and the write is triggered immediately without
## waiting until the next flush_interval.
# max_undelivered_messages = 1000
#
## Auth method. PLAIN and EXTERNAL are supported
## Using EXTERNAL requires enabling the rabbitmq_auth_mechanism_ssl plugin as
## described here: https://www.rabbitmq.com/plugins.html
# auth_method = "PLAIN"
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
## Content encoding for message payloads, can be set to "gzip" to or
## "identity" to apply no encoding.
# content_encoding = "identity"
#
## Data format to consume.
## Each data format has its own unique set of configuration options, read
## more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

## Read Cassandra metrics through Jolokia

```yaml
# [inputs.cassandra]
## DEPRECATED: The 'cassandra' plugin is deprecated in version 1.7.0, use 'inputs.jolokia2' with the 'cassandra.conf' example configuration instead.
## DEPRECATED: The cassandra plugin has been deprecated. Please use the
## jolokia2 plugin instead.
## see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/jolokia2
#
context = "/jolokia/read"
## List of cassandra servers exposing jolokia read service
servers = ["myuser:mypassword@10.10.10.1:8778","10.10.10.2:8778","8778"]
## List of metrics collected on above servers
## Each metric consists of a jmx path.
## This will collect all heap memory usage metrics from the jvm and
## ReadLatency metrics for all keyspaces and tables.
## "type=Table" in the query works with Cassandra3.0. Older versions might
## need to use "type=ColumnFamily"
metrics = [
  "/java.lang:type=Memory/HeapMemoryUsage",
  "/org.apache.cassandra.metrics:type=Table,keyspace=*,scope=*,name=ReadLatency"
]
```

## Cisco model-driven telemetry (MDT) input plugin for IOS XR, IOS XE and NX-OS platforms

```yaml
# [inputs.cisco_telemetry_mdt]
## Telemetry transport can be "tcp" or "grpc". TLS is only supported when
## using the grpc transport.
transport = "grpc"
## Address and port to host telemetry listener
service_address = ":57000"
## Enable TLS; grpc transport only.
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Enable TLS client authentication and define allowed CA certificates; grpc
## transport only.
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
## Define (for certain nested telemetry measurements with embedded tags) which fields are tags
# embedded_tags = ["Cisco-IOS-XR-qos-ma-oper:qos/interface-table/interface/input/service-policy-names/service-policy-instance/statistics/class-stats/class-name"]
```
# Define aliases to map telemetry encoding paths to simple measurement names
# [inputs.cisco_telemetry_mdt.aliases]
# ifstats = "ietf-interfaces:interfaces-state/interface/statistics"
# Define Property Xformation, please refer README and https://pubhub.devnetcloud.com/media/dme-docs-9-3-3/docs/appendix/ for Model details.
# [inputs.cisco_telemetry_mdt.dmes]
# ModTs = "ignore"
# CreateTs = "ignore"

# Read metrics from one or many ClickHouse servers
# [[inputs.clickhouse]]
# Username for authorization on ClickHouse server
# example: username = "default"
# username = "default"
#
# Password for authorization on ClickHouse server
# example: password = "super_secret"
#
# HTTP(s) timeout while getting metrics values
# The timeout includes connection time, any redirects, and reading the response body.
# example: timeout = 1s
# timeout = 5s
#
# List of servers for metrics scraping
# metrics scrape via HTTP(s) clickhouse interface
# https://clickhouse.tech/docs/en/interfaces/http/
# example: servers = ["http://127.0.0.1:8123","https://custom-server.mdb.yandexcloud.net"]
# servers = ["http://127.0.0.1:8123"]
#
# If "auto_discovery" is "true" plugin tries to connect to all servers available in the cluster
# with using same "user:password" described in "user" and "password" parameters
# and get this server hostname list from "system.clusters" table
# see
# - https://clickhouse.tech/docs/en/operations/system_tables/#system-clusters
# - https://clickhouse.tech/docs/en/operations/table_engines/distributed/
# example: auto_discovery = false
# auto_discovery = true
#
# Filter cluster names in "system.clusters" when "auto_discovery" is "true"
# when this filter present then "WHERE cluster IN (...)" filter will apply
# please use only full cluster names here, regexp and glob filters is not allowed
# for "/etc/clickhouse-server/config.d/remote.xml"
# <yandex>
# <remote_servers>
# <my-own-cluster>
# # # <shard>
# # # <replica><host>clickhouse-ru-1.local</host><port>9000</port></replica>
# # # <replica><host>clickhouse-ru-2.local</host><port>9000</port></replica>
# # # </shard>
# # # <shard>
# # # <replica><host>clickhouse-eu-1.local</host><port>9000</port></replica>
# # # <replica><host>clickhouse-eu-2.local</host><port>9000</port></replica>
# # # </shard>
# # # </my-onw-cluster>
# # # </remote_servers>
# # # </yandex>
# #
# # # example: cluster_include = ["my-own-cluster"]
# # cluster_include = []
#
# # # Filter cluster names in "system.clusters" when "auto_discovery" is "true"
# # when this filter present then "WHERE cluster NOT IN (...)" filter will apply
# # # example: cluster_exclude = ["my-internal-not-discovered-cluster"]
# # cluster_exclude = []
#
# # # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # # Read metrics from Google PubSub
# [[inputs.cloud_pubsub]]
# # # Required. Name of Google Cloud Platform (GCP) Project that owns
# # # the given PubSub subscription.
# # project = "my-project"
#
# # # Required. Name of PubSub subscription to ingest metrics from.
# # subscription = "my-subscription"
#
# # # Required. Data format to consume.
# # Each data format has its own unique set of configuration options.
# # Read more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"
#
# # # Optional. Filepath for GCP credentials JSON file to authorize calls to
# # PubSub APIs. If not set explicitly, Telegraf will attempt to use
# # Application Default Credentials, which is preferred.
# # credentials_file = "path/to/my/creds.json"
# Optional. Number of seconds to wait before attempting to restart the
# PubSub subscription receiver after an unexpected error.
# If the streaming pull for a PubSub Subscription fails (receiver),
# the agent attempts to restart receiving messages after this many seconds.
# retry_delay_seconds = 5
#
# Optional. Maximum byte length of a message to consume.
# Larger messages are dropped with an error. If less than 0 or unspecified,
# treated as no limit.
# max_message_len = 1000000
#
# Optional. Maximum messages to read from PubSub that have not been written
# to an output. Defaults to 1000.
# Each message and the size of the output's metric batch size.
# max_undelivered_messages = 1000
#
# The following are optional Subscription ReceiveSettings in PubSub.
# Read more about these values:
# https://godoc.org/cloud.google.com/go/pubsub#ReceiveSettings
#
# Optional. Maximum number of seconds for which a PubSub subscription
# should auto-extend the PubSub ACK deadline for each message. If less than
# 0, auto-extension is disabled.
# max_extension = 0
#
# Optional. Maximum number of unprocessed messages in PubSub
# (unacknowledged but not yet expired in PubSub).
# A value of 0 is treated as the default PubSub value.
# Negative values will be treated as unlimited.
# max_outstanding_messages = 0
#
# Optional. Maximum size in bytes of unprocessed messages in PubSub
# (unacknowledged but not yet expired in PubSub).
# A value of 0 is treated as the default PubSub value.
# Negative values will be treated as unlimited.
# max_outstanding_bytes = 0
#
# Optional. Max number of goroutines a PubSub Subscription receiver can spawn
# to pull messages from PubSub concurrently. This limit applies to each
# subscription separately and is treated as the PubSub default if less than
# 1. Note this setting does not limit the number of messages that can be
# # processed concurrently (use "max_outstanding_messages" instead).
# # max_receiver_go_routines = 0
#
# # Optional. If true, Telegraf will attempt to base64 decode the
# # PubSub message data before parsing
# # base64_data = false

# # Google Cloud Pub/Sub Push HTTP listener
# [[inputs.cloud_pubsub_push]]
# # Address and port to host HTTP listener on
# service_address = ":8080"
#
# # Application secret to verify messages originate from Cloud Pub/Sub
# # token = ""
#
# # Path to listen to.
# # path = "/"
#
# # Maximum duration before timing out read of the request
# # read_timeout = "10s"
# # Maximum duration before timing out write of the response. This should be set to a value
# # large enough that you can send at least 'metric_batch_size' number of messages within the
# # duration.
# # write_timeout = "10s"
#
# # Maximum allowed http request body size in bytes.
# # 0 means to use the default of 524,288,00 bytes (500 mebibytes)
# # max_body_size = "500MB"
#
# # Whether to add the pubsub metadata, such as message attributes and subscription as a tag.
# # add_meta = false
#
# # Optional. Maximum messages to read from PubSub that have not been written
# # to an output. Defaults to 1000.
# # For best throughput set based on the number of metrics within
# # each message and the size of the output's metric_batch_size.
# # For example, if each message contains 10 metrics and the output
# # metric_batch_size is 1000, setting this to 100 will ensure that a
# # full batch is collected and the write is triggered immediately without
# # waiting until the next flush_interval.
# # max_undelivered_messages = 1000
#
# # Set one or more allowed client CA certificate file names to
# # enable mutually authenticated TLS connections
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
# ## Add service certificate and key
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"
#
# ## Ingests files in a directory and then moves them to a target directory.
# [inputs.directory_monitor]
# ## The directory to monitor and read files from.
# directory = ""
# #
# ## The directory to move finished files to.
# finished_directory = ""
# #
# ## The directory to move files to upon file error.
# # If not provided, erroring files will stay in the monitored directory.
# error_directory = ""
# #
# ## The amount of time a file is allowed to sit in the directory before it is picked up.
# ## This time can generally be low but if you choose to have a very large file written to the directory and it's
# ## potential slow.
# directory_duration_threshold = "50ms"
# #
# ## A list of the only file names to monitor, if necessary. Supports regex. If left blank, all files are ingested.
# files_to_monitor = ["^.*\.csv"]
# #
# ## A list of files to ignore, if necessary. Supports regex.
# files_to_ignore = [".DS_Store"]
# #
# ## Maximum lines of the file to process that have not yet be written by the
# ## output. For best throughput set to the size of the output's metric_buffer_limit.
# max_buffered_metrics = 10000
# #
# ## The maximum amount of file paths to queue up for processing at once, before waiting until files are processed
# ## to find more files.
# file_queue_size = 100000
# #
# ## Name a tag containing the name of the file the data was parsed from. Leave empty
# ## to disable. Cautious when file name variation is high, this can increase the cardinality
# # The dataformat to be read from the files.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # NOTE: We currently only support parsing newline-delimited JSON. See the format here:
# https://github.com/ndjson/ndjson-spec
# data_format = "influx"

# # Read logging output from the Docker engine
# [[inputs.docker_log]]
# # Docker Endpoint
# # To use TCP, set endpoint = "tcp://[ip]:[port]"
# # To use environment variables (ie, docker-machine), set endpoint = "ENV"
# # endpoint = "unix:///var/run/docker.sock"
# # When true, container logs are read from the beginning; otherwise
# # reading begins at the end of the log.
# # from_beginning = false
# # # # Timeout for Docker API calls.
# # # timeout = "5s"
# # # Containers to include and exclude. Globs accepted.
# # # Note that an empty array for both will include all containers
# # # container_name_include = []
# # # container_name_exclude = []
# # # Container states to include and exclude. Globs accepted.
# # # When empty only containers in the "running" state will be captured.
# # # container_state_include = []
# # # container_state_exclude = []
# # # docker labels to include and exclude as tags. Globs accepted.
# # # Note that an empty array for both will include all labels as tags
# # # docker_label_include = []
# # # docker_label_exclude = []
# # # Set the source tag for the metrics to the container ID hostname, eg first 12 chars
# # source_tag = false
# # # Optional TLS Config
# # # tls_ca = "/etc/telegraf/ca.pem"
# # # tls_cert = "/etc/telegraf/cert.pem"
#  tls_key = "/etc/telegraf/key.pem"
#  ## Use TLS but skip chain & host verification
#  # insecure_skip_verify = false

## Azure Event Hubs service input plugin
#  [[inputs.eventhub_consumer]]
#  ## The default behavior is to create a new Event Hub client from environment variables.
#  ## This requires one of the following sets of environment variables to be set:
#  ##
#  ## 1) Expected Environment Variables:
#  ##    - "EVENTHUB_CONNECTION_STRING"
#  ##
#  ## 2) Expected Environment Variables:
#  ##    - "EVENTHUB_NAMESPACE"
#  ##    - "EVENTHUB_NAME"
#  ##    - "EVENTHUB_KEY_NAME"
#  ##    - "EVENTHUB_KEY_VALUE"
#  ##
#  ## 3) Expected Environment Variables:
#  ##    - "EVENTHUB_NAMESPACE"
#  ##    - "EVENTHUB_NAME"
#  ##    - "AZURE_TENANT_ID"
#  ##    - "AZURE_CLIENT_ID"
#  ##    - "AZURE_CLIENT_SECRET"
#
#  ## Uncommenting the option below will create an Event Hub client based solely on the connection string.
#  ## This can either be the associated environment variable or hard coded directly.
#  ## If this option is uncommented, environment variables will be ignored.
#  ## Connection string should contain EventHubName (EntityPath)
#  # connection_string = ""
#
#  ## Set persistence directory to a valid folder to use a file persister instead of an in-memory persister
#  # persistence_dir = ""
#
#  ## Change the default consumer group
#  # consumer_group = ""
#
#  ## By default the event hub receives all messages present on the broker, alternative modes can be set below.
#  ## The timestamp should be in https://github.com/toml-lang/toml#offset-date-time format (RFC 3339).
#  ## The 3 options below only apply if no valid persister is read from memory or file (e.g. first run).
#  # from_timestamp =
#  # latest = true
#
#  ## Set a custom prefetch count for the receiver(s)
#  # prefetch_count = 1000
#
#  ## Add an epoch to the receiver(s)
# # epoch = 0
#
# # Change to set a custom user agent, "telegraf" is used by default
# # user_agent = "telegraf"
#
# # To consume from a specific partition, set the partition_ids option.
# # An empty array will result in receiving from all partitions.
# # partition_ids = ["0","1"]
#
# # Max undelivered messages
# # max_un delivered_messages = 1000
#
# # Set either option below to true to use a system property as timestamp.
# # You have the choice between EnqueuedTime and IoTHubEnqueuedTime.
# # It is recommended to use this setting when the data itself has no timestamp.
# # enqueued_time_as_ts = true
# # iot_hub_enqueued_time_as_ts = true
#
# # Tags or fields to create from keys present in the application property bag.
# # These could for example be set by message enrichments in Azure IoT Hub.
# # application_property_tags = []
# # application_property_fields = []
#
# # Tag or field name to use for metadata
# # By default all metadata is disabled
# # sequence_number_field = "SequenceNumber"
# # enqueued_time_field = "EnqueuedTime"
# # offset_field = "Offset"
# # partition_id_tag = "PartitionID"
# # partition_key_tag = "PartitionKey"
# # iot_hub_device_connection_id_tag = "IoTHubDeviceConnectionID"
# # iot_hub_auth_generation_id_tag = "IoTHubAuthGenerationID"
# # iot_hub_connection_auth_method_tag = "IoTHubConnectionAuthMethod"
# # iot_hub_connection_module_id_tag = "IoTHubConnectionModuleID"
# # iot_hub_enqueued_time_field = "IoTHubEnqueuedTime"
#
# # Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"
#
# # Run executable as long-running input plugin
# # [[inputs.execd]]
# # Program to run as daemon
# # command = ["telegraf-smartctl", ",-d", ",/dev/sda"]
#
## Define how the process is signaled on each collection interval.

Valid values are:

- "none" : Do not signal anything.
- "STDIN" : Send a newline on STDIN.
- "SIGHUP" : Send a HUP signal. Not available on Windows.
- "SIGUSR1" : Send a USR1 signal. Not available on Windows.
- "SIGUSR2" : Send a USR2 signal. Not available on Windows.

```
signal = "none"
```

## Delay before the process is restarted after an unexpected termination

```
restart_delay = "10s"
```

## Data format to consume.

Each data format has its own unique set of configuration options, read more about them here:

```
data_format = "influx"
```

---

## gNMI telemetry input plugin

```
[[inputs.gnmi]]
```

### Address and port of the gNMI GRPC server

```
addresses = ["10.49.234.114:57777"]
```

### define credentials

```
username = "cisco"
password = "cisco"
```

### gNMI encoding requested (one of: "proto", "json", "json_ietf", "bytes")

```
# encoding = "proto"
```

### redial in case of failures after

```
redial = "10s"
```

### enable client-side TLS and define CA to authenticate the device

```
# enable_tls = true
# tls_ca = "/etc/telegraf/ca.pem"
# insecure_skip_verify = true
```

### define client-side TLS certificate & key to authenticate to the device

```
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
```

### gNMI subscription prefix (optional, can usually be left empty)

```
# origin = ""
# prefix = ""
```
# target = ""
#
# Define additional aliases to map telemetry encoding paths to simple measurement names
# [inputs.gnmi.aliases]
# ifcounters = "openconfig:/interfaces/interface/state/counters"
#
# Name of the measurement that will be emitted
# name = "ifcounters"
#
# Origin and path of the subscription
# See: https://github.com/openconfig/reference/blob/master/rpc/gnmi/gnmi-specification.md#222-paths
#
# origin usually refers to a (YANG) data model implemented by the device
# and path to a specific substructure inside it that should be subscribed to (similar to an XPath)
# YANG models can be found e.g. here: https://github.com/YangModels/yang/tree/master/vendor/cisco/xr
# origin = "openconfig-interfaces"
# path = "/interfaces/interface/state/counters"
#
# Subscription mode (one of: "target_defined", "sample", "on_change") and interval
# subscription_mode = "sample"
# sample_interval = "10s"
#
# Suppress redundant transmissions when measured values are unchanged
# suppress_redundant = false
#
# If suppression is enabled, send updates at least every X seconds anyway
# heartbeat_interval = "60s"

## Accept metrics over InfluxDB 1.x HTTP API
## [inputs.http_listener]
## Address and port to host InfluxDB listener on
# service_address = ":8186"
#
## maximum duration before timing out read of the request
# read_timeout = "10s"
## maximum duration before timing out write of the response
# write_timeout = "10s"
#
## Maximum allowed HTTP request body size in bytes.
## 0 means to use the default of 32MiB.
# max_body_size = "32MiB"
#
## Optional tag name used to store the database.
## If the write has a database in the query string then it will be kept in this tag name.
## This tag can be used in downstream outputs.
## The default value of nothing means it will be off and the database will not be recorded.
# database_tag = ""
#
# If set the retention policy specified in the write query will be added as
# the value of this tag name.
# retention_policy_tag = ""
#
# Set one or more allowed client CA certificate file names to
# enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# Add service certificate and key
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# Optional username and password to accept for HTTP basic authentication.
# You probably want to make sure you have TLS configured above for this.
# basic_username = "foobar"
# basic_password = "barfoo"

# Generic HTTP write listener
[[inputs.http_listener_v2]]
# Address and port to host HTTP listener on
# service_address = ":8080"
#
# Path to listen to.
# This option is deprecated and only available for backward-compatibility. Please use paths instead.
# path = ""
#
# Paths to listen to.
# paths = ["/telegraf"]
#
# Save path as http_listener_v2_path tag if set to true
# path_tag = false
#
# HTTP methods to accept.
# methods = ["POST", "PUT"]
#
# maximum duration before timing out read of the request
# read_timeout = "10s"
# maximum duration before timing out write of the response
# write_timeout = "10s"
#
# Maximum allowed http request body size in bytes.
# 0 means to use the default of 524,288,000 bytes (500 mebibytes)
# max_body_size = "500MB"
#
# Part of the request to consume. Available options are "body" and
## Accept metrics over InfluxDB 1.x HTTP API

```
[[inputs.influxdb_listener]]
```

### Address and port to host InfluxDB listener on

```
service_address = ":8186"
```

### maximum duration before timing out read of the request

```
read_timeout = "10s"
```

### maximum duration before timing out write of the response

```
write_timeout = "10s"
```

### Maximum allowed HTTP request body size in bytes. 0 means to use the default of 32MiB.

```
max_body_size = "32MiB"
```

### Optional tag name used to store the database.

If the write has a database in the query string then it will be kept in this tag name.

This tag can be used in downstream outputs.

The default value of nothing means it will be off and the database will not be recorded.

```
database_tag = ""
```
# If set the retention policy specified in the write query will be added as
# the value of this tag name.
# retention_policy_tag = ""

# Set one or more allowed client CA certificate file names to
# enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]

# Add service certificate and key
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"

# Optional username and password to accept for HTTP basic authentication.
# You probably want to make sure you have TLS configured above for this.
# basic_username = "foobar"
# basic_password = "barfoo"

# Accept metrics over InfluxDB 2.x HTTP API
[[inputs.influxdb_v2_listener]]
# Address and port to host InfluxDB listener on
# (Double check the port. Could be 9999 if using OSS Beta)
# service_address = ":8086"

# Maximum allowed HTTP request body size in bytes.
# 0 means to use the default of 32MiB.
# max_body_size = "32MiB"

# Optional tag to determine the bucket.
# If the write has a bucket in the query string then it will be kept in this tag name.
# This tag can be used in downstream outputs.
# The default value of nothing means it will be off and the database will not be recorded.
# bucket_tag = ""

# Set one or more allowed client CA certificate file names to
# enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]

# Add service certificate and key
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"

# Optional token to accept for HTTP authentication.
# You probably want to make sure you have TLS configured above for this.
# token = "some-long-shared-secret-token"

# Intel Performance Monitoring Unit plugin exposes Intel PMU metrics available through Linux Perf subsystem
# [inputs.intel_pmu]
# ## List of filesystem locations of JSON files that contain PMU event definitions.
# event_definitions = ["/var/cache/pmu/GenuineIntel-6-55-4-core.json", "/var/cache/pmu/GenuineIntel-6-55-4-uncore.json"]
#
# ## List of core events measurement entities. There can be more than one core_events sections.
# [[inputs.intel_pmu.core_events]]
# ## List of events to be counted. Event names shall match names from event_definitions files.
# ## Single entry can contain name of the event (case insensitive) augmented with config options and perf modifiers.
# ## If absent, all core events from provided event_definitions are counted skipping unresolvable ones.
# events = ["INST_RETIRED.ANY", "CPU_CLK_UNHALTED.THREAD_ANY:config1=0x4043200000000k"]
#
# ## Limits the counting of events to core numbers specified.
# ## If absent, events are counted on all cores.
# ## Single "0", multiple "0,1,2" and range "0-2" notation is supported for each array element.
# ## example: cores = ["0,2", "4", "12-16"]
# cores = ["0"]
#
# ## Indicator that plugin shall attempt to run core_events.events as a single perf group.
# ## If absent or set to false, each event is counted individually. Defaults to false.
# ## This limits the number of events that can be measured to a maximum of available hardware counters per core.
# ## Could vary depending on type of event, use of fixed counters.
# ## perf_group = false
#
# ## Optionally set a custom tag value that will be added to every measurement within this events group.
# ## Can be applied to any group of events, unrelated to perf_group setting.
# events_tag = ""
#
# ## List of uncore event measurement entities. There can be more than one uncore_events sections.
# [[inputs.intel_pmu.uncore_events]]
# ## List of events to be counted. Event names shall match names from event_definitions files.
# ## Single entry can contain name of the event (case insensitive) augmented with config options and perf modifiers.
# ## If absent, all uncore events from provided eventdefinitions are counted skipping unresolvable ones.
# events = ["UNC_CHA_CLOCKTICKS", "UNC_CHA_TOR_OCCUPANCY.IA_MISS"]
#
# ## Limits the counting of events to specified sockets.
# ## If absent, events are counted on all sockets.
# ## Single "0", multiple "0,1" and range "0-1" notation is supported for each array element.
# ## example: sockets = ["0-2"]
# sockets = ["0"]
#
# ## Indicator that plugin shall provide an aggregated value for multiple units of same type distributed in an uncore.
# ## If absent or set to false, events for each unit are exposed as separate metric. Defaults to false.
# ## aggregate_uncore_units = false
# Optionally set a custom tag value that will be added to every measurement within this events group.
# `events_tag = ""`

# Intel Resource Director Technology plugin
[
inputs.intel_rdt
]
# Optionally set sampling interval to Nx100ms.
# This value is propagated to pqos tool. Interval format is defined by pqos itself.
# If not provided or provided 0, will be set to 10 = 10x100ms = 1s.
# `sampling_interval = "10"`
#
# Optionally specify the path to pqos executable.
# If not provided, auto discovery will be performed.
# `pqos_path = "/usr/local/bin/pqos"`
#
# Optionally specify if IPC and LLC_Misses metrics shouldn't be propagated.
# If not provided, default value is false.
# `shortened_metrics = false`
#
# Specify the list of groups of CPU core(s) to be provided as pqos input.
# Mandatory if processes aren't set and forbidden if processes are specified.
# e.g. ["0-3", "4,5,6"] or ["1-3,4"]
# `cores = ["0-3"]`
#
# Specify the list of processes for which Metrics will be collected.
# Mandatory if cores aren't set and forbidden if cores are specified.
# e.g. ["qemu", "pmd"]
# `processes = ["process"]`
#
# Specify if the pqos process should be called with sudo.
# Mandatory if the telegraf process does not run as root.
# `use_sudo = false`

# Read JTI OpenConfig Telemetry from listed sensors
[
inputs.jti_openconfig_telemetry
]
# List of device addresses to collect telemetry from
# `servers = ["localhost:1883"]`
#
# Authentication details. Username and password are must if device expects
# authentication. Client ID must be unique when connecting from multiple instances
# of telegraf to the same device
# `username = "user"
# password = "pass"
# client_id = "telegraf"
#
# Frequency to get data
# sample_frequency = "1000ms"
#
# ## Sensors to subscribe for
# ## A identifier for each sensor can be provided in path by separating with space
# ## Else sensor path will be used as identifier
# ## When identifier is used, we can provide a list of space separated sensors.
# ## A single subscription will be created with all these sensors and data will
# ## be saved to measurement with this identifier name
# sensors = [
#    "/interfaces/",
#    "/collection /components/ /lldp",
#    "]
#
# ## We allow specifying sensor group level reporting rate. To do this, specify the
# ## reporting rate in Duration at the beginning of sensor paths / collection
# ## name. For entries without reporting rate, we use configured sample frequency
# sensors = [
#    "1000ms customReporting /interfaces /lldp",
#    "2000ms collection /components",
#    "/interfaces",
#    "]
#
# ## Optional TLS Config
# # enable_tls = true
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Delay between retry attempts of failed RPC calls or streams. Defaults to 1000ms.
# # Failed streams/calls will not be retried if 0 is provided
# retry_delay = "1000ms"
#
# # To treat all string values as tags, set this to true
# str_as_tags = false
#
# # Read metrics from Kafka topics
# [[inputs.kafka_consumer]]
# # Kafka brokers.
# # brokers = ["localhost:9092"]
# #
# # Topics to consume.
# # topics = ["telegraf"]
# #
# # When set this tag will be added to all metrics with the topic as the value.
# # topic_tag = ""
# # Optional Client id
# # client_id = "Telegraf"
#
# # Set the minimal supported Kafka version. Setting this enables the use of new
# # Kafka features and APIs. Must be 0.10.2.0 or greater.
# # ex: version = "1.1.0"
# # version = ""
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # # Optional SASL authentication credentials. These settings should typically be used
# # # with TLS encryption enabled
# # # with TLS encryption enabled
# # # sasl_username = "kafka"
# # # sasl_password = "secret"
#
# # # Optional SASL:
# # # One of: OAUTHBEARER, PLAIN, SCRAM-SHA-256, SCRAM-SHA-512, GSSAPI
# # # (defaults to PLAIN)
# # # sasl_mechanism = ""
#
# # # used if sasl_mechanism is GSSAPI (experimental)
# # # sasl_gssapi_service_name = ""
# # # One of: KRB5_USER_AUTH and KRB5_KEYTAB_AUTH
# # # sasl_gssapi_auth_type = "KRB5_USER_AUTH"
# # # sasl_gssapi_kerberos_config_path = "/"
# # # sasl_gssapi_realm = "realm"
# # # sasl_gssapi_key_tab_path = ""
# # # sasl_gssapi_disable_pafxfast = false
#
# # # used if sasl_mechanism is OAUTHBEARER (experimental)
# # # sasl_access_token = ""
#
# # # SASL protocol version. When connecting to Azure EventHub set to 0.
# # # sasl_version = 1
#
# # # Disable Kafka metadata full fetch
# # # metadata_full = false
#
# # # Name of the consumer group.
# # # consumer_group = "telegraf_metrics_consumers"
#
# # # Compression codec represents the various compression codecs recognized by
# Kafka in messages.
# 0 : None
# 1 : Gzip
# 2 : Snappy
# 3 : LZ4
# 4 : ZSTD
# compression_codec = 0
#
# Initial offset position; one of "oldest" or "newest".
# offset = "oldest"
#
# Consumer group partition assignment strategy; one of "range", "roundrobin" or "sticky".
# balance_strategy = "range"
#
# Maximum length of a message to consume, in bytes (default 0/unlimited);
# max_message_len = 1000000
#
# Maximum messages to read from the broker that have not been written by an
# output. For best throughput set based on the number of metrics within
# each message and the size of the output's metric_batch_size.
#
# For example, if each message from the queue contains 10 metrics and the
# output metric_batch_size is 1000, setting this to 100 will ensure that a
# full batch is collected and the write is triggered immediately without
# waiting until the next flush_interval.
# max_undelivered_messages = 1000
#
# Maximum amount of time the consumer should take to process messages. If
# the debug log prints messages from sarama about 'abandoning subscription
# to [topic] because consuming was taking too long', increase this value to
# longer than the time taken by the output plugin(s).
#
# Note that the effective timeout could be between 'max_processing_time' and
# '2 * max_processing_time'.
# max_processing_time = "100ms"
#
# Data format to consume.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# Read metrics from Kafka topic(s)
[[inputs.kafka_consumer_legacy]]
# DEPRECATED: The 'kafka_consumer_legacy' plugin is deprecated in version 1.4.0, use
# 'inputs.kafka_consumer' instead. NOTE: 'kafka_consumer' only supports Kafka v0.8+.
# ## topic(s) to consume
# topics = ["telegraf"]
#
# ## an array of Zookeeper connection strings
# zookeeper_peers = ["localhost:2181"]
#
# ## Zookeeper Chroot
# zookeeper_chroot = ""
#
# ## the name of the consumer group
# consumer_group = "telegraf_metrics_consumers"
#
# ## Offset (must be either "oldest" or "newest")
# offset = "oldest"
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# ## Maximum length of a message to consume, in bytes (default 0/unlimited);
# ## larger messages are dropped
# max_message_len = 65536

# Configuration for the AWS Kinesis input.
# [[inputs.kinesis_consumer]]
# ## Amazon REGION of kinesis endpoint.
# region = "ap-southeast-2"
#
# ## Amazon Credentials
# ## Credentials are loaded in the following order
# ## 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# ## 2) Assumed credentials via STS if role_arn is specified
# ## 3) explicit credentials from 'access_key' and 'secret_key'
# ## 4) shared profile from 'profile'
# ## 5) environment variables
# ## 6) shared credentials file
# ## 7) EC2 Instance Profile
# # access_key = ""
# # secret_key = ""
# # token = ""
# # role_arn = ""
# # web_identity_token_file = ""
# # role_session_name = ""
# # profile = ""
# # shared_credential_file = ""
## Endpoint to make request against, the correct endpoint is automatically determined and this option should only be set if you wish to override the default.

**ex: endpoint_url = "http://localhost:8000"**

**endpoint_url = ""**

### Kinesis StreamName must exist prior to starting telegraf.

**streamname = "StreamName"**

### Shard iterator type (only 'TRIM_HORIZON' and 'LATEST' currently supported)

**shard_iterator_type = "TRIM_HORIZON"**

### Maximum messages to read from the broker that have not been written by an output. For best throughput set based on the number of metrics within each message and the size of the output's metric_batch_size.

**max_undelivered_messages = 1000**

### Data format to consume.

### Each data format has its own unique set of configuration options, read more about them here:

**https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md**

**data_format = "influx"**

### The content encoding of the data from kinesis

**content_encoding = "identity"**

### Optional

### Configuration for a dynamodb checkpoint

### [inputs.kinesis_consumer.checkpoint_dynamodb]

**app_name = "default"**

**table_name = "default"**

### Listener capable of handling KNX bus messages provided through a KNX-IP Interface.

### [[inputs.knx_listener]]
## Type of KNX-IP interface.
## Can be either "tunnel" or "router".

```
# service_type = "tunnel"
```

## Address of the KNX-IP interface.

```
# service_address = "localhost:3671"
```

## Measurement definition(s)

```
# [[[inputs.knx_listener.measurement]]
#   ## Name of the measurement
#   # name = "temperature"
#   ## Datapoint-Type (DPT) of the KNX messages
#   # dpt = "9.001"
#   ## List of Group-Addresses (GAs) assigned to the measurement
#   # addresses = ["5/5/1"]
#
# [[[inputs.knx_listener.measurement]]
#   # name = "illumination"
#   # dpt = "9.004"
#   # addresses = ["5/5/3"]
```

## Read metrics off Arista LANZ, via socket

```
# [[[inputs.lanz]]
#   ## URL to Arista LANZ endpoint
#   servers = [
#     "tcp://127.0.0.1:50001"
#   ]
```

## Stream and parse log file(s).

```
# [[[inputs.logparser]]
#   ## DEPRECATED: The 'logparser' plugin is deprecated in version 1.15.0, use 'inputs.tail' with 'grok' data format instead.
#   ## These accept standard unix glob matching rules, but with the addition of
#   # ** as a "super asterisk". ie:
#   # /var/log/**.log -> recursively find all .log files in /var/log
#   # /var/log/*/*.log -> find all .log files with a parent dir in /var/log
#   # /var/log/apache.log -> only tail the apache log file
#   files = ["/var/log/apache/access.log"]
#   # Read files that currently exist from the beginning. Files that are created
#   # while telegraf is running (and that match the "files" globs) will always
#   # be read from the beginning.
#   from_beginning = false
#   # Method used to watch for file updates. Can be either "inotify" or "poll".
```
Parse logstash-style "grok" patterns:

This is a list of patterns to check the given log file(s) for.
Note that adding patterns here increases processing time. The most efficient configuration is to have one pattern per logparser.

Other common built-in patterns are:

%{COMMON_LOG_FORMAT} (plain apache & nginx access logs)
%{COMBINED_LOG_FORMAT} (access logs + referrer & agent)

patterns = [%{COMBINED_LOG_FORMAT}]

Name of the outputted measurement name.
measurement = "apache_access_log"

t Full path(s) to custom pattern files.
custom_pattern_files = []

custom patterns can also be defined here. Put one pattern per line.
custom_patterns = ""

Timezone allows you to provide an override for timestamps that don't already include an offset
e.g. 04/06/2016 12:41:45 data one two 5.43µs

default: "" which renders UTC

Options are as follows:

1. Local -- interpret based on machine localtime
3. UTC -- or blank/unspecified, will return timestamp in UTC

timezone = "Canada/Eastern"

When set to "disable", timestamp will not incremented if there is a duplicate.
unique_timestamp = "auto"

Read metrics from MQTT topic(s)

Broker URLs for the MQTT server or cluster. To connect to multiple clusters or standalone servers, use a separate plugin instance.
e.g. example: servers = ["tcp://localhost:1883"]

servers = ["ssl://localhost:1883"]

servers = ["ws://localhost:1883"]
servers = ["tcp://127.0.0.1:1883"]

Topics that will be subscribed to.
# topics = [
#   "telegraf/host01/cpu",
#   "telegraf/+/-/mem",
#   "sensors/#",
# ]
#
# # topic_fields = "/_/_/temperature"
# ## The message topic will be stored in a tag specified by this value. If set
# ## to the empty string no topic tag will be created.
# # topic_tag = "topic"
# ## QoS policy for messages
# ##   0 = at most once
# ##   1 = at least once
# ##   2 = exactly once
# ##
# ## When using a QoS of 1 or 2, you should enable persistent_session to allow
# ## resuming unacknowledged messages.
# # qos = 0
# ## Connection timeout for initial connection in seconds
# # connection_timeout = "30s"
# ## Maximum messages to read from the broker that have not been written by an
# ## output. For best throughput set based on the number of metrics within
# ## each message and the size of the output's metric_batch_size.
# ##
# ## For example, if each message from the queue contains 10 metrics and the
# ## output metric_batch_size is 1000, setting this to 100 will ensure that a
# ## full batch is collected and the write is triggered immediately without
# ## waiting until the next flush_interval.
# # max_undelivered_messages = 1000
# ## Persistent session disables clearing of the client session on connection.
# ## In order for this option to work you must also set client_id to identify
# ## the client. To receive messages that arrived while the client is offline,
# ## also set the qos option to 1 or 2 and don't forget to also set the QoS when
# ## publishing.
# # persistent_session = false
# ## If unset, a random client ID will be generated.
# # client_id = ""
# ## Username and password to connect MQTT server.
# # username = "telegraf"
# # password = "metricsmetricsmetricsmetrics"
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
## Enable extracting tag values from MQTT topics

### [[inputs.mqtt_consumer.topic_parsing]]

- **topic** = ""
- **measurement** = ""
- **tags** = ""
- **fields** = ""

### [inputs.mqtt_consumer.topic_parsing.types]

### Read metrics from NATS subject(s)

### [[inputs.nats_consumer]]

- **urls** of NATS servers
  - **servers** = ["nats://localhost:4222"]
- **subject(s)** to consume
  - **subjects** = ["telegraf"]
- **name** a queue group
  - **queue_group** = "telegraf_consumers"
- **Optional credentials**
  - **username** = ""
  - **password** = ""
- **Optional NATS 2.0 and NATS NGS compatible user credentials**
  - **credentials** = "/etc/telegraf/nats.creds"
- **Use Transport Layer Security**
  - **secure** = false
- **Optional TLS Config**
  - **tls_ca** = "/etc/telegraf/ca.pem"
  - **tls_cert** = "/etc/telegraf/cert.pem"
  - **tls_key** = "/etc/telegraf/key.pem"
  - **Use TLS but skip chain & host verification**
    - **insecure_skip_verify** = false
- **Sets the limits for pending msgs and bytes for each subscription**
  - **pending_message_limit** = 65536
  - **pending_bytes_limit** = 67108864
- **Maximum messages to read from the broker that have not been written by an output. For best throughput set based on the number of metrics within**
# ## For each message and the size of the output's metric_batch_size.

# ## For example, if each message from the queue contains 10 metrics and the
# ## output metric_batch_size is 1000, setting this to 100 will ensure that a
# ## full batch is collected and the write is triggered immediately without
# ## waiting until the next flush_interval.

# max_undelivered_messages = 1000

# ## Data format to consume.

# Each data format has its own unique set of configuration options, read
# more about them here:

# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md

# data_format = "influx"


# ## Read NSQ topic for metrics.

# [[inputs.nsq_consumer]]

# Server option still works but is deprecated, we just prepend it to the nsqd array.

# server = "localhost:4150"

# ## An array representing the NSQD TCP HTTP Endpoints

# nsqd = ["localhost:4150"]

# ## An array representing the NSQLookupd HTTP Endpoints

# nsqlookupd = ["localhost:4161"]

# topic = "telegraf"

# channel = "consumer"

# max_in_flight = 100

# ## Maximum messages to read from the broker that have not been written by an
# ## output. For best throughput set based on the number of metrics within

# ## each message and the size of the output's metric_batch_size.

# ## For example, if each message from the queue contains 10 metrics and the
# ## output metric_batch_size is 1000, setting this to 100 will ensure that a
# ## full batch is collected and the write is triggered immediately without
# ## waiting until the next flush_interval.

# max_undelivered_messages = 1000

# ## Data format to consume.

# Each data format has its own unique set of configuration options, read
# more about them here:

# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md

# data_format = "influx"


# Receive OpenTelemetry traces, metrics, and logs over gRPC

# [[inputs.opentelemetry]]
# # Override the default (0.0.0.0:4317) destination OpenTelemetry gRPC service
# # address:port
# # service_address = "0.0.0.0:4317"
#
# # Override the default (5s) new connection timeout
# # timeout = "5s"
#
# # Override the default (prometheus-v1) metrics schema.
# # Supports: "prometheus-v1", "prometheus-v2"
# # For more information about the alternatives, read the Prometheus input
# # plugin notes.
# # metrics_schema = "prometheus-v1"
#
# # Optional TLS Config.
# # For advanced options: https://github.com/influxdata/telegraf/blob/v1.18.3/docs/TLS.md
# #
# # Set one or more allowed client CA certificate file names to enable mutually authenticated TLS connections.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
# # Add service certificate and key.
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"

# # Read metrics from one or many pgbouncer servers
# [inputs.pgbouncer]
# # specify address via a url matching:
# # postgres://[pqgotest[:password]]@localhost[/dbname]?
# ## sslmode=[disable|verify-ca|verify-full]
# # or a simple string:
# # host=localhost user=pqgotest password=... sslmode=... dbname=app_production
# #
# # All connection parameters are optional.
# #
# # address = "host=localhost user=pgbouncer sslmode=disable"

# # Read metrics from one or many postgresql servers
# [inputs.postgresql]
# # specify address via a url matching:
# # postgres://[pqgotest[:password]]@localhost[/dbname]?
# ## sslmode=[disable|verify-ca|verify-full]
# # or a simple string:
# # host=localhost user=pqgotest password=... sslmode=... dbname=app_production
# #
# # All connection parameters are optional.
# #
# # Without the dbname parameter, the driver will default to a database
Open Source Used In BGP TE Controller Version 4.3.0

# with the same name as the user. This dbname is just for instantiating a
# connection with the server and doesn't restrict the databases we are trying
# to grab metrics for.
#
# address = "host=localhost user=postgres sslmode=disable"
# A custom name for the database that will be used as the "server" tag in the
# measurement output. If not specified, a default one generated from
# the connection address is used.
# outputaddress = "db01"
#
# connection configuration.
# maxlifetime - specify the maximum lifetime of a connection.
# default is forever (0s)
max_lifetime = "0s"
#
# A list of databases to explicitly ignore. If not specified, metrics for all
# databases are gathered. Do NOT use with the 'databases' option.
# ignored_databases = ["postgres", "template0", "template1"]
#
# A list of databases to pull metrics about. If not specified, metrics for all
# databases are gathered. Do NOT use with the 'ignored_databases' option.
# databases = ["app_production", "testing"]

# Read metrics from one or many postgresql servers
# [inputs.postgresql_extensible]
# specify address via a url matching:
# postgres://[pqgotest[:password]]@localhost/[dbname]/
# ?sslmode=[disable|verify-ca|verify-full]
# or a simple string:
# host=localhost user=pqgotest password=... sslmode=... dbname=app_production
#
# All connection parameters are optional.
# Without the dbname parameter, the driver will default to a database
# with the same name as the user. This dbname is just for instantiating a
# connection with the server and doesn't restrict the databases we are trying
# to grab metrics for.
#
# address = "host=localhost user=postgres sslmode=disable"
#
# connection configuration.
# maxlifetime - specify the maximum lifetime of a connection.
# default is forever (0s)
max_lifetime = "0s"
#
# A list of databases to pull metrics about. If not specified, metrics for all
# databases are gathered.
# databases = ["app_production", "testing"]
# A custom name for the database that will be used as the "server" tag in the measurement output. If not specified, a default one generated from the connection address is used.
# outputaddress = "db01"

# Define the toml config where the sql queries are stored
# New queries can be added, if the withdbname is set to true and there is no databases defined in the 'databases field', the sql query is ended by a 'is not null' in order to make the query succeed.

# Example:
# The sqlquery : "SELECT * FROM pg_stat_database where datname" become "SELECT * FROM pg_stat_database where datname IN ('postgres', 'pgbench')"
# because the databases variable was set to ['postgres', 'pgbench'] and the withdbname was true. Be careful that if the withdbname is set to false you don't have to define the where clause (aka with the dbname) the tagvalue field is used to define custom tags (separated by commas)
# The optional "measurement" value can be used to override the default output measurement name ("postgresql").
#
# The script option can be used to specify the .sql file path.
# If script and sqlquery options specified at same time, sqlquery will be used
#
# the tagvalue field is used to define custom tags (separated by comas).
# the query is expected to return columns which match the names of the defined tags. The values in these columns must be of a string-type, a number-type or a blob-type.
#
# The timestamp field is used to override the data points timestamp value. By default, all rows inserted with current time. By setting a timestamp column, the row will be inserted with that column's value.
#
# Structure :
# [inputs.postgresql_extensible.query]
# sqlquery string
# version string
# withdbname boolean
# tagvalue string (comma separated)
# measurement string
# timestamp string
# [inputs.postgresql_extensible.query]
# sqlquery="SELECT * FROM pg_stat_database" version=901
# withdbname=false
# tagvalue=""
# measurement=""
# [inputs.postgresql_extensible.query]
# sqlquery="SELECT * FROM pg_stat_bgwriter"
# version=901
# withdbname=false
# tagvalue="postgresql.stats"

# # Read metrics from one or many prometheus clients
# [[inputs.prometheus]]
# # An array of urls to scrape metrics from.
# urls = ["http://localhost:9100/metrics"]
#
# # Metric version controls the mapping from Prometheus metrics into
# # Telegraf metrics. When using the prometheus_client output, use the same
# # value in both plugins to ensure metrics are round-tripped without
# # modification.
##
# # example: metric_version = 1;
# # metric_version = 2; recommended version
# # metric_version = 1
#
# # Url tag name (tag containing scrapped url. optional, default is "url")
# # url_tag = "url"
#
# # Whether the timestamp of the scraped metrics will be ignored.
# # If set to true, the gather time will be used.
# # ignore_timestamp = false
#
# # An array of Kubernetes services to scrape metrics from.
# # kubernetes_services = ["http://my-service-dns.my-namespace:9100/metrics"]
#
# # Kubernetes config file to create client from.
# # kube_config = "/path/to/kubernetes.config"
#
# # Scrape Kubernetes pods for the following prometheus annotations:
# # - prometheus.io/scrape: Enable scraping for this pod
# # - prometheus.io/scheme: If the metrics endpoint is secured then you will need to
# #   set this to 'https' & most likely set the tls config.
# # - prometheus.io/path: If the metrics path is not /metrics, define it with this annotation.
# # - prometheus.io/port: If port is not 9102 use this annotation
# # monitor_kubernetes_pods = true
# # Get the list of pods to scrape with either the scope of
# # - cluster: the kubernetes watch api (default, no need to specify)
# # - node: the local cadvisor api; for scalability. Note that the config node_ip or the environment variable
# #   NODE_IP must be set to the host IP.
# # pod_scrape_scope = "cluster"
# # Only for node scrape scope: node IP of the node that telegraf is running on.
# # Either this config or the environment variable NODE_IP must be set.
# # node_ip = "10.180.1.1"
# # Only for node scrape scope: interval in seconds for how often to get updated pod list for scraping.
## Default is 60 seconds.
## pod_scrape_interval = 60
# ## Restricts Kubernetes monitoring to a single namespace
# ## ex: monitor_kubernetes_pods_namespace = "default"
# # monitor_kubernetes_pods_namespace = ""
# # label selector to target pods which have the label
# # kubernetes_label_selector = "env=dev,app=nginx"
# # field selector to target pods
# # eg. To scrape pods on a specific node
# # kubernetes_field_selector = "spec.nodeName=${HOSTNAME}"
#
# ## Scrape Services available in Consul Catalog
# # [inputs.prometheus.consul]
# # enabled = true
# # agent = "http://localhost:8500"
# # query_interval = "5m"
#
# # [inputs.prometheus.consul.query]
# # name = "a service name"
# # tag = "a service tag"
# # url = 'http://{{if ne .ServiceAddress ""}}{{.ServiceAddress}}{{else}}{{.Address}}{{end}}:{{.ServicePort}}/{{with .ServiceMeta.metrics_path}}{{.}}{{else}}metrics{{end}}'
# # [inputs.prometheus.consul.query.tags]
# # host = "{{.Node}}"
#
# ## Use bearer token for authorization. (bearer_token takes priority)
# # bearer_token = "/path/to/bearer/token"
# ## OR
# # bearer_token_string = "abc_123"
#
# ## HTTP Basic Authentication username and password. (bearer_token and
# ## bearer_token_string take priority)
# # username = ""
# # password = ""
#
# ## Specify timeout duration for slower prometheus clients (default is 3s)
# # response_timeout = "3s"
#
# ## Optional TLS Config
# # tls_ca = /path/to/cafile
# # tls_cert = /path/to/certfile
# # tls_key = /path/to/keyfile
# # ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## RAS plugin exposes counter metrics for Machine Check Errors provided by RASDaemon (sqlite3 output is
required).
# [[[inputs.ras]]]
# ## Optional path to RASDaemon sqlite3 database.
# ## Default: /var/lib/rasdaemon/ras-mc_event.db
# # db_path = ""

## Riemann protobuf listener.
# [[[inputs.riemann_listener]]]
# ## URL to listen on.
# ## Default is "tcp://:5555"
# # service_address = "tcp://:8094"
# # service_address = "tcp://127.0.0.1:8094"
# # service_address = "tcp4://:8094"
# # service_address = "tcp6://:8094"
# # service_address = "tcp6://[2001:db8::1]:8094"
# # Maximum number of concurrent connections.
# ## 0 (default) is unlimited.
# # max_connections = 1024
# # Read timeout.
# ## 0 (default) is unlimited.
# # read_timeout = "30s"
# ## Optional TLS configuration.
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Enables client authentication if set.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
# ## Maximum socket buffer size (in bytes when no unit specified).
# # read_buffer_size = "64KiB"
# ## Period between keep alive probes.
# ## 0 disables keep alive probes.
# ## Defaults to the OS configuration.
# # keep_alive_period = "5m"

## SFLOW V5 Protocol Listener
# [[[inputs.sflow]]]
# ## Address to listen for sFlow packets.
# ## example: service_address = "udp://:6343"
# # service_address = "udp://:6343"
# # service_address = "udp4://:6343"
# # service_address = "udp6://:6343"
# # service_address = "udp://:6343"
# # Set the size of the operating system's receive buffer.
# ## example: read_buffer_size = "64KiB"
# # read_buffer_size = ""
## Receive SNMP traps

```
# [[[inputs.snmp_trap]]]
# ### Transport, local address, and port to listen on. Transport must
# ### be "udp://". Omit local address to listen on all interfaces.
# ### example: "udp://127.0.0.1:1234"
# ###
# # service_address = "udp://:162"
# ###
# ### Path to mib files
# # path = ["/usr/share/snmp/mibs"]
# ###
# ### Deprecated in 1.20.0; no longer running snmptranslate
# ### Timeout running snmptranslate command
# # timeout = "5s"
# ### Snmp version, defaults to 2c
# # version = "2c"
# ### SNMPv3 authentication and encryption options.
# ###
# ### Security Name.
# # sec_name = "myuser"
# ### Authentication protocol; one of "MD5", "SHA" or "".
# # auth_protocol = "MD5"
# ### Authentication password.
# # auth_password = "pass"
# ### Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".
# # sec_level = "authNoPriv"
# ### Privacy protocol used for encrypted messages; one of "DES", "AES", "AES192", "AES192C", "AES256", "AES256C" or "".
# # priv_protocol = ""
# ### Privacy password used for encrypted messages.
# # priv_password = ""
```

## Generic socket listener capable of handling multiple socket types.

```
# [[[inputs.socket_listener]]]
# ### URL to listen on
# # service_address = "tcp://:8094"
# # service_address = "tcp://127.0.0.1:http"
# # service_address = "tcp4://:8094"
# # service_address = "tcp6://:8094"
# # service_address = "tcp6://[2001:db8::1]:8094"
# # service_address = "udp://:8094"
# # service_address = "udp4://:8094"
# # service_address = "udp6://:8094"
```
# # service_address = "unix:///tmp/telegraf.sock"
# # service_address = "unixgram:///tmp/telegraf.sock"
#
# ## Change the file mode bits on unix sockets. These permissions may not be
# ## respected by some platforms, to safely restrict write permissions it is best
# ## to place the socket into a directory that has previously been created
# ## with the desired permissions.
# ## ex: socket_mode = "777"
# # socket_mode = ""
#
# ## Maximum number of concurrent connections.
# ## Only applies to stream sockets (e.g. TCP).
# ## 0 (default) is unlimited.
# # max_connections = 1024
#
# ## Read timeout.
# ## Only applies to stream sockets (e.g. TCP).
# ## 0 (default) is unlimited.
# # read_timeout = "30s"
#
# ## Optional TLS configuration.
# ## Only applies to stream sockets (e.g. TCP).
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Enables client authentication if set.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# ## Maximum socket buffer size (in bytes when no unit specified).
# ## For stream sockets, once the buffer fills up, the sender will start backing up.
# ## For datagram sockets, once the buffer fills up, metrics will start dropping.
# ## Defaults to the OS default.
# # read_buffer_size = "64KiB"
#
# ## Period between keep alive probes.
# ## Only applies to TCP sockets.
# ## 0 disables keep alive probes.
# ## Defaults to the OS configuration.
# # keep_alive_period = "5m"
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"
#
# ## Content encoding for message payloads, can be set to "gzip" to or
# ## "identity" to apply no encoding.
# # content_encoding = "identity"
## Read metrics from SQL queries

### [inputs.sql]

### Database Driver

### See https://github.com/influxdata/telegraf/blob/master/docs/SQL_DRIVERS_INPUT.md for a list of supported drivers.

### driver = "mysql"

### Data source name for connecting

### The syntax and supported options depends on selected driver.

### dsn = "username:password@mysqlserver:3307/dbname?param=value"

### Timeout for any operation

### Note that the timeout for queries is per query not per gather.

### timeout = "5s"

### Connection time limits

### By default the maximum idle time and maximum lifetime of a connection is unlimited, i.e. the connections will not be closed automatically. If you specify a positive time, the connections will be closed after idling or existing for at least that amount of time, respectively.

### connection_max_idle_time = "0s"

### connection_max_life_time = "0s"

### Connection count limits

### By default the number of open connections is not limited and the number of maximum idle connections will be inferred from the number of queries specified. If you specify a positive number for any of the two options, connections will be closed when reaching the specified limit. The number of idle connections will be clipped to the maximum number of connections limit if any.

### connection_max_open = 0

### connection_max_idle = auto

### Query to perform on the server

### query="SELECT user,state,latency,score FROM Scoreboard WHERE application > 0"

### Alternatively to specifying the query directly you can select a file here containing the SQL query.

### Only one of 'query' and 'query_script' can be specified!

### query_script = "/path/to/sql/script.sql"

### Name of the measurement

### In case both measurement and 'measurement_col' are given, the latter takes precedence.

### measurement = "sql"

### Column name containing the name of the measurement

### If given, this will take precedence over the 'measurement' setting. In case a query result does not contain the specified column, we fall-back to the 'measurement' setting.

### measurement_column = ""
## Read metrics from Microsoft SQL Server

```yaml
[[inputs.sqlserver]]
```

### Specify instances to monitor with a list of connection strings.

#### All connection parameters are optional.

#### By default, the host is localhost, listening on default port, TCP 1433.

#### for Windows, the user is the currently running AD user (SSO).

#### See https://github.com/denisenkom/go-mssqldb for detailed connection parameters, in particular, tls connections can be created like so:

```yaml
servers = [
  "Server=192.168.1.10;Port=1433;User Id=<user>;Password=<pw>;app name=telegraf;log=1;",
]
```

### Authentication method

#### valid methods: "connection_string", "AAD"
# auth_method = "connection_string"
#
### "database_type" enables a specific set of queries depending on the database type. If specified, it replaces azuredb = true/false and query_version = 2
### In the config file, the sql server plugin section should be repeated each with a set of servers for a specific database_type.
### Possible values for database_type are - "SQLServer" or "AzureSQLDB" or "AzureSQLManagedInstance" or "AzureSQLPool"
#
# database_type = "SQLServer"
#
### A list of queries to include. If not specified, all the below listed queries are used.
# include_query = []
#
### A list of queries to explicitly ignore.
# exclude_query = ["SQLServerAvailabilityReplicaStates", "SQLServerDatabaseReplicaStates"]
#
### Queries enabled by default for database_type = "SQLServer" are -
### SQLServerPerformanceCounters, SQLServerWaitStatsCategorized, SQLServerDatabaseIO,
### SQLServerProperties, SQLServerMemoryClerks,
### SQLServerSchedulers, SQLServerRequests, SQLServerVolumeSpace, SQLServerCpu,
### SQLServerAvailabilityReplicaStates, SQLServerDatabaseReplicaStates
#
### Queries enabled by default for database_type = "AzureSQLDB" are -
### AzureSQLDBResourceStats, AzureSQLDBResourceGovernance, AzureSQLDBWaitStats,
### AzureSQLDBDatabaseIO, AzureSQLDBServerProperties,
### AzureSQLDBOsWithWaitstats, AzureSQLDBMemoryClerks, AzureSQLDBPerformanceCounters,
### AzureSQLDBRequests, AzureSQLDBSchedulers
#
### Queries enabled by default for database_type = "AzureSQLManagedInstance" are -
### AzureSQLMIResourceStats, AzureSQLMIResourceGovernance, AzureSQLMIDatabaseIO,
### AzureSQLMIProperties, AzureSQLMIWaitstats,
### AzureSQLMIMemoryClerks, AzureSQLMIPerformanceCounters, AzureSQLMIRequests,
### AzureSQLMISchedulers
#
### Queries enabled by default for database_type = "AzureSQLPool" are -
### AzureSQLPoolResourceStats, AzureSQLPoolResourceGovernance, AzureSQLPoolDatabaseIO,
### AzureSQLPoolWaitStats,
### AzureSQLPoolMemoryClerks, AzureSQLPoolPerformanceCounters, AzureSQLPoolSchedulers
#
### Following are old config settings
### You may use them only if you are using the earlier flavor of queries, however it is recommended to use
### the new mechanism of identifying the database_type there by use it's corresponding queries
#
### Optional parameter, setting this to 2 will use a new version
### of the collection queries that break compatibility with the original
### dashboards.
### Version 2 - is compatible from SQL Server 2012 and later versions and also for SQL Azure DB
## query_version = 2
#
## If you are using AzureDB, setting this to true will gather resource utilization metrics
## azuredb = false

## Statsd UDP/TCP Server
## [[inputs.statsd]]
## Protocol, must be "tcp", "udp", "udp4" or "udp6" (default=udp)
## protocol = "udp"
#
## MaxTCPConnection - applicable when protocol is set to tcp (default=250)
## max_tcp_connections = 250
#
## Enable TCP keep alive probes (default=false)
## tcp_keep_alive = false
#
## Specifies the keep-alive period for an active network connection.
## Only applies to TCP sockets and will be ignored if tcp_keep_alive is false.
## Defaults to the OS configuration.
## tcp_keep_alive_period = "2h"
#
## Address and port to host UDP listener on
## service_address = ":8125"
#
## The following configuration options control when telegraf clears it's cache
## of previous values. If set to false, then telegraf will only clear it's
## cache when the daemon is restarted.
## Reset gauges every interval (default=true)
## delete_gauges = true
## Reset counters every interval (default=true)
## delete_counters = true
## Reset sets every interval (default=true)
## delete_sets = true
## Reset timings & histograms every interval (default=true)
## delete_timings = true
#
## Percentiles to calculate for timing & histogram stats
## percentiles = [50.0, 90.0, 99.0, 99.9, 99.95, 100.0]
#
## separator to use between elements of a statsd metric
## metric_separator = " _ "
#
## Parses tags in the datadog statsd format
## http://docs.datadoghq.com/guides/dogstatsd/
## parse_data_dog_tags = false
#
## Parses datadog extensions to the statsd format
# datadog_extensions = false

# ## Parses distributions metric as specified in the datadog statsd format
# ## https://docs.datadoghq.com/developers/metrics/types/?tab=distribution#definition
# datadog_distributions = false

# ## Statsd data translation templates, more info can be read here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/TEMPLATE_PATTERN.md
# templates = [  
#   "cpu.* measurement*"
# ]

# ## Number of UDP messages allowed to queue up, once filled,
# the statsd server will start dropping packets
# allowed_pending_messages = 10000

# ## Number of timing/histogram values to track per-measurement in the
# ## calculation of percentiles. Raising this limit increases the accuracy
# ## of percentiles but also increases the memory usage and cpu time.
# percentile_limit = 1000

# ## Max duration (TTL) for each metric to stay cached/reported without being updated.
# max_ttl = "1000h"

# ## Suricata stats and alerts plugin
# [[inputs.suricata]]
# ## Data sink for Suricata stats and alerts logs
# This is expected to be a filename of a
# unix socket to be created for listening.
# source = "/var/run/suricata-stats.sock"

# # Delimiter for flattening field keys, e.g. subitem "alert" of "detect"
# becomes "detect_alert" when delimiter is ".".
# delimiter = "."

# ## Detect alert logs
# alerts = false

# ## Accepts syslog messages following RFC5424 format with transports as per RFC5426, RFC5425, or RFC6587
# [[inputs.syslog]]
# ## Specify an ip or hostname with port - eg., tcp://localhost:6514, tcp://10.0.0.1:6514
# ## Protocol, address and port to host the syslog receiver.
# If no host is specified, then localhost is used.
# If no port is specified, 6514 is used (RFC5425#section-4.1).
# server = "tcp://6514"
## TLS Config

# tls_allowed_cacerts = ["/etc/telegraf/ca.pem"]
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"

## Period between keep alive probes.
## 0 disables keep alive probes.
## Defaults to the OS configuration.
## Only applies to stream sockets (e.g. TCP).
# keep_alive_period = "5m"

## Maximum number of concurrent connections (default = 0).
## 0 means unlimited.
## Only applies to stream sockets (e.g. TCP).
# max_connections = 1024

## Read timeout is the maximum time allowed for reading a single message (default = 5s).
## 0 means unlimited.
# read_timeout = "5s"

## The framing technique with which it is expected that messages are transported (default = "octet-counting").
## Whether the messages come using the octet-counting (RFC5425#section-4.3.1, RFC6587#section-3.4.1),
## or the non-transparent framing technique (RFC6587#section-3.4.2).
## Must be one of "octet-counting", "non-transparent".
# framing = "octet-counting"

## The trailer to be expected in case of non-transparent framing (default = "LF").
## Must be one of "LF", or "NUL".
# trailer = "LF"

## Whether to parse in best effort mode or not (default = false).
# best_effort = false

## The RFC standard to use for message parsing
## By default RFC5424 is used. RFC3164 only supports UDP transport (no streaming support)
## Must be one of "RFC5424", or "RFC3164".
# syslog_standard = "RFC5424"

## Character to prepend to SD-PARAMs (default = ".").
## A syslog message can contain multiple parameters and multiple identifiers within structured data section.
## Eg., [id1 name1="val1" name2="val2"][id2 name1="val1" nameA="valA"]
## For each combination a field is created.
## Its name is created concatenating identifier, sdparam_separator, and parameter name.
# sdparam_separator = "."

## Parse the new lines appended to a file
# [inputs.tail]
#
# File names or a pattern to tail.
# These accept standard unix glob matching rules, but with the addition of
# ** as a "super asterisk". ie:
# 
# */var/log/**.log" -> recursively find all .log files in /var/log
# */var/log/*/#.log" -> find all .log files with a parent dir in /var/log
# */var/log/apache.log" -> just tail the apache log file
# */var/log/log[1-2]* -> tail files without 1-2
# */var/log/log[^1-2]* -> identical behavior as above
# See https://github.com/gobwas/glob for more examples
#
# files = ["/var/mymetrics.out"]
#
# Read file from beginning.
# from_beginning = false
#
# Whether file is a named pipe
# pipe = false
#
# Method used to watch for file updates. Can be either "inotify" or "poll".
# watch_method = "inotify"
#
# Maximum lines of the file to process that have not yet been written by the
# output. For best throughput set based on the number of metrics on each
# line and the size of the output's metric_batch_size.
# max_undelivered_lines = 1000
#
# Character encoding to use when interpreting the file contents. Invalid
# characters are replaced using the unicode replacement character. When set
# to the empty string the data is not decoded to text.
# character_encoding = "utf-8"
# character_encoding = "utf-16le"
# character_encoding = "utf-16be"
# character_encoding = ""
#
# Data format to consume.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# Set the tag that will contain the path of the tailed file. If you don't want this tag, set it to an empty string.
# path_tag = "path"
#
# multiline parser/codec
# [inputs.tail.multiline]
## The pattern should be a regexp which matches what you believe to be an indicator that the field is part of an event consisting of multiple lines of log data.

# pattern = "^\s"  

## This field must be either "previous" or "next".

# If a line matches the pattern, "previous" indicates that it belongs to the previous line, whereas "next" indicates that the line belongs to the next one.

# match_which_line = "previous"  

## The invert_match field can be true or false (defaults to false).

# If true, a message not matching the pattern will constitute a match of the multiline filter and the what will be applied. (vice-versa is also true)

# invert_match = false  

## After the specified timeout, this plugin sends a multiline event even if no new pattern is found to start a new event. The default timeout is 5s.

# timeout = 5s  

### [inputs.tcp_listener]  
### DEPRECATED: The 'tcp_listener' plugin is deprecated in version 1.3.0, use 'inputs.socket_listener' instead.

# DEPRECATED: the TCP listener plugin has been deprecated in favor of the socket_listener plugin

# see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/socket_listener

### [inputs.udp_listener]  
### DEPRECATED: The 'udp_listener' plugin is deprecated in version 1.3.0, use 'inputs.socket_listener' instead.

# DEPRECATED: the TCP listener plugin has been deprecated in favor of the socket_listener plugin

# see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/socket_listener

### [inputs.vsphere]  
### List of vCenter URLs to be monitored. These three lines must be uncommented and edited for the plugin to work.

# vcenters = [ "https://vcenter.local/sdk" ]  
# username = "user@corp.local"  
# password = "secret"  

### VMs  
### Typical VM metrics (if omitted or empty, all metrics are collected)

# vm_include = [ "/*/vm/**" ] # Inventory path to VMs to collect (by default all are collected)

# vm_exclude = [] # Inventory paths to exclude

# vm_metric_include = [ ]
# "cpu.demand.average",
# "cpu.idle.summation",
# "cpu.latency.average",
# "cpu.readiness.average",
# "cpu.ready.summation",
# "cpu.run.summation",
# "cpu.usagemhz.average",
# "cpu.used.summation",
# "cpu.wait.summation",
# "mem.active.average",
# "mem.granted.average",
# "mem.latency.average",
# "mem.swapin.average",
# "mem.swapinRate.average",
# "mem.swapout.average",
# "mem.swapoutRate.average",
# "mem.usage.average",
# "mem.vmmemctl.average",
# "net.bytesRx.average",
# "net.bytesTx.average",
# "net.droppedRx.summation",
# "net.droppedTx.summation",
# "net.usage.average",
# "power.power.average",
# "virtualDisk.numberReadAveraged.average",
# "virtualDisk.numberWriteAveraged.average",
# "virtualDisk.read.average",
# "virtualDisk.readOIO.latest",
# "virtualDisk.throughput.usage.average",
# "virtualDisk.totalReadLatency.average",
# "virtualDisk.totalWriteLatency.average",
# "virtualDisk.write.average",
# "virtualDisk.writeOIO.latest",
# "sys.uptime.latest",
#
# # vm_metric_exclude = [] ## Nothing is excluded by default
# # vm_instances = true ## true by default
#
# # ## Hosts
# # ## Typical host metrics (if omitted or empty, all metrics are collected)
# # # host_include = [ "*/host/**"] # Inventory path to hosts to collect (by default all are collected)
# # # host_exclude [] # Inventory paths to exclude
# # # host_metric_include = [
# #   "cpu.coreUtilization.average",
# #   "cpu.costop.summation",
# #   "cpu.demand.average",
# #   "cpu.idle.summation",
# #   "cpu.latency.average",
# #   "cpu.ready.summation",
# #   "cpu.run.summation",
# #   "cpu.usagemhz.average",
# #   "cpu.used.summation",
# #   "cpu.wait.summation",
# #   "mem.active.average",
# #   "mem.granted.average",
# #   "mem.latency.average",
# #   "mem.swapin.average",
# #   "mem.swapinRate.average",
# #   "mem.swapout.average",
# #   "mem.swapoutRate.average",
# #   "mem.usage.average",
# #   "mem.vmmemctl.average",
# #   "net.bytesRx.average",
# #   "net.bytesTx.average",
# #   "net.droppedRx.summation",
# #   "net.droppedTx.summation",
# #   "net.usage.average",
# #   "power.power.average",
# #   "virtualDisk.numberReadAveraged.average",
# #   "virtualDisk.numberWriteAveraged.average",
# #   "virtualDisk.read.average",
# #   "virtualDisk.readOIO.latest",
# #   "virtualDisk.throughput.usage.average",
# #   "virtualDisk.totalReadLatency.average",
# #   "virtualDisk.totalWriteLatency.average",
# #   "virtualDisk.write.average",
# #   "virtualDisk.writeOIO.latest",
# #   "sys.uptime.latest",
# # ]
# # # # vm_metric_exclude = [] ## Nothing is excluded by default
# # # vm_instances = true ## true by default
# #
# "cpu.readiness.average",
# "cpu.ready.summation",
# "cpu.swapwait.summation",
# "cpu.usage.average",
# "cpu.usagemhz.average",
# "cpu.used.summation",
# "cpu.utilization.average",
# "cpu.wait.summation",
# "disk.deviceReadLatency.average",
# "disk.deviceWriteLatency.average",
# "disk.kernelReadLatency.average",
# "disk.kernelWriteLatency.average",
# "disk.numberReadAveraged.average",
# "disk.numberWriteAveraged.average",
# "disk.read.average",
# "disk.totalReadLatency.average",
# "disk.totalWriteLatency.average",
# "disk.write.average",
# "mem.active.average",
# "mem.latency.average",
# "mem.state.latest",
# "mem.swapin.average",
# "mem.swapinRate.average",
# "mem.swapout.average",
# "mem.swapoutRate.average",
# "mem.totalCapacity.average",
# "mem.usage.average",
# "mem.vmmemctl.average",
# "net.bytesRx.average",
# "net.bytesTx.average",
# "net.droppedRx.summation",
# "net.droppedTx.summation",
# "net.errorsRx.summation",
# "net.errorsTx.summation",
# "net.usage.average",
# "power.power.average",
# "storageAdapter.numberReadAveraged.average",
# "storageAdapter.numberWriteAveraged.average",
# "storageAdapter.read.average",
# "storageAdapter.write.average",
# "sys.uptime.latest",
# ]
#
#
#
## Collect IP addresses? Valid values are "ipv4" and "ipv6"
## ip_addresses = ["ipv6", "ipv4"]
##
## host_metric_exclude = [] ## Nothing excluded by default
## host_instances = true ## true by default
# ## Clusters
# # cluster_include = [ "/*/host/**"] # Inventory path to clusters to collect (by default all are collected)
# # cluster_exclude = [] # Inventory paths to exclude
# # cluster_metric_include = [] ## if omitted or empty, all metrics are collected
# # cluster_metric_exclude = [] ## Nothing excluded by default
# # cluster_instances = false ## false by default
#
# ## Datastores
# # datastore_include = [ "/*/datastore/**"] # Inventory path to datastores to collect (by default all are collected)
# # datastore_exclude = [] # Inventory paths to exclude
# # datastore_metric_include = [] ## if omitted or empty, all metrics are collected
# # datastore_metric_exclude = [] ## Nothing excluded by default
# # datastore_instances = false ## false by default
#
# ## Datacenters
# # datacenter_include = [ "/*/host/**"] # Inventory path to clusters to collect (by default all are collected)
# # datacenter_exclude = [] # Inventory paths to exclude
# # datacenter_metric_include = [] ## if omitted or empty, all metrics are collected
# # datacenter_metric_exclude = [ "*" ] ## Datacenters are not collected by default.
# # datacenter_instances = false ## false by default
#
# ## Plugin Settings
# ## separator character to use for measurement and field names (default: ".")
# # separator = "." 
#
# ## number of objects to retrieve per query for realtime resources (vms and hosts)
# # set to 64 for vCenter 5.5 and 6.0 (default: 256)
# # max_query_objects = 256
# #
# ## number of metrics to retrieve per query for non-realtime resources (clusters and datastores)
# # set to 64 for vCenter 5.5 and 6.0 (default: 256)
# # max_query_metrics = 256
# #
# ## number of go routines to use for collection and discovery of objects and metrics
# # collect_concurrency = 1
# # discover_concurrency = 1
# #
# ## the interval before (re)discovering objects subject to metrics collection (default: 300s)
# # object_discovery_interval = "300s"
# #
# ## timeout applies to any of the api request made to vcenter
# # timeout = "60s"
# #
# ## When set to true, all samples are sent as integers. This makes the output
# ## data types backwards compatible with Telegraf 1.9 or lower. Normally all
# ## samples from vCenter, with the exception of percentages, are integer
# ## values, but under some conditions, some averaging takes place internally in
### Custom attributes from vCenter can be very useful for queries in order to slice the metrics along different dimension and for forming ad-hoc relationships. They are disabled by default, since they can add a considerable amount of tags to the resulting metrics. To enable, simply set custom_attribute_exclude to [] (empty set) and use custom_attribute_include to select the attributes you want to include.

### The number of vSphere 5 minute metric collection cycles to look back for non-realtime metrics. In some versions (6.7, 7.0 and possible more), certain metrics, such as cluster metrics, may be reported with a significant delay (>30min). If this happens, try increasing this number. Please note that increasing it too much may cause performance issues.

### Optional SSL Config

### The Historical Interval value must match EXACTLY the interval in the daily "Interval Duration" found on the VCenter server under Configure > General > Statistics > Statistic intervals

### A Webhooks Event collector

---

### A Webhooks Event collector

---
# [inputs.webhooks.rollbar]
#   path = "/rollbar"
#
# [inputs.webhooks.papertrail]
#   path = "/papertrail"
#
# [inputs.webhooks.particle]
#   path = "/particle"

## This plugin implements the Zipkin http server to gather trace and timing data needed to troubleshoot latency problems in microservice architectures.

[[inputs.zipkin]]
#   path = "/api/v1/spans" # URL path for span data
#   port = 9411  # Port on which Telegraf listens

Found in path(s):
* /opt/cola/permits/1216933448_1652759819.755799/0/telegraf-1.21.4-1.x86_64.src.rpm-cosi-expand-archive-84HOI8oJ/etc/telegraf/telegraf.conf

1.1060 asm-commons 5.0.4

1.1060.1 Available under license:

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* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF
* THE POSSIBILITY OF SUCH DAMAGE.
*/
/**
 * Constructs a new [@link Textifier]. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the [@link #Textifier(int)]
 * version.
 *
 * @throws IllegalStateException
 *             If a subclass calls this constructor.
 */

Found in path(s):
* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
  jar/org/objectweb/asm/util/Textifier.java

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 * CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
 * ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF
THE POSSIBILITY OF SUCH DAMAGE.

*/
/**
 * Creates a new {@link AnalyzerAdapter}. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the
 * [ {@link #AnalyzerAdapter(int, String, int, String, String, MethodVisitor)}]
 * version.
 *
 * @param owner
 * the owner's class name.
 * @param access
 * the method's access flags (see [ @link Opcodes ]).
 * @param name
 * the method's name.
 * @param desc
 * the method's descriptor (see [ @link Type Type ]).
 * @param mv
 * the method visitor to which this adapter delegates calls. May
 * be <tt>null</tt>.
 * @throws IllegalStateException
 * If a subclass calls this constructor.
 */

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  jar/org/objectweb/asm/xml/package.html
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  jar/org/objectweb/asm/TypeReference.java
* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
  jar/org/objectweb/asm/TypePath.java
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*/
/**
* Constructs a new [{@link LocalVariableAnnotationNode}]. <i>Subclasses must
* not use this constructor</i>. Instead, they must use the
* [{@link #LocalVariableAnnotationNode(int, TypePath, LabelNode[], LabelNode[], int[], String)}
* version.
*
* @param typeRef
* a reference to the annotated type. See [{@link TypeReference}].
* @param typePath
* the path to the annotated type argument, wildcard bound, array
* element type, or static inner type within 'typeRef'. May be
* <tt>null</tt> if the annotation targets 'typeRef' as a whole.
* @param start
* the first instructions corresponding to the continuous ranges
* that make the scope of this local variable (inclusive).
* @param end
* the last instructions corresponding to the continuous ranges
that make the scope of this local variable (exclusive). This array must have the same size as the 'start' array.

@param index
the local variable's index in each range. This array must have the same size as the 'start' array.

@param desc
the class descriptor of the annotation class.

/**

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*/

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  jar/org/objectweb/asm/util/ASMifiable.java
* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
  jar/org/objectweb/asm/util/Textifiable.java
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/**
 * Constructs a new [@link ClassNode]. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the [@link #ClassNode(int)]
 * version.
 *
 * @throws IllegalStateException
 *         If a subclass calls this constructor.
 */

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  jar/org/objectweb/asm/xml/SAXAdapter.java
* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
  jar/org/objectweb/asm/xml/SAXClassAdapter.java
* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
  jar/org/objectweb/asm/xml/ASMContentHandler.java
* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
  jar/org/objectweb/asm/xml/SAXAnnotationAdapter.java
* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
  jar/org/objectweb/asm/xml/Processor.java
* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
  jar/org/objectweb/asm/xml/SAXCodeAdapter.java
* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
  jar/org/objectweb/asm/xml/SAXFieldAdapter.java

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/**
 * Creates a new JSRInliner. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the
 * {@link #JSRInlinerAdapter(int, MethodVisitor, int, String, String, String,
 * String[])}
 * version.
 *
 * @param mv
 * the <code>MethodVisitor</code> to send the resulting inlined
 * method code to (use <code>null</code> for none).
 * @param access
 * the method's access flags (see {@link Opcodes}). This
 * parameter also indicates if the method is synthetic and/or
 * deprecated.
 * @param name
 * the method's name.
 * @param desc
 * the method's descriptor (see {@link Type}).
 * @param signature
 * the method's signature. May be <tt>null</tt>.
 * @param exceptions
 * the internal names of the method's exception classes (see
 * the @link Type#getInternalName() getInternalName()). May be
 * <tt>null</tt>.
 * @throws IllegalStateException
 * If a subclass calls this constructor.
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* /opt/cola/permits/1136404724_1613762512.96/0/asm-commons-5-0-4-sources-4-
jar/org/objectweb/asm/commons/JSRInlinerAdapter.java

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/**
 * Creates a new {@link GeneratorAdapter}. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the
 * {@link GeneratorAdapter(int, MethodVisitor, int, String, String)}
 * version.
 *
 * @param mv
 * the method visitor to which this adapter delegates calls.
 * @param access
 * the method's access flags (see {@link Opcodes}).
 * @param name
 * the method's name.
 */
* @param desc
*     the method's descriptor (see [@link Type]).
* @throws IllegalStateException
*     If a subclass calls this constructor.
*/

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Eclipse

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

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Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

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Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.
* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

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OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html
org.ow2.asm:asm-commons
org.ow2.asm:asm

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Apache

The following artifacts are ASL2 licensed.
org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

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MortBay

The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed.
org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api
Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies.

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1.1065 certifi 2021.05.30

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This package contains a modified version of ca-bundle.crt:

c-a-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov  3 19:04:19 2011#
This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:
It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication.
Just configure this file as the SSLCACertificateFile.#

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@(#) SRCsfile: certdata.txt,v $Revision: 1.80 $Date: 2011/11/03 15:11:58 $
A library to support the Internationalised Domain Names in Applications (IDNA) protocol as specified in RFC 5890 et.al. This new methodology, known as IDNA 2008, can generate materially different results to the previous standard. The library can act as a drop-in replacement for the "encodings.idna" module.

```python
import io, sys
from setuptools import setup

def main():
    python_version = sys.version_info[:2]
    if python_version < (2,6):
        raise SystemExit("Sorry, Python 2.6 or newer required")

    package_data = {}
    exec(open('idna/package_data.py').read(), package_data)

    arguments = {
        'name': 'idna',
        'packages': ['idna'],
        'version': package_data['__version__'],
        'description': 'Internationalized Domain Names in Applications (IDNA)',
        'long_description': io.open("README.rst", encoding="UTF-8").read(),
        'author': 'Kim Davies',
        'author_email': 'kim@cynosure.com.au',
        'license': 'BSD-like',
        'url': 'https://github.com/kjd/idna',
        'classifiers': [
            'Development Status :: 5 - Production/Stable',
            'Intended Audience :: Developers',
            'Intended Audience :: System Administrators',
            'License :: OSI Approved :: BSD License',
            'Operating System :: OS Independent',
            'Programming Language :: Python',
            'Programming Language :: Python :: 2.6',
            'Programming Language :: Python :: 2.7',
            'Programming Language :: Python :: 3',
            'Programming Language :: Python :: 3.3',
        ],
    }

    setup(**arguments)
```
'Programming Language :: Python :: 3.4',
'Programming Language :: Python :: 3.5',
'Programming Language :: Python :: 3.6',
'Topic :: Internet :: Name Service (DNS)',
'Topic :: Software Development :: Libraries :: Python Modules',
'Topic :: Utilities',
],
'test_suite': 'tests',
}

setup(**arguments)

if __name__ == '__main__':
    main()

Found in path(s):
* /opt/cola/permits/1110765725_1606850597.720/kjd-idna-v2-7-0-g5d76cb6-1-tar-gz/kjd-idna-77c8bce/setup.py

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1.1067 python-setuptools 39.2.0
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1.1068 perl 1.28-420.el8
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=head1 NAME

Errno - System errno constants

=head1 SYNOPSIS

use Errno qw(EINTR EIO :POSIX);

=head1 DESCRIPTION
C<Errno> defines and conditionally exports all the error constants defined in your system F<errno.h> include file. It has a single export tag, C<:POSIX>, which will export all POSIX defined error numbers.

On Windows, C<Errno> also defines and conditionally exports all the Winsock error constants defined in your system F<WinError.h> include file. These are included in a second export tag, C<:WINSOCK>.

C<Errno> also makes C<%!> magic such that each element of C<%!> has a non-zero value only if C<$!> is set to that value. For example:

    my $fh;
    unless (open($fh, "<", "/fangorn/spouse")) {
        if ($!{ENOENT}) {
            warn "Get a wife!\n";
        } else {
            warn "This path is barred: $!";
        }
    }

If a specified constant C<EFOO> does not exist on the system, C<$!{EFOO}> returns C"". You may use C<exists $!{EFOO}> to check whether the constant is available on the system.

Perl automatically loads C<Errno> the first time you use C<%!>, so you don't need an explicit C<use>.

=head1 CAVEATS

Importing a particular constant may not be very portable, because the import will fail on platforms that do not have that constant. A more portable way to set C<$!> to a valid value is to use:

    if (exists &Errno::EFOO) {
        $! = &Errno::EFOO;
    }

=head1 AUTHOR

Graham Barr <gbarr@pobox.com>

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1.1070 monotonic 1.6

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* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/impl/AbstractWindowsConsoleWriter.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/utils/WriterOutputStream.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/utils/PumpReader.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/utils/NonBlockingPumpReader.java

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* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/spi/JansiSupport.java
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* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/spi/JnaSupport.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/utils/AttributedCharSequence.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/utils/InfoCmp.java

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* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/impl/AbstractTerminal.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/utils/NonBlockingReaderImpl.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/utils/Colors.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/utils/NonBlockingInputStream.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/impl/LineDisciplineTerminal.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/impl/PosixPtyTerminal.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/impl/Curses.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/impl/DumbTerminal.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/impl/NonBlockingTerminal.java

grey
red
lime
yellow
blue
fuchsia
aqua
white
grey0
navyblue
darkblue
blue3
blue3a
blue1
darkgreen
deepskyblue4
deepskyblue4a
deepskyblue4b
dodgerblue3
dodgerblue2
green4
springgreen4
turquoise4
deepskyblue3
deepskyblue3a
dodgerblue1
green3
springgreen3
darkcyan
lightseagreen
deepskyblue2
deepskyblue1
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springgreen2
cyan3
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turquoise2
green1
springgreen2a
springgreen1
mediumspringgreen
cyan2
cyan1
darkred
deepred
purple4
purple4a
purple3
blueviolet
orange4
grey37
mediumpurple4
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slateblue3a
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chartreuse4
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paleturquoise4
steelblue
steelblue3
cornflowerblue
chartreuse3
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palegreen3
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aquamarine3
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steelblue1a
chartreuse2
seagreen2
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aquamarine1
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darkviolet
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orange4a
lightpink4
plum4
mediumpurple3
mediumpurple3a
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grey66
grey70
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grey78
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grey89
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Found in path(s):
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* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/terminal/impl/ExecPty.java
* /opt/cola/permits/1258291790_1643053056.81/0/jline-terminal-3-14-1-sources-jar/org/jline/utils/InputStreamReader.java
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auto_left_margin, bw, bw
auto_right_margin, am, am
back_color_erase, bce, ut
can_change, ccc, cc
ceol_standout_glitch, xhp, xs
col_addr_glitch, xhpa, YA
cpi_changes_res, cpix, YF
cr_cancels_micro_mode, crxm, YB
dest_tabs_magic_smso, xt, xt
eat_newline_glitch, xenl, xn
erase_overstrike, eo, eo
generic_type, gn, gn
hard_copy, hc, hc
hard_cursor, chts, HC
has_meta_key, km, km
has_print_wheel, daisy, YC
has_status_line, hs, hs
hue_lightness_saturation, hls, hl
insert_null_glitch, in, in
lpi_changes_res, lpix, YG
memory_above, da, da
memory_below, db, db
move_insert_mode, mir, mi
move_standout_mode, msgr, ms
needs_xon_xoff, nxon, nx
no_esc_ctlc, xsb, xb
no_pad_char, npc, NP
non_dest_scroll_region, ndscr, ND
non_rev_rmcup, nrrmc, NR
over_strike, os, os
prtr_silent, mc5i, 5i
row_addr_glitch, xvpa, YD
semi_auto_right_margin, sam, YE
status_line_esc_ok, eslok, es
tilde_glitch, hz, hz
transparent_underline, ul, ul
xon_xoff, xon, xo
columns, cols, co
init_tabs, it, it
label_height, lh, lh
label_width, lw, lw
lines, lines, li
lines_of_memory, lm, lm
magic_cookie_glitch, xmc, sg
max_attributes, ma, ma
max_colors, colors, Co
max_pairs, pairs, pa
maximum_windows, wnum, MW
no_color_video, ncv, NC
num_labels, nlab, Nl
padding_baud_rate, pb, pb
virtual_terminal, vt, vt
width_status_line, wsl, ws
bit_image_entwining, bitwin, Yo
bit_image_type, bitype, Yp
fixed_pause, pause, PA
flash_hook, hook, fh
flash_screen, flash, vb
form_feed, ff, ff
from_status_line, fsl, fs
goto_window, wingo, WG
hangup, hup, HU
init_1string, is1, i1
init_2string, is2, is
init_3string, is3, i3
init_file, if, if
init_prog, iprog, iP
initialize_color, initc, Ic
initialize_pair, initp, Ip
insert_character, ich1, ic
insert_line, il1, al
insert_padding, ip, ip
key_a1, ka1, K1
key_a3, ka3, K3
key_b2, kb2, K2
key_backspace, kbs, kb
key_beg, kbeg, @1
key_btab, kcbt, kB
key_c1, kc1, K4
key_c3, kc3, K5
key_cancel, kcan, @2
key_catab, ktbc, ka
key_clear, kclr, kC
key_close, kclo, @3
key_command, kcmd, @4
key_copy, kcpy, @5
key_create, kcrn, @6
key_ctab, kctab, kt
key_dc, kdch1, kD
key_dl, kdl1, kL
key_down, kcud1, kd
key_eic, krmir, kM
key_end, kend, @7
key_enter, kent, @8
key_eol, kel, kE
key_eos, ked, kS
key_exit, kext, @9
key_f0, kf0, k0
key_f1, kf1, k1
key_f10, kf10, k;
key_f11, kf11, F1
key_f12, kf12, F2
key_f13, kf13, F3
key_f58, kf58, Fm
key_f59, kf59, Fn
key_f6, kf6, k6
key_f60, kf60, Fo
key_f61, kf61, Fp
key_f62, kf62, Fq
key_f63, kf63, Fr
key_f7, kf7, k7
key_f8, kf8, k8
key_f9, kf9, k9
key_find, kfnd, @0
key_help, khlp, %1
key_home, khome, kh
key_ic, kich1, kI
key_il, kil1, kA
key_left, kcu1, kl
key_ll, kll, kH
key_mark, kmrk, %2
key_message, kmsg, %3
key_move, kmov, %4
key_next, knxt, %5
key_npage, knp, kN
key_open, kopn, %6
key_options, kopt, %7
key_ppage, kpp, kP
key_previous, kprv, %8
key_print, kprt, %9
key_redo, krdo, %0
key_reference, kref, &1
key_refresh, krfr, &2
key_replace, krpl, &3
key_restart, krst, &4
key_resume, kres, &5
key_right, kcu1, kr
key_save, ksav, &6
key_sbeg, kBEG, &9
key_scancel, kCAN, &0
key_scommand, kCMD, *1
key_scopy, kCPY, *2
key_screate, kCRT, *3
key_sdc, kDC, *4
key_sdl, kDL, *5
key_select, kslt, *6
key_send, kEND, *7
key_seol, kEOL, *8
key_sexit, kEXT, *9
key_sf, kind, kF
key_sfind, kFND, *0
get_mouse, getm, Gm
key_mouse, kmous, Km
mouse_info, minfo, Mi
pc_term_options, pctrm, S6
pkey_plab, pfxl, xl
req_mouse_pos, reqmp, RQ
scancode_escape, scese, S7
set0_des_seq, s0ds, s0
set1_des_seq, s1ds, s1
set2_des_seq, s2ds, s2
set3_des_seq, s3ds, s3
set_a_background, setab, AB
set_a_foreground, setaf, AF
set_color_band, setcolor, Yz
set_lr_margin, smglr, ML
set_page_length, slines, YZ
set_tb_margin, smgtb, MT
enter_horizontal_hl_mode, ehhlm, Xh
enter_left_hl_mode, elhlm, Xl
enter_low_hl_mode, elohtm, Xo
enter_right_hl_mode, erhlm, Xr
enter_top_hl_mode, ethlm, Xt
enter_vertical_hl_mode, evhlm, Xv
set_a_attributes, sgr1, sA
set_pglen_inch, slength, sL

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1.1075 perl-data-dumper 2.167-399.el8

1.1075.1 Available under license :

No license file was found, but licenses were detected in source scan.

From 9f38b6c605086a67f0d92591f8e88d9c99bc1d9164 Mon Sep 17 00:00:00 2001
From: =?UTF-8?q?Petr=20P=C3=ADsa=C5=99?= <ppisar@redhat.com>
Date: Thu, 11 May 2017 09:25:35 +0200
Subject: [PATCH] Upgrade to 2.167
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit

Unbundled from perl-5.25.12.

Signed-off-by: Petr Písa <ppisar@redhat.com>

---
Changes     |  14 +++++
Dumper.pm   |  47 ++++++++---------
Dumper.xs   | 167 +++++++++++++++++++++++++++++++++++++++++++++---------------
t/bugs.t    |  37 +++++++++++++--
t/deparse.t  22 ++++----
5 files changed, 207 insertions(+), 80 deletions(-)

diff --git a/Changes b/Changes
index f9ea53f..a5430d5 100644
--- a/Changes
+++ b/Changes
@@ -6,6 +6,20 @@ Changes - public release history for Data::Dumper

=over 8

+=item 2.166 (Nov 29 2016)
+
+Reduce memory usage by not importing from Carp
+Reduce memory usage by removing unused overload require.
+
+=item 2.165 (Nov 20 2016)
+
+Remove impediment to compiling under C++11.
+
+=item 2.164 (Nov 12 2016)
+
+The XS implementation now handles the C<Deparse> option, so using it no
+longer forces use of the pure-Perl version.
+
=item 2.161 (Jul 11 2016)

Perl 5.12 fix/workaround until fixed PPPort release.
diff --git a/Dumper.pm b/Dumper.pm
index c71ad35..00f6326 100644
--- a/Dumper.pm
+++ b/Dumper.pm
@@ -10,16 +10,15 @@
package Data::Dumper;

BEGIN {
-  $VERSION = '2.161'; # Don't forget to set version and release
+  $VERSION = '2.167'; # Don't forget to set version and release
} # date in POD below!

#$| = 1;

use 5.006_001;
require Exporter;
-require overload;

-use Carp;
+use Carp ();
BEGIN {
    @ISA = qw(Exporter);
    @ @ -70.7 +69.7 @@ $Maxrecurse = 1000 unless defined $Maxrecurse;
    sub new {
        my($c, $v, $n) = @_;

        - croak "Usage: PACKAGE->new(ARRAYREF, [ARRAYREF])"
        + Carp::croak("Usage: PACKAGE->new(ARRAYREF, [ARRAYREF])")
        unless (defined($v) && (ref($v) eq 'ARRAY'));
        $n = [] unless (defined($n) && (ref($n) eq 'ARRAY'));

        @@ -170,11 +169,11 @@ sub Seen {
            $s->{seen}{$id} = [$k, $v];
        }
        else {
            - carp "Only refs supported, ignoring non-ref item \$\$k";
            + Carp::carp("Only refs supported, ignoring non-ref item \$\$k");
        }
        }
        else {
            - carp "Value of ref must be defined; ignoring undefined item \$\$k";
            + Carp::carp("Value of ref must be defined; ignoring undefined item \$\$k");
        }
        }
        return $s;
    @@ -195,7 +194,7 @@ sub Values {
        return $s;
    }
    else {
        - croak "Argument to Values, if provided, must be array ref";
        + Carp::croak("Argument to Values, if provided, must be array ref");
    }
    }
    else {
        - croak "Argument to Names, if provided, must be array ref";
        + Carp::croak("Argument to Names, if provided, must be array ref");
    }
    }
    else {
        @ @ -227.7 +226.6 @@ sub DESTROY {}
    }
    sub Dump {
        return &Dumpxs
    }
}

unless $Data::Dumper::Useperl || (ref($_[0]) && $_[0]->{useperl})
- $Data::Dumper::Deparse || (ref($_[0]) & $_[0]->{deparse})

  # Use pure perl version on earlier releases on EBCDIC platforms
  || (! $IS_ASCII & $] lt 5.021_010);
@@ -439,7 +437,7 @@ sub _dump {
    if (ref($s->{sortkeys}) eq 'CODE') {
      $keys = $s->{sortkeys}($val);
      unless (ref($keys) eq 'ARRAY') {
-        carp "Sortkeys subroutine did not return ARRAYREF";
+        Carp::carp("Sortkeys subroutine did not return ARRAYREF");
        $keys = [];
    }
}
@@ -487,16 +485,16 @@ sub _dump {
    require B::Deparse;
    my $sub = 'sub ' . (B::Deparse->new)->coderef2text($val);
    $pad    = $s->{sep} . $s->{pad} . $s->{apad} . $s->{xpad} x ($s->{level} - 1);
-    $sub    =~ s/
/$pad/gse;
+    $sub    =~ s/
/$pad/gs;
    $out   .=  $sub;
  } else {
    $out .= 'sub { "DUMMY" }';
-    carp "Encountered CODE ref, using dummy placeholder" if $s->{purity};
+    Carp::carp("Encountered CODE ref, using dummy placeholder") if $s->{purity};
  }
} else {
-    croak "Can't handle \$realtype type";
+    Carp::croak("Can't handle \$realtype type");
  }

  if ($realpack and !$no_bless) { # we have a blessed ref
    @ -1212,9 +1210,10 @@ $Data::Dumper::Deparse I<or> $I<OBJ>-Deparse(I<[$NEWVAL]>)

 Can be set to a boolean value to control whether code references are
turned into perl source code. If set to a true value, C<B::Deparse>
-will be used to get the source of the code reference. Using this option
-will force using the Perl implementation of the dumper, since the fast
-XSUB implementation doesn't support it.
+will be used to get the source of the code reference. In older versions,
+using this option imposed a significant performance penalty when dumping
+parts of a data structure other than code references, but that is no
+longer the case.

 Caution : use this option only if you know that your coderefs will be
properly reconstructed by C<B::Deparse>.
    @ -1435,15 +1434,9 @@ the C<Deparse> flag), an anonymous subroutine that
contains the string ""DUMMY"" will be inserted in its place, and a warning
will be printed if C<Purity> is set. You can C<eval> the result, but bear
in mind that the anonymous sub that gets created is just a placeholder.
-Someday, perl will have a switch to cache-on-demand the string
-representation of a compiled piece of code, I hope. If you have prior
-knowledge of all the code refs that your data structures are likely
-to have, you can use the C<Seen> method to pre-seed the internal reference
-table and make the dumped output point to them, instead. See L</EXAMPLES>
-above.
-
The C<Deparse> flag makes Dump() run slower, since the XSUB
-implementation does not support it.
+Even using the C<Deparse> flag will in some cases produce results that
+behave differently after being passed to C<eval>; see the documentation
+for L<B::Deparse>.

SCALAR objects have the weirdest looking C<bless> workaround.

@@ -1466,13 +1459,13 @@ be to use the C<Sortkeys> filter of Data::Dumper.

Gurusamy Sarathy        gsar@activestate.com

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=head1 VERSION

-Version 2.161  (July 11 2016)
+Version 2.167  (January 4 2017)

=head1 SEE ALSO

diff --git a/Dumper.xs b/Dumper.xs
index b22088f..0e7142e 100644
--- a/Dumper.xs
+++ b/Dumper.xs
@@ -63,6 +63,7 @@ typedef struct {
      int useqq;
      int use_sparse_seen_hash;
      int trailingcomma;
+    int deparse;
     } Style;
 static STRLEN num_q (const char *s, STRLEN slen);
@@ -369,7 +370,7 @@ typedef struct {
    I32 useqq;
    int use_sparse_seen_hash;
    int trailingcomma;
+    int deparse;
 } Style;

static STRLEN num_q (const char *s, STRLEN slen);
@@ -369,7 +370,7 @@ typedef struct {
    I32 useqq;
    int use_sparse_seen_hash;
    int trailingcomma;
+    int deparse;
 } Style;

UV k;
if (do_utf8
&& ! isASCII(*(U8*)s)
+
&& ! isASCII(*s)
/* Exclude non-ASCII low ordinal controls. This should be
* optimized out by the compiler on ASCII platforms; if not
* could wrap it in a #ifdef EBCDIC, but better to avoid
@@ -387,11 +388,11 @@ esc_q_utf8(pTHX_ SV* sv, const char *src, STRLEN slen, I32 do_utf8, I32 useqq)
increment = (k == 0 && *s != '\0') ? 1 : UTF8SKIP(s);
#if PERL_VERSION < 10
sprintf(r, "\\x{%"UVxf"}", k);
+
sprintf(r, "\\x{%" UVxf "}", k);
r += strlen(r);
/* my_sprintf is not supported by ppport.h */
#else
r = r + my_sprintf(r, "\\x{%"UVxf"}", k);
+
r = r + my_sprintf(r, "\\x{%" UVxf "}", k);
#endif
continue;
}
@@ -505,6 +506,53 @@ sv_x(pTHX_ SV *sv, const char *str, STRLEN len, I32 n)
return sv;
}
+static SV *
+deparsed_output(pTHX_ SV *val)
+{
+ SV *text;
+ int n;
+ dSP;
+
+ /* This is passed to load_module(), which decrements its ref count and
+ * modifies it (so we also can't reuse it below) */
+ SV *pkg = newSVpvs("B::Deparse");
+
+ load_module(PERL_LOADMOD_NOIMPORT, pkg, 0);
+
+ SAVETMPS;
+
+ PUSHMARK(SP);
+ mXPUSHs(newSVpvs("B::Deparse"));
+ PUTBACK;
+
+ n = call_method("new", G_SCALAR);
+ SPAGAIN;
+
+ if (n != 1) {

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croak("B::Deparse->new returned %d items, but expected exactly 1", n);

+)

PUSHMARK(SP - n);
XPUSHs(val);
PUTBACK;

n = call_method("coderef2text", G_SCALAR);
SPAGAIN;

if (n != 1) {
    croak("$b_deparse->coderef2text returned %d items, but expected exactly 1", n);
}

text = POPs;
SvREFCNT_inc(text); /* the caller will mortalise this */
FREETMPS;
PUTBACK;

return text;
}

/*
* This ought to be split into smaller functions. (it is one long function since
* it exactly parallels the perl version, which was one long thing for
@ @ -565,14 +613,14 @@ DD_dump(pTHX_ SV *val, const char *name, STRLEN namelen, SV *retval, HV
*seenhv,
    i = perl_call_method(SvPVX_const(style->freezer), G_EVAL|G_VOID|G_DISCARD);
    SPAGAIN;
    if (SvTRUE(ERRSV))
-warn("WARNING(Freezer method call failed): %"SVf", ERRSV);
+warn("WARNING(Freezer method call failed): %" SVf, ERRSV);
    PUTBACK; FREETMPS; LEAVE;
}

ival = SvRV(val);
realtype = SvTYPE(ival);
#ifdef DD_USE_OLD_ID_FORMAT
    idlen = my_snprintf(id, sizeof(id), "0x"UVxf, PTR2UV(ival));
#else
    id_buffer = PTR2UV(ival);
    idlen = sizeof(id_buffer);
#endif
#endif

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warn("ref name not found for %s", id);
#else
-   warn("ref name not found for 0x%"UVxf, PTR2UV(ival));
+   warn("ref name not found for 0x%" UVxf, PTR2UV(ival));
#endif
    return 0;
}
@@ -848,10 +896,10 @@ DD_dump(pTHX_ SV *val, const char *name, STRLEN namelen, SV *retval, HV
                   *seenhv,
                   ilen = inamelen;
                   sv_setiv(ixsv, ix);
                  #if PERL_VERSION < 10
  -      (void) sprintf(iname+ilen, "%"IVdf, (IV)ix);
+      (void) sprintf(iname+ilen, "%" IVdf, (IV)ix);
                   ilen = strlen(iname);
                  #else
  -      ilen = ilen + my_sprintf(iname+ilen, "%"IVdf, (IV)ix);
+      ilen = ilen + my_sprintf(iname+ilen, "%" IVdf, (IV)ix);
                  #endif
                  iname[len++] = ']; iname[len] = '\0';
                  if (style->indent >= 3) {
@@ -886,7 +934,6 @@ DD_dump(pTHX_ SV *val, const char *name, STRLEN namelen, SV *retval, HV
                    SV *sname;
                    HE *entry = NULL;
                    char *key;
  -      STRLEN klen;
+      SV *hval;
                   AV *keys = NULL;
@@ -976,6 +1023,7 @@ DD_dump(pTHX_ SV *val, const char *name, STRLEN namelen, SV *retval, HV
                               char *nkey_buffer = NULL;
                               STRLEN nticks = 0;
                         SV* keysv;
  +      STRLEN klen;
                   STRLEN keylen;
                   STRLEN nlen;
                   bool do_utf8 = FALSE;
@@ -1029,7 +1077,7 @@ DD_dump(pTHX_ SV *val, const char *name, STRLEN namelen, SV *retval, HV
                              if (style->quotekeys || key_needs_quote(key,keylen)) {
                             if (do_utf8 || style->useqq) {
                               STRLEN ocur = SvCUR(retval);
  -                               nlen = esc_q_utf8(aTHX__retval, key, klen, do_utf8, style->useqq);
+                               klen = nlen = esc_q_utf8(aTHX__retval, key, klen, do_utf8, style->useqq);
                                nkey = SvPVX(retval) + ocur;
                               }
else {
    @@ -1095,9 +1143,41 @@ DD_dump(pTHX_ SV *val, const char *name, STRLEN namelen, SV *retval, HV
        SvREFCNT_dec(totpad);
    }
    else if (realtype == SVt_PVCV) {
-        sv_catpvs(retval, "sub { "DUMMY" }");
-        if (style->purity)
-            warn("Encountered CODE ref, using dummy placeholder");
+        if (style->deparse) {
+            SV *deparsed = sv_2mortal(deparsed_output(aTHX_ val));
+            SV *fullpad = sv_2mortal(newSVsv(style->sep));
+            const char *p;
+            STRLEN plen;
+            I32 i;
+            sv_catsv(fullpad, style->pad);
+            sv_catsv(fullpad, apad);
+            for (i = 0; i < level; i++) {
+                sv_catsv(fullpad, style->xpad);
+            }
+            sv_catpvs(retval, "sub ");
+            p = SvPV(deparsed, plen);
+            while (plen > 0) {
+                const char *nl = (const char *) memchr(p, '\n', plen);
+                if ((nl) {
+                    sv_catpvn(retval, p, plen);
+                    break;
+                }
+            }
+        }
+    }
+}
+}
+}
+
+}
+else {
+    sv_catpvs(retval, "sub { "DUMMY" }");
+    if (style->purity)
+        warn("Encountered CODE ref, using dummy placeholder");
+}
}
}
else {
    warn("cannot handle ref type %d", (int)realtype);
}
if (namelen) {
    #ifdef DD_USE_OLD_ID_FORMAT
        idlen = my_snprintf(id, sizeof(id), "0x" UVxf, PTR2UV(val));
    #else
        id_buffer = PTR2UV(val);
        idlen = sizeof(id_buffer);
    @-1184,9 +1264,9 @@ DD_dump(pTHX_ SV *val, const char *name, STRLEN namelen, SV *retval, HV *
        if (DD_is_integer(val)) {
            STRLEN len;
            if (SvIsUV(val))
                len = my_snprintf(tmpbuf, sizeof(tmpbuf), "%"UVuf, SvUV(val));
            else
                len = my_snprintf(tmpbuf, sizeof(tmpbuf), "%"IVdf, SvIV(val));
            if (SvPOK(val)) {
                /* Need to check to see if this is a string such as " 0". */
                I'm assuming from sprintf isn't going to clash with utf8. */
                if ((svp = hv_fetch(hv, "seen", 4, FALSE)) && SvROK(*svp))
                    seenhv = (HV*)SvRV(*svp);
                else
                    style.use_sparse_seen_hash = 1;
                -if ((svp = hv_fetch(hv, "noseen", 6, FALSE)))
                +if ((svp = hv_fetchs(hv, "noseen", FALSE)) && SvROK(*svp))
                    style.use_sparse_seen_hash = (SvOK(*svp) && SvIV(*svp) != 0);
                    todumpav = (AV*)SvRV(*svp);
                    if ((svp = hv_fetch(hv, "names", 5, FALSE)) && SvROK(*svp))
                        namesav = (AV*)SvRV(*svp);
                    -if ((svp = hv_fetch(hv, "indent", 6, FALSE)))
                    +if ((svp = hv_fetchs(hv, "indent", FALSE)) && SvROK(*svp))
                        style.indent = SvIV(*svp);
                    -if ((svp = hv_fetch(hv, "purity", 6, FALSE)))
                    +if ((svp = hv_fetchs(hv, "purity", FALSE)) && SvROK(*svp))
                        style.purity = SvIV(*svp);
                    -if ((svp = hv_fetch(hv, "terse", 5, FALSE)))
                    +if ((svp = hv_fetchs(hv, "terse", FALSE)))
}
 terse = SvTRUE(*svp);
- if ((svp = hv_fetch(hv, "useqq", 5, FALSE)))
+ if ((svp = hv_fetchs(hv, "useqq", FALSE)))
    style.useqq = SvTRUE(*svp);
- if ((svp = hv_fetch(hv, "pad", 3, FALSE)))
+ if ((svp = hv_fetchs(hv, "pad", FALSE)))
    style.pad = *svp;
- if ((svp = hv_fetch(hv, "xpad", 4, FALSE)))
+ if ((svp = hv_fetchs(hv, "xpad", FALSE)))
    style.xpad = *svp;
- if ((svp = hv_fetch(hv, "apad", 4, FALSE)))
+ if ((svp = hv_fetchs(hv, "apad", FALSE)))
    apad = *svp;
- if ((svp = hv_fetch(hv, "sep", 3, FALSE)))
+ if ((svp = hv_fetchs(hv, "sep", FALSE)))
    style.sep = *svp;
- if ((svp = hv_fetch(hv, "pair", 4, FALSE)))
+ if ((svp = hv_fetchs(hv, "pair", FALSE)))
    style.pair = *svp;
- if ((svp = hv_fetch(hv, "varname", 7, FALSE)))
+ if ((svp = hv_fetchs(hv, "varname", FALSE)))
    varname = *svp;
- if ((svp = hv_fetch(hv, "freezer", 7, FALSE)))
+ if ((svp = hv_fetchs(hv, "freezer", FALSE)))
    style.freezer = *svp;
- if ((svp = hv_fetch(hv, "toaster", 7, FALSE)))
+ if ((svp = hv_fetchs(hv, "toaster", FALSE)))
    style.toaster = *svp;
- if ((svp = hv_fetch(hv, "deepcopy", 8, FALSE)))
+ if ((svp = hv_fetchs(hv, "deepcopy", FALSE)))
    style.deepcopy = SvTRUE(*svp);
- if ((svp = hv_fetch(hv, "quotekeys", 9, FALSE)))
+ if ((svp = hv_fetchs(hv, "quotekeys", FALSE)))
    style.quotekeys = SvTRUE(*svp);
-                if ((svp = hv_fetch(hv, "trailingcomma", 13, FALSE)))
+                if ((svp = hv_fetchs(hv, "trailingcomma", FALSE)))
    style.trailingcomma = SvTRUE(*svp);
- if ((svp = hv_fetch(hv, "bless", 5, FALSE)))
+ if ((svp = hv_fetchs(hv, "bless", FALSE)))
    style.bless = *svp;
- if ((svp = hv_fetch(hv, "maxdepth", 8, FALSE)))
+ if ((svp = hv_fetchs(hv, "maxdepth", FALSE)))
    style.maxdepth = SvIV(*svp);
- if ((svp = hv_fetch(hv, "maxrecurse", 10, FALSE)))
+ if ((svp = hv_fetchs(hv, "maxrecurse", FALSE)))
    style.maxrecurse = SvIV(*svp);
-if ((svp = hv_fetch(hv, "sortkeys", 8, FALSE))) {
+if ((svp = hv_fetchs(hv, "sortkeys", FALSE))) {
    SV *sv = *svp;
    if (! SvTRUE(sv))
        style.sortkeys = NULL;
}
@@ -1525,9 +1607,10 @@ Data_Dumper_Dumpxs(href, ...)
     }
    else {
        STRLEN nchars;
-    sv_setpvn(name, "$", 1);
+    sv_setpvs(name, "$");
    sv_catsv(name, varname);
-    nchars = my_snprintf(tmpbuf, sizeof(tmpbuf), "%"IVdf, (IV)(i+1));
+    nchars = my_snprintf(tmpbuf, sizeof(tmpbuf), "%" IVdf,
         (IV)(i+1));
    sv_catpvn(name, tmpbuf, nchars);
 }
@@ -1575,7 +1658,7 @@ Data_Dumper_Dumpxs(href, ...)
 sv_catpvs(retval, ";");
     sv_catsv(retval, style.sep);
 }
-   sv_setpvn(valstr, "", 0);
+   SvPVCLEAR(valstr);
if (gimme == G_ARRAY) {
    XPUSHs(sv_2mortal(retval));
if (i < imax) /* not the last time thro ? */ */
diff --git a/t/bugs.t b/t/bugs.t
index a440b0a..5db82da 100644
--- a/t/bugs.t
+++ b/t/bugs.t
@@ -12,7 +12,7 @@ BEGIN {
 }

 use strict;
-use Test::More tests => 15;
+use Test::More tests => 24;
use Data::Dumper;

 { 
 @@ -144,4 +144,39 @@ SKIP: {
     &$tests;
 }

+{ # https://rt.perl.org/Ticket/Display.html?id=128524
+   my $want;
+   my $runtime = "runtime";
+   my $requires = "requires";


utf8::upgrade(my $uruntime = $runtime);
utf8::upgrade(my $urequires = $requires);
for my $run ($runtime, $uruntime) {
    for my $req ($requires, $urequires) {
        my $data = { $run => { $req => { foo => "bar" } });
        local $Data::Dumper::Useperl = 1;
        # we want them all the same
        defined $want or $want = Dumper($data);
        is(Dumper( $data ), $want, "utf-8 indents");
        SKIP:
        {
            defined &Data::Dumper::Dumpxs
            or skip "No XS available", 1;
            local $Data::Dumper::Useperl = 0;
            is(Dumper( $data ), $want, "utf8-indents");
        }
    }
}

# RT#130487 - stack management bug in XS deparse
SKIP: {
    skip "No XS available", 1 if !defined &Data::Dumper::Dumpxs;
    sub rt130487_args { 0 + @_ }
    my $code = sub { };
    local $Data::Dumper::Useperl = 0;
    local $Data::Dumper::Deparse = 1;
    my $got = rt130487_args( Dumper($code) );
    is($got, 1, "stack management in XS deparse works, rt 130487");
}

# EOF
diff --git a/t/deparse.t b/t/deparse.t
index c281fce..cddde8c 100644
--- a/t/deparse.t
+++ b/t/deparse.t
@@ -15,7 +15,7 @@ BEGIN {
    use strict;

    use Data::Dumper;
-use Test::More tests =>  8;
+use Test::More tests =>  16;
    use lib qw(.t/lib);
    use Testing qw( _dumptostr );

@@ -24,7 +24,9 @@ BEGIN {
    use strict;

    use Data::Dumper;
-use Test::More tests =>  8;
+use Test::More tests =>  16;
    use lib qw(.t/lib);
    use Testing qw( _dumptostr );

    @ @ -24,7 +24,9 @ @ use Testing qw( _dumptostr );

    note("\$Data::Dumper::Deparse and Deparse()");
for my $useperl (0, 1) {
    local $Data::Dumper::Useperl = $useperl;

    use strict;
    my $struct = { foo => "bar\nbaz", quux => sub { "fleem" } };    
@@ -46,11 +48,11 @@ note("$Data::Dumper::Deparse and Deparse()");
    $dumps{'objzero'} = _dumptostr($obj);

    is($dumps{'noprev'}, $dumps{'dddzero'},
        "No previous setting and \$Data::Dumper::Deparse = 0 are equivalent");
+    "No previous setting and \$Data::Dumper::Deparse = 0 are equivalent (useperl=\$useperl)"
    );

    is($dumps{'noprev'}, $dumps{'objempty'},
        "No previous setting and Deparse() are equivalent");
+    "No previous setting and Deparse() are equivalent (useperl=\$useperl)"
    );

    is($dumps{'noprev'}, $dumps{'objzero'},
        "No previous setting and Deparse(0) are equivalent");
+    "No previous setting and Deparse(0) are equivalent (useperl=\$useperl)"
    );

    local $Data::Dumper::Deparse = 1;
    $obj = Data::Dumper->new( [ $struct ] );
@@ -62,19 +64,19 @@ note("\$Data::Dumper::Deparse and Deparse()");
    $dumps{'objone'} = _dumptostr($obj);

    is($dumps{'dddtrue'}, $dumps{'objone'},
+    "$Data::Dumper::Deparse = 1 and Deparse(1) are equivalent (useperl=\$useperl)"
    );

    isnt($dumps{'dddzero'}, $dumps{'dddtrue'},
        "$Data::Dumper::Deparse = 0 differs from \$Data::Dumper::Deparse = 1";
+    "$Data::Dumper::Deparse = 0 differs from \$Data::Dumper::Deparse = 1 (useperl=\$useperl)"
    );

    like($dumps{'dddzero'},
        qr/quux.*?sub.*?DUMMY/s,
-    "$Data::Dumper::Deparse = 0 reports DUMMY instead of deparsing coderef";
+    "$Data::Dumper::Deparse = 0 reports DUMMY instead of deparsing coderef (useperl=\$useperl)"
    );

    unlike($dumps{'dddtrue'},
        qr/quux.*?sub.*?DUMMY/s,
-    "$Data::Dumper::Deparse = 1 does not report DUMMY";
+    "$Data::Dumper::Deparse = 1 does not report DUMMY (useperl=\$useperl)"
    );

    like($dumps{'dddtrue'},
        qr/quux.*?use\strict.*?fleem/s,
-    "$Data::Dumper::Deparse = 1 parses coderef";
+    "$Data::Dumper::Deparse = 1 parses coderef (useperl=\$useperl)"
    );
}
--
2.9.3

Found in path(s):
No license file was found, but licenses were detected in source scan.

---
abstract: unknown
author:
  - unknown
buildRequires:
  ExtUtils::MakeMaker: '0'
  Test::More: '0.98'
configureRequires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 0
generated_by: 'ExtUtils::MakeMaker version 7.0401, CPAN::Meta::Converter version 2.150001'
license: unknown
metaSpec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
name: Data-Dumper
noIndex:
  directory:
    - t
    - inc
requires: {}
resources:
  MailingList: http://lists.cpan.org/showlist.cgi?name=perl5-porters
  bugtracker: http://rt.perl.org/perlbug/
  repository: 'git://perl5.git.perl.org/perl.git perl-git'
  version: '2.161'

Found in path(s):
No license file was found, but licenses were detected in source scan.

/ *
-------------------------------------------------------------

ppport.h -- Perl/Pollution/Portability Version 3.31

Automatically created by Devel::PPPort running under perl 5.022001.
Do NOT edit this file directly! -- Edit PPPort_pm.PL and the includes in parts/inc/ instead.

Use 'perldoc ppport.h' to view the documentation below.

SKIP

=pod

=head1 NAME

ppport.h - Perl/Pollution/Portability version 3.31

=head1 SYNOPSIS

perl ppport.h [options] [source files]

Searches current directory for files if no [source files] are given

--help show short help
--version show version
--patch=file write one patch file with changes
--copy=suffix write changed copies with suffix
--diff=program use diff program and options
--compat-version=version provide compatibility with Perl version
--cplusplus accept C++ comments
--quiet don't output anything except fatal errors
--nodiag don't show diagnostics
--nohints don't show hints
--nochanges don't suggest changes
--nofilter don't filter input files
--strip strip all script and doc functionality from ppport.h
--list-provided list provided API
--list-unsupported list unsupported API
--api-info=name show Perl API portability information

=head1 COMPATIBILITY

This version of F<ppport.h> is designed to support operation with Perl
installations back to 5.003, and has been tested up to 5.20.

=head1 OPTIONS

=head2 --help

Display a brief usage summary.

=head2 --version

Display the version of F<ppport.h>.

=head2 --patch=I<file>

If this option is given, a single patch file will be created if any changes are suggested. This requires a working diff program to be installed on your system.

=head2 --copy=I<suffix>

If this option is given, a copy of each file will be saved with the given suffix that contains the suggested changes. This does not require any external programs. Note that this does not automagically add a dot between the original filename and the suffix. If you want the dot, you have to include it in the option argument.

If neither C<--patch> or C<--copy> are given, the default is to simply print the diffs for each file. This requires either C<Text::Diff> or a C<diff> program to be installed.

=head2 --diff=I<program>

Manually set the diff program and options to use. The default is to use C<Text::Diff>, when installed, and output unified context diffs.

=head2 --compat-version=I<version>

Tell F<ppport.h> to check for compatibility with the given Perl version. The default is to check for compatibility with Perl version 5.003. You can use this option to reduce the output of F<ppport.h> if you intend to be backward compatible only down to a certain Perl version.

=head2 --cplusplus

Usually, F<ppport.h> will detect C++ style comments and
replace them with C style comments for portability reasons.
Using this option instructs F<ppport.h> to leave C++
comments untouched.

=head2 --quiet

Be quiet. Don't print anything except fatal errors.

=head2 --nodiag

Don't output any diagnostic messages. Only portability
alerts will be printed.

=head2 --nohints

Don't output any hints. Hints often contain useful portability
notes. Warnings will still be displayed.

=head2 --nochanges

Don't suggest any changes. Only give diagnostic output and hints
unless these are also deactivated.

=head2 --nofilter

Don't filter the list of input files. By default, files not looking
like source code (i.e. not *.xs, *.c, *.cc, *.cpp or *.h) are skipped.

=head2 --strip

Strip all script and documentation functionality from F<ppport.h>.
This reduces the size of F<ppport.h> dramatically and may be useful
if you want to include F<ppport.h> in smaller modules without
increasing their distribution size too much.

The stripped F<ppport.h> will have a C<--unstrip> option that allows
you to undo the stripping, but only if an appropriate C<Devel::PPPort>
module is installed.

=head2 --list-provided

Lists the API elements for which compatibility is provided by
F<ppport.h>. Also lists if it must be explicitly requested,
if it has dependencies, and if there are hints or warnings for it.

=head2 --list-unsupported

Lists the API elements that are known not to be supported by
F<ppport.h> and below which version of Perl they probably won't be available or work.

=head2 --api-info=I<name>

Show portability information for API elements matching I<name>. If I<name> is surrounded by slashes, it is interpreted as a regular expression.

=head1 DESCRIPTION

In order for a Perl extension (XS) module to be as portable as possible across differing versions of Perl itself, certain steps need to be taken.

=over 4

=item *

Including this header is the first major one. This alone will give you access to a large part of the Perl API that hasn't been available in earlier Perl releases. Use

perl ppport.h --list-provided

to see which API elements are provided by ppport.h.

=item *

You should avoid using deprecated parts of the API. For example, using global Perl variables without the C<PL_> prefix is deprecated. Also, some API functions used to have a C<perl_> prefix. Using this form is also deprecated. You can safely use the supported API, as F<ppport.h> will provide wrappers for older Perl versions.

=item *

If you use one of a few functions or variables that were not present in earlier versions of Perl, and that can't be provided using a macro, you have to explicitly request support for these functions by adding one or more C<#define>s in your source code before the inclusion of F<ppport.h>.

These functions or variables will be marked C<explicit> in the list shown by C<--list-provided>.

Depending on whether you module has a single or multiple files that use such functions or variables, you want either C<static> or global variants.
For a C<static> function or variable (used only in a single source file), use:

```c
#define NEED_function
#define NEED_variable
```

For a global function or variable (used in multiple source files), use:

```c
#define NEED_function_GLOBAL
#define NEED_variable_GLOBAL
```

Note that you mustn't have more than one global request for the same function or variable in your project.

<table>
<thead>
<tr>
<th>Function / Variable</th>
<th>Static Request</th>
<th>Global Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL_parser</td>
<td>NEED_PL_parser</td>
<td>NEED_PL_parser_GLOBAL</td>
</tr>
<tr>
<td>PL_signals</td>
<td>NEED_PL_signals</td>
<td>NEED_PL_signals_GLOBAL</td>
</tr>
<tr>
<td>caller_cx()</td>
<td>NEED_caller_cx</td>
<td>NEED_caller_cx_GLOBAL</td>
</tr>
<tr>
<td>eval_pv()</td>
<td>NEED_eval_pv</td>
<td>NEED_eval_pv_GLOBAL</td>
</tr>
<tr>
<td>grok_bin()</td>
<td>NEED_grok_bin</td>
<td>NEED_grok_bin_GLOBAL</td>
</tr>
<tr>
<td>grok_hex()</td>
<td>NEED_grok_hex</td>
<td>NEED_grok_hex_GLOBAL</td>
</tr>
<tr>
<td>grok_number()</td>
<td>NEED_grok_number</td>
<td>NEED_grok_number_GLOBAL</td>
</tr>
<tr>
<td>grok_numeric_radix()</td>
<td>NEED_grok_numeric_radix</td>
<td>NEED_grok_numeric_radix_GLOBAL</td>
</tr>
<tr>
<td>grok_oct()</td>
<td>NEED_grok_oct</td>
<td>NEED_grok_oct_GLOBAL</td>
</tr>
<tr>
<td>load_module()</td>
<td>NEED_load_module</td>
<td>NEED_load_module_GLOBAL</td>
</tr>
<tr>
<td>mg_findext()</td>
<td>NEED_mg_findext</td>
<td>NEED_mg_findext_GLOBAL</td>
</tr>
<tr>
<td>my_snprintf()</td>
<td>NEED_my_snprintf</td>
<td>NEED_my_snprintf_GLOBAL</td>
</tr>
<tr>
<td>my_sprintf()</td>
<td>NEED_my_sprintf</td>
<td>NEED_my_sprintf_GLOBAL</td>
</tr>
<tr>
<td>my_strlcat()</td>
<td>NEED_my_strlcat</td>
<td>NEED_my_strlcat_GLOBAL</td>
</tr>
<tr>
<td>my_strlcpy()</td>
<td>NEED_my_strlcpy</td>
<td>NEED_my_strlcpy_GLOBAL</td>
</tr>
<tr>
<td>newCONSTSUB()</td>
<td>NEED_newCONSTSUB</td>
<td>NEED_newCONSTSUB_GLOBAL</td>
</tr>
<tr>
<td>newRV_noinc()</td>
<td>NEED_newRV_noinc</td>
<td>NEED_newRV_noinc_GLOBAL</td>
</tr>
<tr>
<td>newSV_type()</td>
<td>NEED_newSV_type</td>
<td>NEED_newSV_type_GLOBAL</td>
</tr>
<tr>
<td>newSVpn_flags()</td>
<td>NEED_newSVpn_flags</td>
<td>NEED_newSVpn_flags_GLOBAL</td>
</tr>
<tr>
<td>newSVpn_share()</td>
<td>NEED_newSVpn_share</td>
<td>NEED_newSVpn_share_GLOBAL</td>
</tr>
<tr>
<td>pv_display()</td>
<td>NEED_pv_display</td>
<td>NEED_pv_display_GLOBAL</td>
</tr>
<tr>
<td>pv_escape()</td>
<td>NEED_pv_escape</td>
<td>NEED_pv_escape_GLOBAL</td>
</tr>
<tr>
<td>pv_pretty()</td>
<td>NEED_pv_pretty</td>
<td>NEED_pv_pretty_GLOBAL</td>
</tr>
<tr>
<td>sv_2pvflags()</td>
<td>NEED_sv_2pvflags</td>
<td>NEED_sv_2pvflags_GLOBAL</td>
</tr>
<tr>
<td>sv_2pvbyte()</td>
<td>NEED_sv_2pvbyte</td>
<td>NEED_sv_2pvbyte_GLOBAL</td>
</tr>
<tr>
<td>sv_catpvf_mg()</td>
<td>NEED_sv_catpvf_mg</td>
<td>NEED_sv_catpvf_mg_GLOBAL</td>
</tr>
<tr>
<td>sv_catpvf_mg_nocontext()</td>
<td>NEED_sv_catpvf_mg_nocontext</td>
<td>NEED_sv_catpvf_mg_nocontext_GLOBAL</td>
</tr>
<tr>
<td>sv_pvn_force_flags()</td>
<td>NEED_sv_pvn_force_flags</td>
<td>NEED_sv_pvn_force_flags_GLOBAL</td>
</tr>
<tr>
<td>sv_setpvf_mg()</td>
<td>NEED_sv_setpvf_mg</td>
<td>NEED_sv_setpvf_mg_GLOBAL</td>
</tr>
<tr>
<td>sv_setpvf_mg_nocontext()</td>
<td>NEED_sv_setpvf_mg_nocontext</td>
<td>NEED_sv_setpvf_mg_nocontext_GLOBAL</td>
</tr>
<tr>
<td>sv_unmagicext()</td>
<td>NEED_sv_unmagicext</td>
<td>NEED_sv_unmagicext_GLOBAL</td>
</tr>
</tbody>
</table>
To avoid namespace conflicts, you can change the namespace of the explicitly exported functions / variables using the C<\DPPP\_NAMESPACE> macro. Just C<#define> the macro before including C<ppport.h>:

```c
#define DPPP\_NAMESPACE MyOwnNamespace_
#include "ppport.h"
```

The default namespace is C<\DPPP\_>.

=back

The good thing is that most of the above can be checked by running F<ppport.h> on your source code. See the next section for details.

=head1 EXAMPLES

To verify whether F<ppport.h> is needed for your module, whether you should make any changes to your code, and whether any special defines should be used, F<ppport.h> can be run as a Perl script to check your source code. Simply say:

perl ppport.h

The result will usually be a list of patches suggesting changes that should at least be acceptable, if not necessarily the most efficient solution, or a fix for all possible problems.

If you know that your XS module uses features only available in newer Perl releases, if you're aware that it uses C++ comments, and if you want all suggestions as a single patch file, you could use something like this:

```bash
perl ppport.h --compat-version=5.6.0 --cplusplus --patch=test.diff
```

If you only want your code to be scanned without any suggestions for changes, use:

```bash
perl ppport.h --nochanges
```

You can specify a different C<diff> program or options, using the C<--diff> option:

```bash
perl ppport.h --diff='diff -C 10'
```
This would output context diffs with 10 lines of context.

If you want to create patched copies of your files instead, use:

    perl ppport.h --copy=.new

To display portability information for the C<newSVpvn> function, use:

    perl ppport.h --api-info=newSVpvn

Since the argument to C<--api-info> can be a regular expression, you can use

    perl ppport.h --api-info=/_nomg$/

to display portability information for all C<_nomg> functions or

    perl ppport.h --api-info=/./

to display information for all known API elements.

=head1 BUGS

If this version of F<ppport.h> is causing failure during the compilation of this module, please check if newer versions of either this module or C<Devel::PPPort> are available on CPAN before sending a bug report.

If F<ppport.h> was generated using the latest version of C<Devel::PPPort> and is causing failure of this module, please file a bug report here: L<https://github.com/mhx/Devel-PPPort/issues/>

Please include the following information:

=over 4

=item 1.

The complete output from running "perl -V"

=item 2.

This file.

=item 3.
The name and version of the module you were trying to build.

=item 4.

A full log of the build that failed.

=item 5.

Any other information that you think could be relevant.

=back

For the latest version of this code, please get the C<Devel::PPPort> module from CPAN.

=head1 COPYRIGHT

Version 3.x, Copyright (c) 2004-2013, Marcus Holland-Moritz.

Version 2.x, Copyright (C) 2001, Paul Marquess.

Version 1.x, Copyright (C) 1999, Kenneth Albanowski.

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

=head1 SEE ALSO

See L<Devel::PPPort>.

=cut

use strict;

# Disable broken TRIE-optimization
BEGIN { eval '{^RE_TRIE_MAXBUF} = -1' if $> >= 5.009004 && $> <= 5.009005 };

my $VERSION = 3.31;

my %opt = (
    quiet => 0,
    diag => 1,
    hints => 1,
    changes => 1,
    cplusplus => 0,
    filter => 1,
    strip => 0,
    version => 0,
);
my($ppport) = $0 =~ /\[\w.]+$/;
my $LF = '(?:\r\n|\[\r\n\])';   # line feed
my $HS = "[ \t\]";             # horizontal whitespace

# Never use C comments in this file!
my $ccs = '\.\*';
my $cce = '\*\.'/;
my $rccs = quotemeta $ccs;
my $rcce = quotemeta $cce;

eval {
    require Getopt::Long;
    Getopt::Long::GetOptions(%opt, qw(
        help quiet diag! filter! hints! changes! cplusplus strip version
        patch=s copy=s diff=s compat-version=s
        list-provided list-unsupported api-info=s
    )) or usage();
};

if ($@ and grep /^-/, @ARGV) {
    usage() if "@ARGV" =~ /^--?h(?:elp)?$/;
    die "Getopt::Long not found. Please don't use any options.
";
}

if ($opt{version}) {
    print "This is $0 $VERSION.\n";
    exit 0;
}

usage() if $opt{help};
strip() if $opt{strip};

if (exists $opt{compat-version}) {
    my($r,$v,$s) = eval { parse_version($opt{compat-version}) };
    if ($@) {
        die "Invalid version number format: $opt{compat-version}\n";
    }
    die "Only Perl 5 is supported\n" if $r != 5;
    die "Invalid version number: $opt{compat-version}\n" if $v >= 1000 || $s >= 1000;
    $opt{compat-version} = sprintf "%d.%03d%03d", $r, $v, $s;
} else {
    $opt{compat-version} = 5;
}

my %API = map { /^\w+|[^\^]*|[^\^]*|\^$/}
? ( $1 => {
    ( $2 ? ( base => $2 ) : () ),
    ( $3 ? ( todo => $3 ) : () ),
    ( index($4, 'v') =< 0 ? ( varargs => 1 ) : () ),
    ( index($4, 'p') =< 0 ? ( provided => 1 ) : () ),
    ( index($4, 'n') =< 0 ? ( nothxarg => 1 ) : () ),
  })
  : die "invalid spec: $_" } qw(
  ASCII_TO_NEED
  AvFILL
  BhkDISABLE
  BhkENABLE
  BhkENTRY_set
  BhkENTRY
  BhkFLAGS
  CALL_BLOCK_HOOKS
  CLASS
  CPERLscope
  CX_CURPAD_SAVE
  CX_CURPAD_SV
  CopFILEAV
  CopFILEGV_set
  CopFILEGV
  CopFILESV
  CopFILE_set
  CopFILE
  CopSTASHPV_set
  CopSTASHPV
  CopSTASH_eq
  CopSTASH_set
  CopSTASH
  CopyD
  CvPADLIST
  CvSTASH
  CvWEAKOUTSIDE
  DEFSV_set
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---

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if (exists $opt{'list-unsupported'}) {
    my $f;
    for $f (sort { lc $a cmp lc $b } keys %API) {
        next unless $API{$f}{todo};
        print "$f ".x(40-length($f)), " ", format_version($API{$f}{todo}), "\n";
    }
    exit 0;
}

# Scan for possible replacement candidates

my(%replace, %need, %hints, %warnings, %depends);
my $replace = 0;
my($hint, $define, $function);

sub find_api
{
    my $code = shift;
    $code =~ s{\b(\w+)\b}{ \1 ]; $1 =~ m{\w\w*$} }egsx;
    grep { exists $API{$_} } $code =~ /\w+/m;
    while (<DATA>) {
        if ($hint) {
            my $h = $hint->[0] eq 'Hint'? \%hints \%warnings;
            if (m{\w\w*$\w\w*$}) {
                for (@{Shint->[1]}) {
                    $h->{$_} ||= ''; # suppress warning with older perls
                    $h->{$_} .= "$1\n";
                }
            }
        }
    }
}
$hint = [S1, [split /,?s+/, S2]]
    if m{^
        s*srccs\s+(\w+(?:\w+))*s*}$;

if ($define) {
    if ($define->[1] =~ /\$/) {
        $define->[1] = $;
    } else {
        if (exists $API{$define->[0]} && $define->[1] !~ /^DPPP_\$/) {
            my @n = find_api($define->[1]);
            push @ {$depends{$define->[0]}}, @n if @n
        }
        undef $define;
    }
}
$define = [S1, S2] if m{^
    s*srccs\s+\(\w+)(?:\([^)]\))*\?s+\.$};

if ($function) {
    if (/\$/) {
        if (exists $API{$function->[0]}) {
            my @n = find_api($function->[1]);
            push @ {$depends{$function->[0]}}, @n if @n
        }
        undef $function;
    } else {
        $function->[1] .= $_;
    }
}
$function = [S1, ""] if m{^
    DPPP_\(my_(\w+)\);$};

$replace     = S1 if m{^
    srccs\s+Replace:\s+\(\w+\)\s+$srccs\s*$};
$replace[S2] = S1 if $replace and m{^
    srccs\s+\(\w+\)\s+\(\w+\)\s+$srccs\s*$};
$replace[S2] = S1 if m{^
    srccs\s+Replace\s+\(\w+\) with \(\w+\)$};
$replace[S1] = S2 if m{^
    srccs\s+Replace (\w+) with \(\w+\)$};

if (m{^
    srccs\s+\(\w+\)\s+\(\w+\)\s+\(\w+\)$}) {
    my @deps = map { s/s+//g; S_ } split /, $3;
    my $d;
    for $d (map { s/s+//g; S_ } split /, $1) {
        push @ {$depends{$d}}, @deps;
    }
$need{S1} = 1 if m{^\#if\s+defined\(NEED_(\w+)(?:_GLOBAL)?\)\}i; 
}

for (values %depends) {
  my %s;
  $_. = [sort grep !$s{$_}++, @$_];
}

if (exists $opt{'api-info'}) {
  my $f;
  my $count = 0;
  my $match = Sopt{'api-info'} =~ m!^/(.*)/$! ? $1 : "^\Q$opt{'api-info'}\E\$";
  for $f (sort { lc $a cmp lc $b } keys %API) {
    next unless $f =~ /$match/;
    print "\n=== $f ===\n
";
    my $info = 0;
    if ($API{$f}{base} || $API{$f}{todo}) {
      my $base = format_version($API{$f}{base} || $API{$f}{todo});
      print "Supported at least starting from perl-$base\n";
      $info++;
    }
    if ($API{$f}{provided}) {
      my $todo = $API{$f}{todo} ? format_version($API{$f}{todo}) : "5.003";
      print "Support by $ppport provided back to perl-$todo\n";
      print "Support needs to be explicitly requested by NEED_$f\n" if exists $need{$f};
      print "Depends on: \njoin(\n', \n@\$depends{\$f} )); \n\n" if exists $depends{$f};
      print "\nHints:\n\n$hints{$f}" if exists $hints{$f};
      if exists $warnings{$f};
      $info++;
    }
    print "\nNo portability information available\n" unless $info;
    $count++;
  }
  $count or print "Found no API matching 'Sopt{'api-info'}'.\n";
  print "\n";
  exit 0;
}

if (exists $opt{'list-provided'}) {
  my $f;
  for $f (sort { lc $a cmp lc $b } keys %API) {
    next unless $API{$f}{provided};
    my @flags;
    push @flags, 'explicit' if exists $need{$f};
    push @flags, 'depend'   if exists $depends{$f};
  }
push @flags, 'hint' if exists $hints{$f};
push @flags, 'warning' if exists $warnings{$f};
my $flags = @flags ? ' ['.join(', ', @flags).']' : '';
print "$f$flags\n";
}
exit 0;
}
my @files;
my @srcext = qw( .xs .c .h .cc .cpp -c.inc -xs.inc );
my $srcext = join '|', map { quotemeta $_ } @srcext;
if (@ARGV) {
my %seen;
for (@ARGV) {
if (-e) {
if (-f) {
push @files, $_ unless $seen{$_}++;
}
else { warn "'$_' is not a file.\n" }
}
else {
my @new = grep { -f } glob $_
or warn "'$_' does not exist.\n";
push @files, grep { !$seen{$_}++ } @new;
}
}
}
else {
eval {
require File::Find;
File::Find::find(sub {
$File::Find::name =~ /($srcext)$/i
and push @files, $File::Find::name;
}, '.');
};
if ($@) {
@files = map { glob "*$_" } @srcext;
}
}
if (!@ARGV || $opt{filter}) {
my(@in, @out);
my %xsc = map { /(.*)\.xs$/ ? ("$1.c" => 1, "$1.cc" => 1) : () } @files;
for (@files) {
my $out = exists $xsc{$_} || /\b\Q$ppport\E$/i || !/($srcext)$/i;
push @{ $out ? \@out : \@in }, $_;
}

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if (@ARGV && @out) {
    warning("Skipping the following files (use --nofilter to avoid this):
    " . join "\n    " . @out);
}
@files = @in;
}

die "No input files given!\n" unless @files;

my(%files, %global, %revreplace);
%revreplace = reverse %replace;
my $filename;
my $patch_opened = 0;

for $filename (@files) {
    unless (open IN, "<$filename") {
        warn "Unable to read from $filename: $!
        next;
    }
    info("Scanning $filename ...);
    my $c = do { local $/; <IN> }
    close IN;
    my %file = (orig => $c, changes => 0);
    # Temporarily remove C/XS comments and strings from the code
    my @ccom;
    $c =~ s{
        (^SHS\#SHS*include\b[^\r\n]+\b(?:Q$ppport\E|XSUB\b)\b[^\r\n]*
        | ^SHS\#SHS*(:define|elif|if(?:def)?)\b[^\r\n]* )
        | ( ^SHS\#[^\r\n]*
        | "[^\r\n]*(?:\[^\r\n]*)*"
        | '\[^'\r\n]*' }
    {
        defined $2 and push @ccom, $2;
        defined $1 ? $1 : "$ccs$#ccom$cce"
    }mgsex;
    $file{ccom} = @ccom;
    $file{code} = $c;
    $file{has_inc_ppport} = $c =~ /^SHS*SHS*include[^\r\n]+\bQ$ppport\E\b/m;

    my $func;
    for $func (keys %API) {
        my $match = $func;
        $match .= "$revreplace{$func}" if exists $revreplace{$func};
if ($c =~ /\b(?:Perl_)?($match)\b/) {
$file{uses_replace}{$1}++ if exists $revreplace{$func} && $1 eq $revreplace{$func};
$file{uses_Perl}{$func}++ if $c =~ /\bPerl_$func\b/;
if (exists $API{$func}{provided}) {
$file{uses_provided}{$func}++;
if (!exists $API{$func}{base} || $API{$func}{base} > $opt{'compat-version'}) {
$file{uses}{$func}++;
my @deps = rec_depend($func);
if (@deps) {
$file{uses_deps}{$func} = \@deps;
for (@deps) {
$file{uses}{$_} = 0 unless exists $file{uses}{$_};
}
}
for ($func, @deps) {
$file{needs}{$_} = 'static' if exists $need{$_};
}
}
}
if (exists $API{$func}{todo} && $API{$func}{todo} > $opt{'compat-version'}) {
if ($c =~ /\b$func\b/) {
$file{uses_todo}{$func}++;
}
}
}
}
while ($c =~ /^$HS*#$HS*define$HS+(NEED_(\w+?)(_GLOBAL)?)\b/mg) {
if (exists $need{$2}) {
$file{defined $3 ? 'needed_global' : 'needed_static'}{$2}++;
}
else { warning("Possibly wrong #define $1 in $filename") }
}
for (qw(uses needs uses_todo needed_global needed_static)) {
for $func (keys %{$file{$_}}) {
push @{$global{$_}{$func}}, $filename;
}
}
$files{$filename} = \%file;
}
# Globally resolve NEED_'s
my $need;
for $need (keys %{$global{needs}}) {
if (@{$global{needs}{$need}} > 1) {
my @targets = @{$global{needs}{$need}};

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my @t = grep $files{$_}{needed_global}{$need}, @targets;
@targets = @t if @t;
@t = grep /\.xs$/i, @targets;
@targets = @t if @t;
my $target = shift @targets;
$files{$target}{needs}{$need} = 'global';
for (@{$global{needs}{$need}}) {
$files{$_}{needs}{$need} = 'extern' if $_ ne $target;
}
}
}
for $filename (@files) {
exists $files{$filename} or next;
info("=== Analyzing $filename ===");
my %file = %{$files{$filename}};
my $func;
my $c = $file{code};
my $warnings = 0;
for $func (sort keys %{$file{uses_Perl}}) {
if ($API{$func}{varargs}) {
unless ($API{$func}{nothxarg}) {
my $changes = ($c =~ s{\b(Perl_$func\s*\(\s*)(?!aTHX_?)(\)|[^\s)]*\))}
{ $1 . ($2 eq ')' ? 'aTHX' : 'aTHX_ ') . $2 }ge);
if ($changes) {
warning("Doesn't pass interpreter argument aTHX to Perl_$func");
$file{changes} += $changes;
}
}
}
else {
warning("Uses Perl_$func instead of $func");
$file{changes} += ($c =~ s{\bPerl_$func(\s*)\((\s*aTHX_?)?\s*}
{$func$1(}g);
}
}
for $func (sort keys %{$file{uses_replace}}) {
warning("Uses $func instead of $replace{$func}");
$file{changes} += ($c =~ s/\b$func\b/$replace{$func}/g);
}
for $func (sort keys %{$file{uses_provided}}) {
if ($file{uses}{$func}) {
if (exists $file{uses_deps}{$func}) {

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diag("Uses $func, which depends on ", join(':', '@{file{uses_deps}{$func}}'));
}
else {
    diag("Uses $func");
}

$warnings += hint($func);
}

unless ($opt{quiet}) {
    for $func (sort keys %{$file{uses_todo}}) {
        print "*** WARNING: Uses $func, which may not be portable below perl ",
            format_version($API{$func}{todo}), ", even with '$ppport'\n";
        $warnings++;
    }
}

for $func (sort keys %{$file{needed_static}}) {
    my $message = ";
    if (not exists $file{uses}{$func}) {
        $message = "No need to define NEED_$func if $func is never used";
    }
    elsif (exists $file{needs}{$func} & $file{needs}{$func} ne 'static') {
        $message = "No need to define NEED_$func when already needed globally";
    }
    if ($message) {
        diag($message);
        $file{changes} += ($c =~ s/^$HS*#\ndefine\n$HS+NEED_$func\n$LSF//mg);
    }
}

for $func (sort keys %{$file{needed_global}}) {
    my $message = ";
    if (not exists $global{uses}{$func}) {
        $message = "No need to define NEED_$funcGLOBAL if $func is never used";
    }
    elsif (exists $file{needs}{$func}) {
        if ($file{needs}{$func} eq 'extern') {
            $message = "No need to define NEED_$funcGLOBAL when already needed globally";
        }
        elsif ($file{needs}{$func} eq 'static') {
            $message = "No need to define NEED_$funcGLOBAL when only used in this file";
        }
    }
    if ($message) {
        diag($message);
        $file{changes} += ($c =~ s/^$HS*#\ndefine\n$HS+NEED_$funcGLOBAL\n$LSF//mg);
    }
}
$file{needs_inc_ppport} = keys %{$file{uses}};

if ($file{needs_inc_ppport}) {
    my $pp = ";

    for $func (sort keys %{$file{needs}}) {
        my $type = $file{needs}{$func};
        next if $type eq 'extern';
        my $suffix = $type eq 'global' ? '_GLOBAL' : "";
        unless (exists $file{"needed_$type"}[$func]) {
            if ($type eq 'global') {
                diag("Files @ @{$global{needs}{$func}} need $func, adding global request");
            } else {
                diag("File needs $func, adding static request");
            }
            $pp .= "#define NEED_$func$suffix\n";
        }
    }

    if ($pp && ($c =~ s/^(?=$HS*#$HS*define$HS+NEED_\w+)/$pp/m)) {
        $pp = ";
        $file{changes}++;  
    }

    unless ($file{has_inc_ppport}) {
        diag("Needs to include '$ppport'");
        $pp .= qq(#include "$ppport\n"
    }

    if ($pp) {
        $file{changes} += ($c =~ s/^(?=$HS*#\H*\H*define\H*$NEED_\w+\H*\W+\H*$ppport)/$pp/m)  
         || ($c =~ s/^(?=$HS*#\H*\H*include\H*$ppport)/$pp/m)  
         || ($c =~ s/^(?=$HS*#\H*\H*include\H*$XSUB\H*$ppport)/$pp/m)  
         || ($c =~ s/^/$pp/);  
    }
}
else {
    if ($file{has_inc_ppport}) {
        diag("No need to include '$ppport'");
        $file{changes} += ($c =~ s/^(?=$HS*#\H*\H*include\H*$ppport)/$ppport\H*\H*\H*$SLF//m);  
    }
}

# put back in our C comments
my $ix;
my $cppc = 0;
my @ccom = @{$file{ccom}};
for $ix (0 .. $#ccom) {
    if (!$opt{cplusplus} && $ccom[$ix] =~ s!^//!!) {
        $cppc++;
        $file{changes} += $c =~ s/$rcs$ix$rcce/$ccom[$ix]/;
    } else {
        $c =~ s/$rcs$ix$rcce/$ccom[$ix]/;
    }
}
if ($cppc) {
    my $s = $cppc != 1 ? 's' : '';        
    warning("Uses $cppc C++ style comment$s, which is not portable");
}

my $s = $warnings != 1 ? 's' : '';        
my $warn = $warnings ? " ($warnings warning$s)" : ''; 
info("Analysis completed$warn");

if ($file{changes}) {
    if (exists $opt{copy}) {
        my $newfile = "$filename$opt{copy}";
        if (-e $newfile) {
            error("'$newfile' already exists, refusing to write copy of '$filename'");
        } else {
            local *F;
            if (open F, ">$newfile") {
                info("Writing copy of '$filename' with changes to '$newfile'");
                print F $c;
                close F;
            } else {
                error("Cannot open '$newfile' for writing: $!");
            }
        }
    } elsif (exists $opt{patch} || $opt{changes}) {
        if (exists $opt{patch}) {
            unless ($patch_opened) {
                if (open PATCH, ">$opt{patch}" ) {
                    $patch_opened = 1;
                } else {
                    error("Cannot open '$opt{patch}' for writing: $!");
                }
            }
        else { 
            error("Cannot open '$opt{patch}' for writing: $!");
        }
    }
} 
else if (exists $opt{patch} || $opt{changes}) { 
    if (exists $opt{patch}) {
        unless ($patchOpened) {
            if (open PATCH, ">$opt{patch}" ) {
                $patchOpened = 1;
            } else {
                error("Cannot open '$opt{patch}' for writing: $!");
            }
        }
    } else { 
        error("Cannot open '$opt{patch}' for writing: $!");
    }
}
$opt{changes} = 1;
    goto fallback;
}

mydiff(*PATCH, $filename, $c);
else {
  fallback:
    info("Suggested changes:");
    mydiff(*STDOUT, $filename, $c);
}
else {
  my $s = $file{changes} == 1 ? '' : 's';
  info("$file{changes} potentially required change$s detected");
}
}
else {
  info("Looks good");
}
}

close PATCH if $patch_opened;

exit 0;

sub try_use { eval "use @_;": return $@ eq " "
}

sub mydiff {
  local *F = shift;
  my($file, $str) = @_;  
  my $diff;

  if (exists $opt{diff}) {
    $diff = run_diff($opt{diff}, $file, $str);
  }

  if (!defined $diff and try_use('Text::Diff')) {
    $diff = Text::Diff::diff($file, $str, { STYLE => 'Unified' });
    $diff = <<HEADER . $diff;
    --- $file
    +++ $file.patched
    HEADER
  }

  if (!defined $diff) {

```
$diff = run_diff('diff -u', $file, $str);
}

if (!defined $diff) {
    $diff = run_diff('diff', $file, $str);
}

if (!defined $diff) {
    error("Cannot generate a diff. Please install Text::Diff or use --copy.");
    return;
}

print F $diff;
}

sub run_diff
{
    my($prog, $file, $str) = @_;  
    my $tmp = 'dppptemp';  
    my $suf = 'aaa';  
    my $diff = ";";
    local *F;

    while (-e "$tmp.$suf") { $suf++ }
    $tmp = "$tmp.$suf";

    if (open F, ">$tmp") {
        print F $str;
        close F;

        if (open F, "$prog $file $tmp |") {
            while (<F>) {
                s/\Q$tmp\E/$file.patched/;
                $diff .= $_;
            }
            close F;
            unlink $tmp;
            return $diff;
        }
    }

    unlink $tmp;
    }

    else {
        error("Cannot open '$tmp' for writing: $!");
    }

    return undef;
}
sub rec_depend
{
  my($func, $seen) = @_;  
  return () unless exists $depends{$func};
  $seen = {%{$seen||{}}};
  return () if $seen->{func}++;
  my %s;
  grep !$s{$_}++, map { ($_, rec_depend($_, $seen)) } @{$depends{$func}}; @{$depends{$func}};
}

sub parse_version
{
  my $ver = shift;

  if ($ver =~ /^\d+/.(\d+)/.(\d+)/) {
    return ($1, $2, $3);
  }
  elsif ($ver !~ /^\d+/\[\d\]+$/) {
    die "cannot parse version \$ver\n";
  }

  $ver =~ s/_//g;
  $ver =~ s/\$/000000/;

  my($r,$v,$s) = $ver =~ /\d+\.(\d{3})\.(\d{3})/;

  $v = int $v;
  $s = int $s;

  if ($r < 5 || ($r == 5 && $v < 6)) {
    if ($s % 10) {
      die "cannot parse version \$ver\n";
    }
  }

  return ($r, $v, $s);
}

sub format_version
{
  my $ver = shift;

  $ver =~ s/\$/000000/;
  my($r,$v,$s) = $ver =~ /\d+\.(\d{3})\.(\d{3})/;

  $v = int $v;
  $s = int $s;
if ($r < 5 || ($r == 5 && $v < 6)) {
    if ($s % 10) {
        die "invalid version '$ver'
    }
    $s /= 10;

    $ver = sprintf "%d.%03d", $r, $v;
    $s > 0 and $ver .= sprintf "_%02d", $s;

    return $ver;
}

return sprintf "%d.%d.%d", $r, $v, $s;

sub info {
    $opt{quiet} and return;
    print @_, "\n";
}

sub diag {
    $opt{quiet} and return;
    $opt{diag} and print @_, "\n";
}

sub warning {
    $opt{quiet} and return;
    print "*** ", @_, "\n";
}

sub error {
    print "*** ERROR: ", @_, "\n";
}

my %given_hints;
my %given_warnings;
sub hint {
    $opt{quiet} and return;
    my $func = shift;
    my $rv = 0;
    if (exists $warnings{$func} && !$given_warnings{$func}++) {
        my $warn = $warnings{$func};
        $warn;
    }
$warn =~ s!^!*** !mg;
print "*** WARNING: $func\n", $warn;
$rv++;
}
if ($opt{hints} && exists $hints{$func} && !$given_hints{$func}++) {
    my $hint = $hints{$func};
    $hint =~ s/^/   /mg;
    print "  --- hint for $func ---\n", $hint;
}
$rv;
}

sub usage {
    my($usage) = do { local(@ARGV,$/)=($0); <> } =~ /^=head\d$/ms;
    my %M = ( 'I' => '*' );
    $usage =~ s/\s*/perl\s+$HS+SYNOPSIS\s*\(.*\)\s*\=/>=/ms;
    $usage =~ s/\[A-Z]\<[^>]+>/\M{\1}$/g;
    print <<ENDUSAGE;
Usage: $usage
See perldoc $0 for details.
ENDUSAGE
exit 2;
}

sub strip {
    my $self = do { local(@ARGV,$/)=($0); <> };
    my($copy) = $self =~ /^=head\d+COPYRIGHT\s*\^(.*?)\s*\=/ms;
    $copy =~ s/^(?=\S+)/    /gms;
    $self =~ s/$HS+Do NOT edit.*?(?=^-)/$copy/ms;
    $self =~ s/$HS+\s+\s+\s+\s+/\s+\s+\s+\s+\s+/g;
    my ($@) and die "Cannot require Devel::PPPort, please install.\n";
    if (eval { require Devel::PPPort });
    if (eval $Devel::PPPort::VERSION < $VERSION) {
        die "$0 was originally generated with Devel::PPPort $VERSION.\n";
    }
    Devel::PPPort::WriteFile($0);
    exit 0;
}
Sorry, but this is a stripped version of $0.

To be able to use its original script and doc functionality, please try to regenerate this file using:

$^X $0 --unstrip

END

my($pl, $c) = $self =~ /(.*^__DATA__)(.*)/ms;
$c =~ s{
  /(?:\^[^*]*\*+(?:[^$ccs][^*]*\*+)?/|^\r\n)*
  | ("[^"\\]*(?:\\.[^"\\]*)*)
  | ('[^'\\]*(?:\\.[^'\\]*)*)
  | ($HS+) }{ defined $2 ? ' ' : ($1 || '') }gsex;
$c =~ s!\s+$!!mg;
$c =~ s!^$LF!!mg;
$c =~ s!^\s*#\s*!#!mg;
$c =~ s!^\s+!!mg;

open OUT, ">$0" or die "cannot strip $0: $!

print OUT "$pl$c

exit 0;
}

__DATA__
/*

Found in path(s):

No license file was found, but licenses were detected in source scan.

=head1 NAME

Data::Dumper - stringified perl data structures, suitable for both printing and C<eval>

=head1 SYNOPSIS

use Data::Dumper;

# simple procedural interface
print Dumper($foo, $bar);

# extended usage with names
print Data::Dumper->Dump([$foo, $bar], [qw(foo *ary)]);

# configuration variables
{
    local $Data::Dumper::Purity = 1;
    eval Data::Dumper->Dump([$foo, $bar], [qw(foo *ary)]);
}

# OO usage
$d = Data::Dumper->new([$foo, $bar], [qw(foo *ary)]);
...
print $d->Dump;
...
$d->Purity(1)->Terse(1)->Deepcopy(1);
eval $d->Dump;

=head1 DESCRIPTION

Given a list of scalars or reference variables, writes out their contents in Perl syntax. The references can also be objects. The content of each variable is output in a single Perl statement. Handles self-referential structures correctly.

The return value can be C<eval>ed to get back an identical copy of the original reference structure. (Please do consider the security implications of eval'ing code from untrusted sources!)

Any references that are the same as one of those passed in will be named C<$VAR>n (where n is a numeric suffix), and other duplicate references to substructures within C<$VAR>n will be appropriately labeled using arrow notation. You can specify names for individual values to be dumped if you use the C<Dump()> method, or you can change the default C<$VAR> prefix to something else. See C<$Data::Dumper::Varname> and C<$Data::Dumper::Terse> below.

The default output of self-referential structures can be C<eval>ed, but the nested references to C<$VAR>n will be undefined, since a recursive structure cannot be constructed using one Perl statement. You should set the C<Purity> flag to 1 to get additional statements that will correctly fill in these references. Moreover, if C<eval>ed when strictures are in effect, you need to ensure that any variables it accesses are previously declared.

In the extended usage form, the references to be dumped can be given user-specified names. If a name begins with a C<*>, the output will describe the dereferenced type of the supplied reference for hashes and arrays, and coderefs. Output of names will be avoided where possible if the C<Terse> flag is set.
In many cases, methods that are used to set the internal state of the object will return the object itself, so method calls can be conveniently chained together.

Several styles of output are possible, all controlled by setting the C<Indent> flag. See L<Configuration Variables or Methods> below for details.

=head2 Methods

=over 4

=item I<PACKAGE>->new(I<ARRAYREF [>, I<ARRAYREF]>)

Returns a newly created C<Data::Dumper> object. The first argument is an anonymous array of values to be dumped. The optional second argument is an anonymous array of names for the values. The names need not have a leading C<$> sign, and must be comprised of alphanumeric characters. You can begin a name with a C<*> to specify that the dereferenced type must be dumped instead of the reference itself, for ARRAY and HASH references.

The prefix specified by C<$Data::Dumper::Varname> will be used with a numeric suffix if the name for a value is undefined.

Data::Dumper will catalog all references encountered while dumping the values. Cross-references (in the form of names of substructures in perl syntax) will be inserted at all possible points, preserving any structural interdependencies in the original set of values. Structure traversal is depth-first, and proceeds in order from the first supplied value to the last.

=item I<$OBJ>->Dump  I<or>  I<PACKAGE>->Dump(I<ARRAYREF [>, I<ARRAYREF]>)

Returns the stringified form of the values stored in the object (preserving the order in which they were supplied to C<new>), subject to the configuration options below. In a list context, it returns a list of strings corresponding to the supplied values.

The second form, for convenience, simply calls the C<new> method on its arguments before dumping the object immediately.

=item I<$OBJ>->Seen(I<[HASHREF]>)

Queries or adds to the internal table of already encountered references. You must use C<Reset> to explicitly clear the table if needed. Such references are not dumped; instead, their names are inserted wherever they
are encountered subsequently. This is useful especially for properly
dumping subroutine references.

Expects an anonymous hash of name => value pairs. Same rules apply for names
as in C<new>. If no argument is supplied, will return the "seen" list of
name => value pairs, in a list context. Otherwise, returns the object
itself.

=item I<$OBJ>->Values(I<[ARRAYREF]>)

Queries or replaces the internal array of values that will be dumped. When
called without arguments, returns the values as a list. When called with a
reference to an array of replacement values, returns the object itself. When
called with any other type of argument, dies.

=item I<$OBJ>->Names(I<[ARRAYREF]>)

Queries or replaces the internal array of user supplied names for the values
that will be dumped. When called without arguments, returns the names. When
called with an array of replacement names, returns the object itself. If the
number of replacement names exceeds the number of values to be named, the
excess names will not be used. If the number of replacement names falls short
of the number of values to be named, the list of replacement names will be
exhausted and remaining values will not be renamed. When
called with any other type of argument, dies.

=item I<$OBJ>->Reset

Clears the internal table of "seen" references and returns the object
itself.

=back

=head2 Functions

=over 4

=item Dumper(I<LIST>)

Returns the stringified form of the values in the list, subject to the
configuration options below. The values will be named C<$VAR>I<n> in the
output, where I<n> is a numeric suffix. Will return a list of strings
in a list context.

=back

=head2 Configuration Variables or Methods
Several configuration variables can be used to control the kind of output generated when using the procedural interface. These variables are usually C<local>ized in a block so that other parts of the code are not affected by the change.

These variables determine the default state of the object created by calling the C<new> method, but cannot be used to alter the state of the object thereafter. The equivalent method names should be used instead to query or set the internal state of the object.

The method forms return the object itself when called with arguments, so that they can be chained together nicely.

=over 4

=item *

$Data::Dumper::Indent  I<or>  I<$OBJ>-Indent(I<NEWVAL>)

Controls the style of indentation. It can be set to 0, 1, 2 or 3. Style 0 spews output without any newlines, indentation, or spaces between list items. It is the most compact format possible that can still be called valid perl. Style 1 outputs a readable form with newlines but no fancy indentation (each level in the structure is simply indented by a fixed amount of whitespace). Style 2 (the default) outputs a very readable form which takes into account the length of hash keys (so the hash value lines up). Style 3 is like style 2, but also annotates the elements of arrays with their index (but the comment is on its own line, so array output consumes twice the number of lines). Style 2 is the default.

=item *

$Data::Dumper::Trailingcomma  I<or>  I<$OBJ>-Trailingcomma(I<NEWVAL>)

Controls whether a comma is added after the last element of an array or hash. Even when true, no comma is added between the last element of an array or hash and a closing bracket when they appear on the same line. The default is false.

=item *

$Data::Dumper::Purity  I<or>  I<$OBJ>-Purity(I<NEWVAL>)

Controls the degree to which the output can be C<eval>ed to recreate the supplied reference structures. Setting it to 1 will output additional perl statements that will correctly recreate nested references. The default is 0.
=item *

$Data::Dumper::Pad I<or> I<$OBJ>-&gt;Pad(I<&NEWVAL>)

Specifies the string that will be prefixed to every line of the output. Empty string by default.

=item *

$Data::Dumper::Varname I<or> I<$OBJ>-&gt;Varname(I<&NEWVAL>)

Contains the prefix to use for tagging variable names in the output. The default is "VAR".

=item *

$Data::Dumper::Useqq I<or> I<$OBJ>-&gt;Useqq(I<&NEWVAL>)

When set, enables the use of double quotes for representing string values. Whitespace other than space will be represented as C&lt;\n\t\r&gt;, "unsafe" characters will be backslashed, and unprintable characters will be output as quoted octal integers. The default is 0.

=item *

$Data::Dumper::Terse I<or> I<$OBJ>-&gt;Terse(I<&NEWVAL>)

When set, Data::Dumper will emit single, non-self-referential values as atoms/terms rather than statements. This means that the C&lt;$VAR$I&lt;n&gt; names will be avoided where possible, but be advised that such output may not always be parseable by C&lt;eval&gt;.

=item *

$Data::Dumper::Freezer I<or> $I&lt;OBJ&gt;-&gt;Freezer(I<&NEWVAL>)

Can be set to a method name, or to an empty string to disable the feature. Data::Dumper will invoke that method via the object before attempting to stringify it. This method can alter the contents of the object (if, for instance, it contains data allocated from C), and even rebless it in a different package. The client is responsible for making sure the specified method can be called via the object, and that the object ends up containing only perl data types after the method has been called. Defaults to an empty string.

If an object does not support the method specified (determined using UNIVERSAL::can()) then the call will be skipped. If the method dies a warning will be generated.
Can be set to a method name, or to an empty string to disable the feature. Data::Dumper will emit a method call for any objects that are to be dumped using the syntax C<bless(DATA, CLASS)-E<gt>METHOD()>. Note that this means that the method specified will have to perform any modifications required on the object (like creating new state within it, and/or reblessing it in a different package) and then return it. The client is responsible for making sure the method can be called via the object, and that it returns a valid object. Defaults to an empty string.

Can be set to a boolean value to enable deep copies of structures. Cross-referencing will then only be done when absolutely essential (i.e., to break reference cycles). Default is 0.

Can be set to a boolean value to control whether hash keys are quoted. A defined false value will avoid quoting hash keys when it looks like a simple string. Default is 1, which will always enclose hash keys in quotes.

Can be set to a string that specifies an alternative to the C<bless> builtin operator used to create objects. A function with the specified name should exist, and should accept the same arguments as the builtin. Default is C<bless>.

Can be set to a string that specifies the separator between hash keys and values. To dump nested hash, array and scalar values to JavaScript, use: C<$Data::Dumper::Pair = ' : ';>. Implementing C<bless> in JavaScript is left as an exercise for the reader. A function with the specified name exists, and accepts the same arguments.
as the builtin.

Default is: C<=E>gt>.

=item *

$Data::Dumper::Maxdepth I<or> $I<OBJ>-Maxdepth(I<[NEWVAL]>)

Can be set to a positive integer that specifies the depth beyond which we don't venture into a structure. Has no effect when C<Data::Dumper::Purity> is set. (Useful in debugger when we often don't want to see more than enough). Default is 0, which means there is no maximum depth.

=item *

$Data::Dumper::Maxrecurse I<or> $I<OBJ>-Maxrecurse(I<[NEWVAL]>)

Can be set to a positive integer that specifies the depth beyond which recursion into a structure will throw an exception. This is intended as a security measure to prevent perl running out of stack space when dumping an excessively deep structure. Can be set to 0 to remove the limit. Default is 1000.

=item *

$Data::Dumper::Useperl I<or> $I<OBJ>-Useperl(I<[NEWVAL]>)

Can be set to a boolean value which controls whether the pure Perl implementation of C<Data::Dumper> is used. The C<Data::Dumper> module is a dual implementation, with almost all functionality written in both pure Perl and also in XS ('C'). Since the XS version is much faster, it will always be used if possible. This option lets you override the default behavior, usually for testing purposes only. Default is 0, which means the XS implementation will be used if possible.

=item *

$Data::Dumper::Sortkeys I<or> $I<OBJ>-Sortkeys(I<[NEWVAL]>)

Can be set to a boolean value to control whether hash keys are dumped in sorted order. A true value will cause the keys of all hashes to be dumped in Perl's default sort order. Can also be set to a subroutine reference which will be called for each hash that is dumped. In this case C<Data::Dumper> will call the subroutine once for each hash, passing it the reference of the hash. The purpose of the subroutine is to return a reference to an array of the keys that will be dumped, in the order that they should be dumped. Using this feature, you can
control both the order of the keys, and which keys are actually used. In
other words, this subroutine acts as a filter by which you can exclude
certain keys from being dumped. Default is 0, which means that hash keys
are not sorted.

=item *

$Data::Dumper::Deparse  I<or>  $I<OBJ>->Deparse(I<[NEWVAL]>)

Can be set to a boolean value to control whether code references are
turned into perl source code. If set to a true value, C<B::Deparse>
will be used to get the source of the code reference. Using this option
will force using the Perl implementation of the dumper, since the fast
XSUB implementation doesn't support it.

Caution: use this option only if you know that your coderefs will be
properly reconstructed by C<B::Deparse>.

=item *

$Data::Dumper::Sparseseen I<or>  $I<OBJ>->Sparseseen(I<[NEWVAL]>)

By default, Data::Dumper builds up the "seen" hash of scalars that
it has encountered during serialization. This is very expensive.
This seen hash is necessary to support and even just detect circular
references. It is exposed to the user via the C<Seen()> call both
for writing and reading.

If you, as a user, do not need explicit access to the "seen" hash,
then you can set the C<Sparseseen> option to allow Data::Dumper
to eschew building the "seen" hash for scalars that are known not
to possess more than one reference. This speeds up serialization
considerably if you use the XS implementation.

Note: If you turn on C<Sparseseen>, then you must not rely on the
content of the seen hash since its contents will be an
implementation detail!
EXAMPLES

Run these code snippets to get a quick feel for the behavior of this module. When you are through with these examples, you may want to add or change the various configuration variables described above, to see their behavior. (See the testsuite in the Data::Dumper distribution for more examples.)

use Data::Dumper;

package Foo;
sub new {bless {'a' => 1, 'b' => sub { return "foo" }}, $_[0]};

package Fuz;  # a weird REF-REF-SCALAR object
sub new {bless \($._ = \'fu\'z\'), $_[0]};

package main;
$foo = Foo->new;
$fuz = Fuz->new;
$boo = [ 1, [], "abcd", \$foo,
       [ 1 => 'a', 023 => 'b', 0x45 => 'c'],
       \"p\q\'r", $foo, $fuz];

########
# simple usage
########
$bar = eval(Dumper($boo));
print($@) if $@;
print Dumper($boo), Dumper($bar);  # pretty print (no array indices)

$Data::Dumper::Terse = 1;  # don't output names where feasible
$Data::Dumper::Indent = 0;  # turn off all pretty print
print Dumper($boo), "\n";

$Data::Dumper::Indent = 1;  # mild pretty print
print Dumper($boo);

$Data::Dumper::Indent = 3;  # pretty print with array indices
print Dumper($boo);

$Data::Dumper::Useqq = 1;  # print strings in double quotes
print Dumper($boo);

$Data::Dumper::Pair = " : ";  # specify hash key/value separator
print Dumper($boo);
### recursive structures

```perl
@c = ('c');
$sc = \@c;
$b = {};
$a = [1, $b, $sc];
$b->{a} = $a;
$b->{b} = $a->[1];
$b->{c} = $a->[2];
print Data::Dumper->Dump([$a,$b,$c], [qw(a b c)]);
```

$Data::Dumper::Purity = 1;     # fill in the holes for eval
print Data::Dumper->Dump([$a, $b], [qw(*a b)]);  # print as @a
print Data::Dumper->Dump([$b, $a], [qw(*b a)]);  # print as %b

$Data::Dumper::Deepcopy = 1;   # avoid cross-refs
print Data::Dumper->Dump([$b, $a], [qw(*b a)]);

$Data::Dumper::Purity = 0;     # avoid cross-refs
print Data::Dumper->Dump([$b, $a], [qw(*b a)]);

### deep structures

```perl
$a = "pearl";
$b = [ $a ];
$c = { 'b' => $b };  
$d = [ $c ];
$e = { 'd' => $d };  
$f = { 'e' => $e };  
print Data::Dumper->Dump([$f], [qw($f)]);
```

$Data::Dumper::Maxdepth = 3;   # no deeper than 3 refs down
print Data::Dumper->Dump([$f], [qw($f)]);

### object-oriented usage

```perl
$d = Data::Dumper->new([$a,$b], [qw(a b)]);
```
$d->Seen({"*c" => $c});  # stash a ref without printing it
$d->Indent(3);
print $d->Dump;
$d->Reset->Purity(0);  # empty the seen cache
print join "----
", $d->Dump;

########
# persistence
########

package Foo;
sub new { bless { state => 'awake' }, shift }
sub Freeze {
  my $s = shift;
  print STDERR "preparing to sleep\n";
  $s->{state} = 'asleep';
  return bless $s, 'Foo::ZZZ';
}

package Foo::ZZZ;
sub Thaw {
  my $s = shift;
  print STDERR "waking up\n";
  $s->{state} = 'awake';
  return bless $s, 'Foo';
}

package main;
use Data::Dumper;
$a = Foo->new;
$b = Data::Dumper->new([$a], ['c']);
$b->Freezer('Freeze');
$b->Toaster('Thaw');
$c = $b->Dump;
print $c;
$d = eval $c;
print Data::Dumper->Dump([$d], ['d']);

########
# symbol substitution (useful for recreating CODE refs)
########

sub foo { print "foo speaking\n" }
*other = \&foo;
$bar = [ \&other ];
$d = Data::Dumper->new(\&other,$bar, ['*other', 'bar']);
$d->Seen({ '*foo' => \&foo });
print $d->Dump;

########
# sorting and filtering hash keys
########
$Data::Dumper::Sortkeys = \&my_filter;
my $foo = { map { (ord, "$_$_$_") } 'I'..'Q' };
my $bar = { %$foo };
my $baz = { reverse %$foo };
print Dumper [ $foo, $bar, $baz ];
sub my_filter {
my ($hash) = @_;
# return an array ref containing the hash keys to dump
# in the order that you want them to be dumped
return [
# Sort the keys of %$foo in reverse numeric order
$hash eq $foo ? (sort {$b <=> $a} keys %$hash) :
# Only dump the odd number keys of %$bar
$hash eq $bar ? (grep {$_ % 2} keys %$hash) :
# Sort keys in default order for all other hashes
(sort keys %$hash)
];
}
=head1 BUGS
Due to limitations of Perl subroutine call semantics, you cannot pass an
array or hash. Prepend it with a C<\> to pass its reference instead. This
will be remedied in time, now that Perl has subroutine prototypes.
For now, you need to use the extended usage form, and prepend the
name with a C<*> to output it as a hash or array.
C<Data::Dumper> cheats with CODE references. If a code reference is
encountered in the structure being processed (and if you haven't set
the C<Deparse> flag), an anonymous subroutine that
contains the string '"DUMMY"' will be inserted in its place, and a warning
will be printed if C<Purity> is set. You can C<eval> the result, but bear
in mind that the anonymous sub that gets created is just a placeholder.
Someday, perl will have a switch to cache-on-demand the string
representation of a compiled piece of code, I hope. If you have prior
knowledge of all the code refs that your data structures are likely
to have, you can use the C<Seen> method to pre-seed the internal reference
table and make the dumped output point to them, instead. See L</EXAMPLES>
above.

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The `<Deparse>` flag makes `Dump()` run slower, since the XSUB implementation does not support it.

SCALAR objects have the weirdest looking `<bless>` workaround.

Pure Perl version of `<Data::Dumper>` escapes UTF-8 strings correctly only in Perl 5.8.0 and later.

=head2 NOTE

Starting from Perl 5.8.1 different runs of Perl will have different ordering of hash keys. The change was done for greater security, see L</perlsec/"Algorithmic Complexity Attacks">. This means that different runs of Perl will have different `Data::Dumper` outputs if the data contains hashes. If you need to have identical `Data::Dumper` outputs from different runs of Perl, use the environment variable `PERL_HASH_SEED`, see L</perlrun/PERL_HASH_SEED> . Using this restores the old (platform-specific) ordering: an even prettier solution might be to use the `<Sortkeys>` filter of `Data::Dumper`.

=head1 AUTHOR

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=head1 VERSION

Version 2.161  (July 11 2016)

=head1 SEE ALSO

perl(1)

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analysis/common/src/java/org/apache/lucene/analysis/es/SpanishMinimalStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/fi/FinnishLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/fi/FinnishMinimalStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/fr/FrenchLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/fr/FrenchMinimalStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/hu/HungarianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/it/ItalianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/pt/PortugueseLightStemmer.java
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VERSION: 2.1 PoliMorf
BUILD: 2016-02-13 19:37:50+01:00
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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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localtime.go, localtime_test.go:

Originals:
https://raw.githubusercontent.com/googleapis/google-cloud-
Changes:

* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.

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Metadata-Version: 1.0
Name: argparse
Version: 0.7.0
Summary: An optparse-inspired command-line parsing library
Home-page: http://argparse.python-hosting.com/
Author: Steven Bethard
Author-email: steven.bethard@gmail.com
License: BSD
Description: Argparse takes the best of the optparse command-line parsing module
and brings it new life. Argparse adds positional as well as
optional arguments, the ability to create parsers for sub-commands,
more informative help and usage messages, and much more. At the
same time, it retains the ease and flexibility of use that made
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1.1089 jansson 2.11 3.el8

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* /opt/cola/permits/1136256579_1613723575.96/0/lang-tag-1-4-4-sources-2-
  jar/com/nimbusds/langtag/LangTag.java
* /opt/cola/permits/1136256579_1613723575.96/0/lang-tag-1-4-4-sources-2-
  jar/com/nimbusds/langtag/ReadOnlyLangTag.java
* /opt/cola/permits/1136256579_1613723575.96/0/lang-tag-1-4-4-sources-2-jar/com/nimbusds/langtag/package-
  info.java
* /opt/cola/permits/1136256579_1613723575.96/0/lang-tag-1-4-4-sources-2-
  jar/com/nimbusds/langtag/LangTagException.java

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  INF/maven/com.nimbusds/lang-tag/pom.xml

1.1096 otel-exporters-otlp-otlptrace-otlptracehttp 1.4.1
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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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1.1103 aggs-matrix-stats-client 7.10.2

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lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:
include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
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kprop/kpropd_rpc.c
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Gocheck - A rich testing framework for Go

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 */
/**
 * Creates a new JSRInliner. <i>Subclasses must not use this constructor</i>. Instead, they must use the
 * { @link JSRInlinerAdapter(int, MethodVisitor, int, String, String, String, String[]})
 * version.
 *
 * @param mv
 * the <code>MethodVisitor</code> to send the resulting inlined
 * method code to (use <code>null</code> for none).
 * @param access
 * the method's access flags (see { @link Opcodes }). This
 * parameter also indicates if the method is synthetic and/or
 * deprecated.
 * @param name
 * the method's name.
 * @param desc
 * the method's descriptor (see { @link Type}).
 * @param signature
 * the method's signature. May be <tt>null</tt>.
 */
* @param exceptions
* the internal names of the method's exception classes (see
* { @link Type#getInternalName() getInternalName }). May be
* <tt>null</tt>.
* @throws IllegalStateException
* If a subclass calls this constructor.
*/

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Creates a new [GeneratorAdapter]. <i>Subclasses must not use this
constructor</i>. Instead, they must use the
[[GeneratorAdapter(int, MethodVisitor, int, String, String)]
version.

@param mv
the method visitor to which this adapter delegates calls.
@param access
the method's access flags (see [Opcodes]).
@param name
the method's name.
@param desc
the method's descriptor (see [Type]).
@throws IllegalStateException
If a subclass calls this constructor.

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 */
/**
 * Constructs a new {@link Textifier}. <i>Subclasses must not use this
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 * version.
 *
 * @throws IllegalStateException
 * If a subclass calls this constructor.
 */
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/**
 * Constructs a new [@link ClassNode]. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the [@link #ClassNode(int)]
 * version.
 *
 * @throws IllegalStateException
 *         If a subclass calls this constructor.
 */

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/**
 * Constructs a new [@link LocalVariableAnnotationNode]. <i>Subclasses must
 * not use this constructor</i>. Instead, they must use the
 * [@link #LocalVariableAnnotationNode(int, TypePath, LabelNode[], LabelNode[], int[], String)]
 * version.
 *
 * @param typeRef
 *    a reference to the annotated type. See [@link TypeReference].
 *
 * @param typePath
 *    the path to the annotated type argument, wildcard bound, array
 *    element type, or static inner type within 'typeRef'. May be
 *    <tt>null</tt> if the annotation targets 'typeRef' as a whole.
 *
 * @param start
 *    the fist instructions corresponding to the continuous ranges
 *    that make the scope of this local variable (inclusive).
 *
 * @param end
 *    the last instructions corresponding to the continuous ranges
 *    that make the scope of this local variable (exclusive). This
 *    array must have the same size as the 'start' array.
 *
 * @param index
 *    the local variable's index in each range. This array must have
 *    the same size as the 'start' array.
 *
 * @param desc
 *    the class descriptor of the annotation class.
 */

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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/Type.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/AnnotationWriter.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/analysis/SimpleVerifier.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/util/Printer.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/commons/Method.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/commons/RemappingSignatureAdapter.java
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/ClassReader.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/Tree/VarInsnNode.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/commons/RemappingMethodAdapter.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/optimizer/AnnotationConstantsCollector.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/AnnotationVisitor.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/InsnNode.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/signature/SignatureReader.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/LineNumberNode.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/optimizer/JarOptimizer.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/commons/LocalVariablesSorter.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/util/TraceAnnotationVisitor.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/util/Constant.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/TableSwitchInsnNode.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/tree/TypeAnnotationNode.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/Handle.java
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/util/TraceClassVisitor.java
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jar/org/objectweb/asm/tree/analysis/BasicInterpreter.java
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/Opcodes.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/util/CheckClassAdapter.java
* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/signature/SignatureVisitor.java

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 */
/**
 * Creates a new [AnalyzerAdapter].<i>Subclasses must not use this
 * constructor</i>. Instead, they must use the
 * [AnalyzerAdapter(int, String, int, String, MethodVisitor)]
 * version.
 *
 * @param owner
 *    the owner's class name.
 * @param access
 *    the method's access flags (see [Opcodes]).
 * @param name
 *    the method's name.
 * @param desc
**the method's descriptor (see [@link Type Type]).**

**@param mv**

**the method visitor to which this adapter delegates calls. May**

**be <tt>null</tt>.
**@throws IllegalStateException**

**If a subclass calls this constructor.**

*/

---

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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/optimizer/shrink-frames.properties
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* /opt/cola/permits/1135863767_1613617914.89/0/asm-5-0-4-sources-6-jar/org/objectweb/asm/TypeReference.java

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1.1124 ncclient 0.6.12

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jloup@gzip.org          madler@alumni.caltech.edu

The following list of people, sorted by last name, have contributed code or patches to this implementation of sudo since I began maintaining it in 1993. This list is known to be incomplete--if you believe you should be listed, please send a note to sudo@sudo.ws.

Ackeret, Matt
Adler, Mark
Allbery, Russ
Anderson, Jamie
Andrew, Nick
Andric, Dimitry
Barron, Danny
Bates, Tom
Behan, Zdenk
Bellis, Ray
Benali, Elias
Beverly, Jamie
Boardman, Spider
Bos, Sander
Bostley, P.J.
Bowes, Keith
Boyce, Keith Garry
Brantley, Michael
Juhani, Timo
Kikuchi, Ayamura
Kadow, Kevin
Kasal, Stepan
Kienenberger, Mike
King, Dale
King, Michael
Klyachkin, Andrey
Knoble, Jim
Knox, Tim
Komarnitsky, Alek O.
Kondrashov, Nikolai
Kopeek, Daniel
Kranenburg, Paul
Krause, David
Lakin, Eric
Larsen, Case
Levin, Dmitry V.
Libby, Kendall
Lobbes, Phillip E.
McIntyre, Jason
MacKenzie, David J.
McLaughlin, Tom
Makey, Jeff
Mallayya, Sangamesh
Marchionna, Michael D.
Markham, Paul
Martinian, Emin
Meskes, Michael
Michael, David
Miller, Todd C.
Minier, Loc
Moffat, Darren
Moldung, Jan Thomas
Morris, Charles
Mueller, Andreas
Miller, Dworkin
Nieusma, Jeff
Nikitser, Peter A.
Nussel, Ludwig
Ouellet, Jean-Philippe
Paquet, Eric
Paradis, Chantal
Pasteleurs, Frederic
Percival, Ted
Perera, Andres
Peron, Christian S.J.
Peschel, Aaron
Venckus, Martynas
de Vries, Maarten
Wagner, Klaus
Walsh, Dan
Warburton, John
Webb, Kirk
Wetzel, Timm
Wieringen, Marco van
Wilk, Jakub
Winiger, Gary
Wood, David
Zacarias, Gustavo
Zolnowsky, John

The following people have worked to translate sudo into other languages as part of the Translation Project, see https://translationproject.org for more details.

Albuquerque, Pedro
Blttermann, Mario
Bogusz, Jakub
Buo-ren, Lin
Casagrande, Milo
Castro, Felipe
Cho, Seong-ho
Chornoivan, Yuri
Diguez, Francisco
Fontenelle, Rafael
Garca-Fontes, Walter
Gezer, Volkan
Hamasaki, Takeshi
Hamming, Peter
Hansen, Joe
Hantrais, Frdric
Hein, Jochen
Hufthammer, Karl Ove
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Koir, Klemen
Kozlov, Yuri
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Marchal, Frdric
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1.1126 certifi 2018.10.15

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ca-bundle.crt -- Bundle of CA Root Certificates

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This is a bundle of X.509 certificates of public Certificate Authorities
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file (certdata.txt). This file can be found in the mozilla source tree:
It contains the certificates in PEM format and therefore
can be directly used with curl / libcurl / php_curl, or with
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1.1127 mariadb 10.3.34
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// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124
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1.1134 krb5-conf 1.0-r2

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1.1138 mod-http2 1.15.7-
3.module_el8.5.0+2609+b30d9eecc
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1.1140 perl-text-tabs-wrap 2013.0523 395.el8

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---
abstract: 'Expand tabs and do simple line wrapping'
author:
  - 'David Muir Sharnoff <muir@idiom.org>'
buildRequires:
  ExtUtils::MakeMaker: 0
configureRequires:
  ExtUtils::MakeMaker: 0
dynamicConfig: 1
generatedBy: 'ExtUtils::MakeMaker version 6.62, CPAN::Meta::Converter version 2.112150'
license: unknown
metaSpec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
version: 1.4
name: Text-Tabs+Wrap
no_index:
directory:
  - t
  - inc
requires: {}
resources:
  repository: http://github.com/muir/Text-Tabs-Wrap
version: 2013.0523

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1019676549_1591379882.87/0/perl-Text-Tabs+Wrap-2013.0523-395.el8.src.rpm-
cosi-expand-archive-WoUTJPer/perl-Text-Tabs+Wrap-2013.0523.tar.gz-cosi-expand-archive-ZHll6Ysd/Text-
Tabs+Wrap-2013.0523/META.yml
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* /opt/ws_local/PERMITS_SQL/1019676549_1591379882.87/0/perl-Text-Tabs+Wrap-2013.0523-395.el8.src.rpm-
cosi-expand-archive-WoUTJPer/perl-Text-Tabs+Wrap.spec

## 1.1141 Jackson 2.10.4

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1.1142 azure-storage-blob-go 0.14.0

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1.1143 cairo 1.15.12 3.el8
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<td>Bitmap image (image/jpeg)</td>
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<tr>
<td>romedalen.png</td>
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doc/sitemap_gen.py

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util/unlink.py

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backport frop python3 Lib/test/support.py

gunicorn/selectors.py

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analysis/common/src/resources/org/apache/lucene/analysis/bn/stopwords.txt
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The German, Spanish, Finnish, French, Hungarian, Italian, Portuguese, Russian and Swedish light stemmers (common) are based on BSD-licensed reference implementations created by Jacques Savoy and Ljiljana Dolamic. These files reside in:
```
analysis/common/src/java/org/apache/lucene/analysis/de/GermanLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/de/GermanMinimalStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/es/SpanishLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/fi/FinnishLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/fr/FrenchLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/fr/FrenchMinimalStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/hu/HungarianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/it/ItalianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/pt/PortugueseLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/ru/RussianLightStemmer.java
analysis/common/src/java/org/apache/lucene/analysis/sv/SwedishLightStemmer.java
```

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The Polish analyzer (stempel) comes with a default stopword list that is BSD-licensed created by the Carrot2 project. The file resides in stempel/src/resources/org/apache/lucene/analysis/pl/stopwords.txt. See http://project.carrot2.org/license.html.

The SmartChineseAnalyzer source code (smartcn) was
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Servlet-api.jar and javax.servlet-*.jar are under the CDDL license, the original source code for this can be found at http://www.eclipse.org/jetty/downloads.php

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Kuromoji Japanese Morphological Analyzer - Apache Lucene Integration
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1.1178 go-capability docker-20.10.14
1.1178.1 Available under license :
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/opt/cola/permits/1324433346_1652340744.2283597/0/docker-ce-20.10.14-3.el8.x86_64.src.rpm-cosi-expand-archive-ikggtmrA/usr/bin/docker-init: binary file matches

Found in path(s):
* /bin/grep

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Manifest-Version: 1.0
Implementation-Title: Netty/Transport/Native/Unix/Common
Bundle-Description: Static library which contains common unix utilitie
Automatic-Module-Name: io.netty.transport.unix.common
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0
Bundle-SymbolicName: io.netty.transport-native-unix-common
Implementation-Version: 4.1.62.Final
Built-By: norman
Bnd-LastModified: 1617128320115
Bundle-ManifestVersion: 2
Implementation-Vendor-Id: io.netty
Bundle-DocURL: https://netty.io/
Bundle-Vendor: The Netty Project
Import-Package: io.netty.buffer;version="[4.1,5)";io.netty.channel.io.
etty.channel.socket;version="[4.1,5)";io.netty.util;version="[4.1,5)"
";io.netty.util.internal;version="[4.1,5)";sun.nio.ch;resolution:=opt
ional,org.eclipse.jetty.npn;version="[1,2)";resolution:=optional,org.
eclipse.jetty.alpn;version="[1,2)";resolution:=optional
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.6))"
Tool: Bnd-2.4.1.201501161923
Implementation-Vendor: The Netty Project
channel.io.netty.channel.socket,io.netty.util";version="4.1.62"
Bundle-Name: Netty/Transport/Native/Unix/Common
Bundle-Version: 4.1.62.Final
Created-By: Apache Maven Bundle Plugin
Build-Jdk: 1.8.0_252
Implementation-URL: https://netty.io/netty-transport-native-unix-commo
n/
1.1181 aiohttp 3.8.1

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author:
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build_requires:
  ExtUtils::MakeMaker: '0'
configure_requires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.0401, CPAN::Meta::Converter version 2.150001'
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meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
name: Digest-MD5
no_index:
directory:
  - t
  - inc
requires:
  Digest::base: '1.00'
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resources:
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  version: '2.55'

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April 1992

The MD5 Message-Digest Algorithm

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1. Executive Summary

This document describes the MD5 message-digest algorithm. The algorithm takes as input a message of arbitrary length and produces as output a 128-bit “fingerprint” or “message digest” of the input. It is conjectured that it is computationally infeasible to produce two messages having the same message digest, or to produce any message having a given prespecified target message digest. The MD5 algorithm is intended for digital signature applications, where a large file must be "compressed" in a secure manner before being encrypted with a private (secret) key under a public-key cryptosystem such as RSA.

The MD5 algorithm is designed to be quite fast on 32-bit machines. In
addition, the MD5 algorithm does not require any large substitution tables; the algorithm can be coded quite compactly.

The MD5 algorithm is an extension of the MD4 message-digest algorithm [1,2]. MD5 is slightly slower than MD4, but is more "conservative" in design. MD5 was designed because it was felt that MD4 was perhaps being adopted for use more quickly than justified by the existing critical review; because MD4 was designed to be exceptionally fast, it is "at the edge" in terms of risking successful cryptanalytic attack. MD5 backs off a bit, giving up a little in speed for a much greater likelihood of ultimate security. It incorporates some suggestions made by various reviewers, and contains additional optimizations. The MD5 algorithm is being placed in the public domain for review and possible adoption as a standard.

For OSI-based applications, MD5's object identifier is

```
md5 OBJECT IDENTIFIER ::= 
   iso(1) member-body(2) US(840) rsadsi(113549) digestAlgorithm(2) 5
```

In the X.509 type AlgorithmIdentifier [3], the parameters for MD5 should have type NULL.

2. Terminology and Notation

In this document a "word" is a 32-bit quantity and a "byte" is an eight-bit quantity. A sequence of bits can be interpreted in a natural manner as a sequence of bytes, where each consecutive group of eight bits is interpreted as a byte with the high-order (most significant) bit of each byte listed first. Similarly, a sequence of bytes can be interpreted as a sequence of 32-bit words, where each consecutive group of four bytes is interpreted as a word with the low-order (least significant) byte given first.

Let $x_i$ denote "x sub i". If the subscript is an expression, we surround it in braces, as in $x_{i+1}$. Similarly, we use $^i$ for superscripts (exponentiation), so that $x^i$ denotes x to the i-th power.

Let the symbol "+" denote addition of words (i.e., modulo-2^32 addition). Let $X \ll s$ denote the 32-bit value obtained by circularly shifting (rotating) X left by s bit positions. Let not(X) denote the bit-wise complement of X, and let $X \lor Y$ denote the bit-wise OR of X and Y. Let $X \oplus Y$ denote the bit-wise XOR of X and Y, and let $X \land Y$ denote the bit-wise AND of X and Y.
3. MD5 Algorithm Description

We begin by supposing that we have a b-bit message as input, and that we wish to find its message digest. Here b is an arbitrary nonnegative integer; b may be zero, it need not be a multiple of eight, and it may be arbitrarily large. We imagine the bits of the message written down as follows:

\[ m_0 \ m_1 \ldots \ m_{(b-1)} \]

The following five steps are performed to compute the message digest of the message.

3.1 Step 1. Append Padding Bits

The message is "padded" (extended) so that its length (in bits) is congruent to 448, modulo 512. That is, the message is extended so that it is just 64 bits shy of being a multiple of 512 bits long. Padding is always performed, even if the length of the message is already congruent to 448, modulo 512.

Padding is performed as follows: a single "1" bit is appended to the message, and then "0" bits are appended so that the length in bits of the padded message becomes congruent to 448, modulo 512. In all, at least one bit and at most 512 bits are appended.

3.2 Step 2. Append Length

A 64-bit representation of b (the length of the message before the padding bits were added) is appended to the result of the previous step. In the unlikely event that b is greater than 2^64, then only the low-order 64 bits of b are used. (These bits are appended as two 32-bit words and appended low-order word first in accordance with the previous conventions.)

At this point the resulting message (after padding with bits and with b) has a length that is an exact multiple of 512 bits. Equivalently, this message has a length that is an exact multiple of 16 (32-bit) words. Let \( M[0 \ldots N-1] \) denote the words of the resulting message, where N is a multiple of 16.
3.3 Step 3. Initialize MD Buffer

A four-word buffer (A,B,C,D) is used to compute the message digest. Here each of A, B, C, D is a 32-bit register. These registers are initialized to the following values in hexadecimal, low-order bytes first):

- word A: 01 23 45 67
- word B: 89 ab cd ef
- word C: fe dc ba 98
- word D: 76 54 32 10

3.4 Step 4. Process Message in 16-Word Blocks

We first define four auxiliary functions that each take as input three 32-bit words and produce as output one 32-bit word.

- $F(X,Y,Z) = XY \lor \neg(X) Z$
- $G(X,Y,Z) = XZ \lor Y \neg(Z)$
- $H(X,Y,Z) = X \oplus Y \oplus Z$
- $I(X,Y,Z) = Y \oplus (X \lor \neg(Z))$

In each bit position $F$ acts as a conditional: if $X$ then $Y$ else $Z$. The function $F$ could have been defined using $+$ instead of $\lor$ since $XY$ and $\neg(X)Z$ will never have 1's in the same bit position.) It is interesting to note that if the bits of $X$, $Y$, and $Z$ are independent and unbiased, the each bit of $F(X,Y,Z)$ will be independent and unbiased.

The functions $G$, $H$, and $I$ are similar to the function $F$, in that they act in "bitwise parallel" to produce their output from the bits of $X$, $Y$, and $Z$, in such a manner that if the corresponding bits of $X$, $Y$, and $Z$ are independent and unbiased, then each bit of $G(X,Y,Z)$, $H(X,Y,Z)$, and $I(X,Y,Z)$ will be independent and unbiased. Note that the function $H$ is the bit-wise "xor" or "parity" function of its inputs.

This step uses a 64-element table $T[1 \ldots 64]$ constructed from the sine function. Let $T[i]$ denote the i-th element of the table, which is equal to the integer part of 4294967296 times $\text{abs}(\sin(i))$, where $i$
is in radians. The elements of the table are given in the appendix.

Do the following:

/* Process each 16-word block. */
For i = 0 to N/16-1 do

/* Copy block i into X. */
For j = 0 to 15 do
  Set X[j] to M[i*16+j].
end /* of loop on j */

/* Save A as AA, B as BB, C as CC, and D as DD. */
AA = A
BB = B
CC = C
DD = D

/* Round 1. */
/* Let [abcd k s i] denote the operation
   a = b + ((a + F(b,c,d) + X[k] + T[i]) <<< s). */
/* Do the following 16 operations. */
[ABCD  0  7  1]  [DABC  1 12  2]  [CDAB  2 17  3]  [BCDA  3 22  4]
[ABCD  4  7  5]  [DABC  5 12  6]  [CDAB  6 17  7]  [BCDA  7 22  8]
[ABCD  8  7  9]  [DABC 10  9 10]  [CDAB 11 14 11]  [BCDA 12 22 12]
[ABCD 12  7 13]  [DABC 13 12 14]  [CDAB 14 17 15]  [BCDA 15 22 16]

/* Round 2. */
/* Let [abcd k s t] denote the operation
   a = b + ((a + G(b,c,d) + X[k] + T[i]) <<< s). */
/* Do the following 16 operations. */
[ABCD  1  5 17]  [DABC  6  9 18]  [CDAB 11 14 19]  [BCDA  0 20 20]
[ABCD  5  5 21]  [DABC 10  9 22]  [CDAB 15 14 23]  [BCDA  4 20 24]
[ABCD  9  5 25]  [DABC 14  9 26]  [CDAB  3 14 27]  [BCDA  8 20 28]
[ABCD 13  5 29]  [DABC  2  9 30]  [CDAB  7 14 31]  [BCDA 12 20 32]

/* Round 3. */
/* Let [abcd k s t] denote the operation
   a = b + ((a + H(b,c,d) + X[k] + T[i]) <<< s). */
/* Do the following 16 operations. */
/* Round 4. */
/* Let [abcd k s t] denote the operation
   a = b + ((a + I(b,c,d) + X[k] + T[i]) <<< s). */
/* Do the following 16 operations. */
[ABCD  0  6 49]  [DABC  7 10 50]  [CDAB 14 15 51]  [BCDA  5 21 52]
[ABCD 12  6 53]  [DABC  3 10 54]  [CDAB 10 15 55]  [BCDA  1 21 56]
[ABCD  8  6 57]  [DABC 15 10 58]  [CDAB  6 15 59]  [BCDA 13 21 60]
[ABCD  4  6 61]  [DABC 11 10 62]  [CDAB  2 15 63]  [BCDA  9 21 64]

/* Then perform the following additions. (That is increment each
   of the four registers by the value it had before this block
   was started.) */
   A = A + AA
   B = B + BB
   C = C + CC
   D = D + DD

end /* of loop on i */
has been carefully scrutinized for weaknesses. It is, however, a relatively new algorithm and further security analysis is of course justified, as is the case with any new proposal of this sort.

5. Differences Between MD4 and MD5

The following are the differences between MD4 and MD5:

1. A fourth round has been added.
2. Each step now has a unique additive constant.
3. The function g in round 2 was changed from \((XY \lor XZ \lor YZ)\) to \((XZ \lor Y \neg(Z))\) to make g less symmetric.
4. Each step now adds in the result of the previous step. This promotes a faster "avalanche effect".
5. The order in which input words are accessed in rounds 2 and 3 is changed, to make these patterns less like each other.
6. The shift amounts in each round have been approximately optimized, to yield a faster "avalanche effect." The shifts in different rounds are distinct.

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References


APPENDIX A - Reference Implementation

This appendix contains the following files taken from RSAREF: A Cryptographic Toolkit for Privacy-Enhanced Mail:

- global.h -- global header file
- md5.h -- header file for MD5
- md5c.c -- source code for MD5

For more information on RSAREF, send email to <rsaref@rsa.com>.

The appendix also includes the following file:

- mddriver.c -- test driver for MD2, MD4 and MD5

The driver compiles for MD5 by default but can compile for MD2 or MD4 if the symbol MD is defined on the C compiler command line as 2 or 4.

The implementation is portable and should work on many different platforms. However, it is not difficult to optimize the implementation on particular platforms, an exercise left to the reader. For example, on "little-endian" platforms where the lowest-addressed byte in a 32-bit word is the least significant and there are no alignment restrictions, the call to Decode in MD5Transform can be replaced with a typecast.

A.1 global.h

/ * GLOBAL.H - RSAREF types and constants *

/* PROTOTYPES should be set to one if and only if the compiler supports function argument prototyping. The following makes PROTOTYPES default to 0 if it has not already been defined with C compiler flags. */

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/*
#endif
#define PROTOTYPES 0
#endif
/* POINTER defines a generic pointer type */
typedef unsigned char *POINTER;

/* UINT2 defines a two byte word */
typedef unsigned short int UINT2;

/* UINT4 defines a four byte word */
typedef unsigned long int UINT4;

/* PROTO_LIST is defined depending on how PROTOTYPES is defined above.
If using PROTOTYPES, then PROTO_LIST returns the list, otherwise it returns an empty list.
*/
#if PROTOTYPES
#define PROTO_LIST(list) list
#else
#define PROTO_LIST(list) ()
#endif

A.2 md5.h

/* MD5.H - header file for MD5C.C */

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documentation and/or software.
*/

/* MD5 context. */
typedef struct {
    UINT4 state[4]; /* state (ABCD) */
    UINT4 count[2]; /* number of bits, modulo 2^64 (lsb first) */
    unsigned char buffer[64]; /* input buffer */
} MD5_CTX;

void MD5Init PROTO_LIST ((MD5_CTX *));
void MD5Update PROTO_LIST
    ((MD5_CTX *, unsigned char *, unsigned int));
void MD5Final PROTO_LIST ((unsigned char [16], MD5_CTX *));

A.3 md5c.c

/* MD5C.C - RSA Data Security, Inc., MD5 message-digest algorithm */

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documentation and/or software.
/*

#include "global.h"
#include "md5.h"

/* Constants for MD5Transform routine. */

#define S11 7
#define S12 12
#define S13 17
#define S14 22
#define S21 5
#define S22 9
#define S23 14
#define S24 20
#define S31 4
#define S32 11
#define S33 16
#define S34 23
#define S41 6
#define S42 10
#define S43 15
#define S44 21

static void MD5Transform PROTO_LIST ((UINT4 [4], unsigned char [64]));
static void Encode PROTO_LIST
((unsigned char *, UINT4 *, unsigned int));
static void Decode PROTO_LIST
((UINT4 *, unsigned char *, unsigned int));
static void MD5_memcpy PROTO_LIST ((POINTER, POINTER, unsigned int));
static void MD5_memset PROTO_LIST ((POINTER, int, unsigned int));

static unsigned char PADDING[64] = {
  0x80, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
  0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
  0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
};

/* F, G, H and I are basic MD5 functions. */
#define F(x, y, z) (((x) & (y)) | ((~x) & (z)))
#define G(x, y, z) (((x) & (z)) | ((y) & (~z)))
#define H(x, y, z) ((x) ^ (y) ^ (z))
#define I(x, y, z) ((y) ^ ((x) | (~z)))

/* ROTATE_LEFT rotates x left n bits. */
#define ROTATE_LEFT(x, n) (((x) << (n)) | ((x) >> (32-(n))))

/* FF, GG, HH, and II transformations for rounds 1, 2, 3, and 4. Rotation is separate from addition to prevent recomputation. */
#define FF(a, b, c, d, x, s, ac) { 
 (a) += F ((b), (c), (d)) + (x) + (UINT4)(ac); 
 (a) = ROTATE_LEFT ((a), (s)); 
}
#define GG(a, b, c, d, x, s, ac) { 
 (a) += G ((b), (c), (d)) + (x) + (UINT4)(ac); 
 (a) = ROTATE_LEFT ((a), (s)); 
 (a) += (b); 
}
#define HH(a, b, c, d, x, s, ac) { 
 (a) += H ((b), (c), (d)) + (x) + (UINT4)(ac); 
 (a) = ROTATE_LEFT ((a), (s)); 
 (a) += (b); 
}
#define II(a, b, c, d, x, s, ac) { 
 (a) += I ((b), (c), (d)) + (x) + (UINT4)(ac); 
 (a) = ROTATE_LEFT ((a), (s)); 
 (a) += (b); 
}

/* MD5 initialization. Begins an MD5 operation, writing a new context. */
void MD5Init (context)
MD5_CTX *context; /* context */
{
 context->count[0] = context->count[1] = 0;
 /* Load magic initialization constants. */
context->state[0] = 0x67452301;
context->state[1] = 0xefcdab89;
context->state[2] = 0x98badcfe;
context->state[3] = 0x10325476;
}

MD5 block update operation. Continues an MD5 message-digest operation, processing another message block, and updating the context.

/* MD5 block update operation. Continues an MD5 message-digest operation, processing another message block, and updating the context.
*/

void MD5Update (context, input, inputLen)
    MD5_CTX *context;                                        /* context */
    unsigned char *input;                                /* input block */
    unsigned int inputLen;                     /* length of input block */
{
    unsigned int i, index, partLen;
    /* Compute number of bytes mod 64 */
    index = (unsigned int)((context->count[0] >> 3) & 0x3F);
    /* Update number of bits */
    if ((context->count[0] += ((UINT4)inputLen << 3)) < ((UINT4)inputLen << 3))
        context->count[1]++;
    context->count[1] += ((UINT4)inputLen >> 29);
    partLen = 64 - index;
    /* Transform as many times as possible. */
    if (inputLen >= partLen) {
        MD5_memcpy
            ((POINTER)&context->buffer[index], (POINTER)input, partLen);
        MD5Transform (context->state, context->buffer);
        for (i = partLen; i + 63 < inputLen; i += 64)
            MD5Transform (context->state, &input[i]);
    }

    index = 0;
} 
else 
i = 0;

/* Buffer remaining input */
MD5_memcpy((POINTER)&context->buffer[index], (POINTER)&input[i], 
        inputLen-i);
}

/* MD5 finalization. Ends an MD5 message-digest operation, writing the 
the message digest and zeroizing the context. */
void MD5Final (digest, context) 
unsigned char digest[16];                         /* message digest */
MD5_CTX *context;                                       /* context */
{
unsigned char bits[8];
unsigned int index, padLen;

/* Save number of bits */
Encode (bits, context->count, 8);

/* Pad out to 56 mod 64. */
index = (unsigned int)((context->count[0] >> 3) & 0x3f);
padLen = (index < 56) ? (56 - index) : (120 - index);
MD5Update (context, PADDING, padLen);

/* Append length (before padding) */
MD5Update (context, bits, 8);

/* Store state in digest */
Encode (digest, context->state, 16);

/* Zeroize sensitive information. */
MD5_memset ((POINTER)context, 0, sizeof (*context));
}

/* MD5 basic transformation. Transforms state based on block. */
static void MD5Transform (state, block)
UINT4 state[4];
unsigned char block[64];
{
    UINT4 a = state[0], b = state[1], c = state[2], d = state[3], x[16];

    Decode (x, block, 64);

    /* Round 1 */
    FF (a, b, c, d, x[ 0], S11, 0xd76aa478); /* 1 */
    FF (d, a, b, c, x[ 1], S12, 0x84445b7f); /* 2 */
    FF (c, d, a, b, x[ 2], S13, 0x374ff5dd); /* 3 */
    FF (b, c, d, a, x[ 3], S14, 0xa2bfe8a6); /* 4 */
    FF (a, b, c, d, x[ 4], S11, 0x49b34c1c); /* 5 */
    FF (d, a, b, c, x[ 5], S12, 0xd62f105d); /* 6 */
    FF (c, d, a, b, x[ 6], S13, 0xf61e2562); /* 7 */
    FF (b, c, d, a, x[ 7], S14, 0x84445b7f); /* 8 */
    FF (a, b, c, d, x[ 8], S11, 0x51f989d7); /* 9 */
    FF (d, a, b, c, x[ 9], S12, 0x5e29d269); /* 10 */
    FF (c, d, a, b, x[10], S13, 0x3c6e0d11); /* 11 */
    FF (b, c, d, a, x[11], S14, 0x0a047438); /* 12 */
    FF (a, b, c, d, x[12], S11, 0x27f8aaa2); /* 13 */
    FF (d, a, b, c, x[13], S12, 0x85845dd1); /* 14 */
    FF (c, d, a, b, x[14], S13, 0x7279dd46); /* 15 */
    FF (b, c, d, a, x[15], S14, 0x18b74d00); /* 16 */

    /* Round 2 */
    GG (a, b, c, d, x[ 1], S21, 0xf61e2562); /* 17 */
    GG (d, a, b, c, x[ 6], S22, 0x5428811c); /* 18 */
    GG (c, d, a, b, x[11], S23, 0x38811c2b); /* 19 */
    GG (b, c, d, a, x[ 0], S24, 0x5f2f8e9c); /* 20 */
    GG (a, b, c, d, x[ 5], S21, 0x5c71b9f1); /* 21 */
    GG (d, a, b, c, x[10], S22, 0x02441453); /* 22 */
    GG (c, d, a, b, x[15], S23, 0xd32e532e); /* 23 */
    GG (b, c, d, a, x[ 4], S24, 0x77f05005); /* 24 */
    GG (a, b, c, d, x[ 9], S21, 0x82e541b7); /* 25 */
    GG (d, a, b, c, x[14], S22, 0x3776f898); /* 26 */
    GG (c, d, a, b, x[ 3], S23, 0xf4d50d87); /* 27 */
    GG (b, c, d, a, x[ 8], S24, 0x13d28177); /* 28 */

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    GG (b, c, d, a, x[ 8], S24, 0x455a14ed); /* 28 */
GG (a, b, c, d, x[13], S21, 0xa9e3e905); /* 29 */
GG (d, a, b, c, x[ 2], S22, 0xfee3a3f8); /* 30 */
GG (c, d, a, b, x[ 7], S23, 0x5676f02d9); /* 31 */
GG (b, c, d, a, x[12], S24, 0x8d2a4c8a); /* 32 */

/* Round 3 */
HH (a, b, c, d, x[ 5], S31, 0xffffa3942); /* 33 */
HH (d, a, b, c, x[ 8], S32, 0x8771f681); /* 34 */
HH (c, d, a, b, x[11], S33, 0x6d69d6122); /* 35 */
HH (b, c, d, a, x[14], S34, 0xfd8e5380c); /* 36 */
HH (a, b, c, d, x[ 1], S31, 0xa4bee4a44); /* 37 */
HH (d, a, b, c, x[ 4], S32, 0x4bdecefa9); /* 38 */
HH (c, d, a, b, x[ 7], S33, 0xf6bb4b60); /* 39 */
HH (b, c, d, a, x[10], S34, 0xbeefbe70); /* 40 */
HH (a, b, c, d, x[13], S31, 0x289b7ec6); /* 41 */
HH (d, a, b, c, x[ 0], S32, 0x6ea127fa); /* 42 */
HH (c, d, a, b, x[ 3], S33, 0xd4ef3085); /* 43 */
HH (b, c, d, a, x[ 6], S34, 0x4881d05); /* 44 */
HH (a, b, c, d, x[ 9], S31, 0xd9d4d039); /* 45 */
HH (d, a, b, c, x[12], S32, 0x6dbb99e5); /* 46 */
HH (c, d, a, b, x[15], S33, 0x1fa27cf8); /* 47 */
HH (b, c, d, a, x[ 2], S34, 0xc4ac5665); /* 48 */

/* Round 4 */
II (a, b, c, d, x[ 0], S41, 0xf4292244); /* 49 */
II (d, a, b, c, x[ 7], S42, 0x432aff97); /* 50 */
II (c, d, a, b, x[14], S43, 0xab9423a7); /* 51 */
II (b, c, d, a, x[ 5], S44, 0xfc93a039); /* 52 */
II (a, b, c, d, x[12], S41, 0x655b59c3); /* 53 */
II (d, a, b, c, x[ 3], S42, 0x8f0ccc92); /* 54 */
II (c, d, a, b, x[10], S43, 0xffeef47d); /* 55 */
II (b, c, d, a, x[ 1], S44, 0x8584d5dd); /* 56 */
II (a, b, c, d, x[ 8], S41, 0x6fa87e4f); /* 57 */
II (d, a, b, c, x[15], S42, 0xfce2e6e0); /* 58 */
II (c, d, a, b, x[ 6], S43, 0xa3014314); /* 59 */
II (b, c, d, a, x[13], S44, 0x4e0811a1); /* 60 */
II (a, b, c, d, x[ 4], S41, 0xf75378e2); /* 61 */
II (d, a, b, c, x[11], S42, 0x8d3ef235); /* 62 */
II (c, d, a, b, x[ 2], S43, 0x2ad7d2bb); /* 63 */
II (b, c, d, a, x[ 9], S44, 0xeb86d391); /* 64 */

state[0] += a;
state[1] += b;
state[2] += c;
state[3] += d;

/* Zeroize sensitive information.*/
MD5_memset ((POINTER)x, 0, sizeof (x));
}

/* Encodes input (UINT4) into output (unsigned char). Assumes len is a multiple of 4. */
static void Encode (output, input, len)
unsigned char *output;
UINT4 *input;
unsigned int len;
{
    unsigned int i, j;

    for (i = 0, j = 0; j < len; i++, j += 4) {
        output[j] = (unsigned char)(input[i] & 0xff);
        output[j+1] = (unsigned char)((input[i] >> 8) & 0xff);
        output[j+2] = (unsigned char)((input[i] >> 16) & 0xff);
        output[j+3] = (unsigned char)((input[i] >> 24) & 0xff);
    }
}

/* Decodes input (unsigned char) into output (UINT4). Assumes len is a multiple of 4. */
static void Decode (output, input, len)
UINT4 *output;
unsigned char *input;
unsigned int len;
{
    unsigned int i, j;

    for (i = 0, j = 0; j < len; i++, j += 4)
        output[i] = ((UINT4)input[j]) | (((UINT4)input[j+1]) << 8) | (((UINT4)input[j+2]) << 16) | (((UINT4)input[j+3]) << 24);
}

/* Note: Replace "for loop" with standard memcpy if possible. */
static void MD5_memcpy (output, input, len)
POINTER output;
POINTER input;
unsigned int len;
{
    unsigned int i;

    for (i = 0; i < len; i++)
    {
        output[i] = input[i];
    }

    /* Note: Replace "for loop" with standard memset if possible. */
    static void MD5_memset (output, value, len)
    POINTER output;
    int value;
    unsigned int len;
    {
        unsigned int i;

        for (i = 0; i < len; i++)
        {
            ((char *)output)[i] = (char)value;
        }
    }

*/

A.4 mddriver.c

/* MDDRIVER.C - test driver for MD2, MD4 and MD5 */

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/* The following makes MD default to MD5 if it has not already been
   defined with C compiler flags.
*/
#ifndef MD
#define MD MD5
#endif

#include <stdio.h>
#include <time.h>
#include <string.h>
#include "global.h"
#if MD == 2
#include "md2.h"
#endif
#if MD == 4
#include "md4.h"
#endif
#if MD == 5
#include "md5.h"
#endif

/* Length of test block, number of test blocks.
*/
#define TEST_BLOCK_LEN 1000
#define TEST_BLOCK_COUNT 1000

static void MDString PROTO_LIST ((char *));
static void MDTimeTrial PROTO_LIST ((void));
static void MDTestSuite PROTO_LIST ((void));
static void MDFile PROTO_LIST ((char *));
static void MDFilter PROTO_LIST ((void));
static void MDPrint PROTO_LIST ((unsigned char [16]));

#if MD == 2
#define MD_CTX MD2_CTX
#define MDInit MD2Init
#define MDUpdate MD2Update
#define MDFinal MD2Final
#endif
#if MD == 4
/* Main driver. */

Arguments (may be any combination):
-ssstring - digests string
- t        - runs time trial
- x        - runs test script
filename - digests file
(none) - digests standard input
*/

int main (argc, argv)

int argc;

{ char *argv[];

 if (argc > 1)
 for (i = 1; i < argc; i++)
 if (argv[i][1] == ' ' && argv[i][1] == 's')
 MDSstring (argv[i] + 2);
 else if (strcmp (argv[i], "-t") == 0)
 MDTtimeTrial ();
 else if (strcmp (argv[i], "-x") == 0)
 MDTtestSuite ();
 else
 MDFile (argv[i]);
 else
 MDFilter ();

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char *argv[];
{
int i;

if (argc > 1)
for (i = 1; i < argc; i++)
if (argv[i][0] == ' ' && argv[i][1] == 's')
 MDSstring (argv[i] + 2);
else if (strncpy (argv[i], "-t") == 0)
 MDTtimeTrial ();
else if (strncpy (argv[i], "-x") == 0)
 MDTtestSuite ();
else
 MDFile (argv[i]);
else
 MDFilter ();
return (0);
}

/* Digests a string and prints the result. */
static void MDString (string)
char *string;
{
  MD_CTX context;
  unsigned char digest[16];
  unsigned int len = strlen (string);

  MDInit (&context);
  MDUpdate (&context, string, len);
  MDFinal (digest, &context);

  printf ("MD%d ("%s") = ", MD, string);
  MDPrint (digest);
  printf ("\n");
}

/* Measures the time to digest TEST_BLOCK_COUNT TEST_BLOCK_LEN-byte blocks. */
static void MDTimeTrial ()
{
  MD_CTX context;
  time_t endTime, startTime;
  unsigned char block[TEST_BLOCK_LEN], digest[16];
  unsigned int i;

  printf ("MD%d time trial. Digesting %d %d-byte blocks ...", MD,
TEST_BLOCK_LEN, TEST_BLOCK_COUNT);

  /* Initialize block */
  for (i = 0; i < TEST_BLOCK_LEN; i++)
    block[i] = (unsigned char)(i & 0xff);

  /* Start timer */
time (&startTime);

/* Digest blocks */
MDInit (&context);
for (i = 0; i < TEST_BLOCK_COUNT; i++)
MDUpdate (&context, block, TEST_BLOCK_LEN);
MDFinal (digest, &context);

/* Stop timer */
time (&endTime);

printf (" done\n");
printf ("Digest = ");
MDPrint (digest);
printf ("\nTime = %ld seconds\n", (long)(endTime-startTime));
printf ("\nSpeed = %ld bytes/second\n",
(long)TEST_BLOCK_LEN * (long)TEST_BLOCK_COUNT/(endTime-startTime));
}

/* Digests a reference suite of strings and prints the results. */
static void MDTestSuite ()
{
printf ("MD%d test suite:\n", MD);

MDString ("\n");
MDString ("a");
MDString ("abc");
MDString ("message digest");
MDString ("abcdefghijklmnopqrstuvwxyz");
MDString ("ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789");

/* Digests a file and prints the result. */
static void MDFile (filename)
char *filename;
{
    FILE *file;
    MD_CTX context;
    int len;
    unsigned char buffer[1024], digest[16];

    if ((file = fopen (filename, "rb")) == NULL)
        printf ("%s can't be opened\n", filename);
    else {
        MDInit (&context);
        while (len = fread (buffer, 1, 1024, file))
            MDUpdate (&context, buffer, len);
        MDFinal (digest, &context);

        fclose (file);

        printf ("MD%d (%s) = ", MD, filename);
        MDPrint (digest);
        printf ("\n");
    }
}

/* Digests the standard input and prints the result. */
static void MDFilter ()
{
    MD_CTX context;
    int len;
    unsigned char buffer[16], digest[16];

    MDInit (&context);
    while (len = fread (buffer, 1, 16, stdin))
        MDUpdate (&context, buffer, len);
    MDFinal (digest, &context);

    MDPrint (digest);
    printf ("\n");
}

/* Prints a message digest in hexadecimal. */
static void MDPrint (digest)
unsigned char digest[16];
{

unsigned int i;

    for (i = 0; i < 16; i++)
    printf ("%02x", digest[i]);
}

A.5 Test suite

    The MD5 test suite (driver option "-x") should print the following results:

    MD5 test suite:
    MD5 ("") = d41d8cd98f00b204e9800998ecf8427e
    MD5 ("a") = 0cc175b9c0f1b6a831c399e269772661
    MD5 ("abc") = 900150983cd24fb0d6963f7d28e17f72
    MD5 ("message digest") = f96b697d7cb7938d525a2f31aaf161d0
    MD5 ("abcdefghijklmnopqrstuvwxyz") = c3fcd3d76192e4007defb496cca67e13b
    MD5 ("ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789") =
    d174ab98d277d9f5a5611c2c9f419d9f
    MD5 ("123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890") =
    57edf4a22be3c955ac49da2e2107b67a

Security Considerations

    The level of security discussed in this memo is considered to be sufficient for implementing very high security hybrid digital-signature schemes based on MD5 and a public-key cryptosystem.

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=head1 NAME

Digest::MD5 - Perl interface to the MD5 Algorithm

=head1 SYNOPSIS

# Functional style
use Digest::MD5 qw(md5 md5_hex md5_base64);

$digest = md5($data);
$digest = md5_hex($data);
$digest = md5_base64($data);

# OO style
use Digest::MD5;

$ctx = Digest::MD5->new;

$ctx->add($data);
$ctx->addfile($file_handle);

$digest = $ctx->digest;
$digest = $ctx->hexdigest;
$digest = $ctx->b64digest;

=head1 DESCRIPTION

The C<Digest::MD5> module allows you to use the RSA Data Security Inc. MD5 Message Digest algorithm from within Perl programs. The algorithm takes as input a message of arbitrary length and produces as output a 128-bit "fingerprint" or "message digest" of the input.
Note that the MD5 algorithm is not as strong as it used to be. It has since 2005 been easy to generate different messages that produce the same MD5 digest. It still seems hard to generate messages that produce a given digest, but it is probably wise to move to stronger algorithms for applications that depend on the digest to uniquely identify a message.

The C<Digest::MD5> module provide a procedural interface for simple use, as well as an object oriented interface that can handle messages of arbitrary length and which can read files directly.

=head1 FUNCTIONS

The following functions are provided by the C<Digest::MD5> module. None of these functions are exported by default.

=item md5($data,...)

This function will concatenate all arguments, calculate the MD5 digest of this "message", and return it in binary form. The returned string will be 16 bytes long.

The result of md5("a", "b", "c") will be exactly the same as the result of md5("abc").

=item md5_hex($data,...)

Same as md5(), but will return the digest in hexadecimal form. The length of the returned string will be 32 and it will only contain characters from this set: '0'..'9' and 'a'..'f'.

=item md5_base64($data,...)

Same as md5(), but will return the digest as a base64 encoded string. The length of the returned string will be 22 and it will only contain characters from this set: 'A'..'Z', 'a'..'z', '0'..'9', '+' and '/'.

Note that the base64 encoded string returned is not padded to be a multiple of 4 bytes long. If you want interoperability with other base64 encoded md5 digests you might want to append the redundant string "==" to the result.
METHODS

The object oriented interface to C\texttt{Digest::MD5} is described in this section. After a C\texttt{Digest::MD5} object has been created, you will add data to it and finally ask for the digest in a suitable format. A single object can be used to calculate multiple digests.

The following methods are provided:

- $md5 = \texttt{Digest::MD5}-new

  The constructor returns a new C\texttt{Digest::MD5} object which encapsulate the state of the MD5 message-digest algorithm.

  If called as an instance method (i.e. $md5->new) it will just reset the state the object to the state of a newly created object. No new object is created in this case.

- $md5->reset

  This is just an alias for $md5->new.

- $md5->clone

  This a copy of the $md5 object. It is useful when you do not want to destroy the digests state, but need an intermediate value of the digest, e.g. when calculating digests iteratively on a continuous data stream. Example:

  ```perl
  my $md5 = Digest::MD5->new;
  while (<>) {
    $md5->add($_);
  }
  print "$md5->hexdigest\n"
  ```

- $md5->add($data,...)

  The $data provided as argument are appended to the message we calculate the digest for. The return value is the $md5 object itself.

  All these lines will have the same effect on the state of the $md5 object:

  ```perl
  $md5->add("a"); $md5->add("b"); $md5->add("c");
  $md5->add("a")->add("b")->add("c");
  $md5->add("a", "b", "c");
  ```
$md5->add("abc");

=item $md5->addfile($io_handle)

The $io_handle will be read until EOF and its content appended to the message we calculate the digest for. The return value is the $md5 object itself.

The addfile() method will croak() if it fails reading data for some reason. If it croaks it is unpredictable what the state of the $md5 object will be. The addfile() method might have been able to read the file partially before it failed. It is probably wise to discard or reset the $md5 object if this occurs.

In most cases you want to make sure that the $io_handle is in C<binmode> before you pass it as argument to the addfile() method.

=item $md5->add_bits($data, $nbits)

=item $md5->add_bits($bitstring)

Since the MD5 algorithm is byte oriented you might only add bits as multiples of 8, so you probably want to just use add() instead. The add_bits() method is provided for compatibility with other digest implementations. See L<Digest> for description of the arguments that add_bits() take.

=item $md5->digest

Return the binary digest for the message. The returned string will be 16 bytes long.

Note that the C<digest> operation is effectively a destructive, read-once operation. Once it has been performed, the C<Digest::MD5> object is automatically C<reset> and can be used to calculate another digest value. Call $md5->clone->digest if you want to calculate the digest without resetting the digest state.

=item $md5->hexdigest

Same as $md5->digest, but will return the digest in hexadecimal form. The length of the returned string will be 32 and it will only contain characters from this set: '0'..'9' and 'a'..'f'.

=item $md5->b64digest

Same as $md5->digest, but will return the digest as a base64 encoded string. The length of the returned string will be 22 and it will only
The base64 encoded string returned is not padded to be a multiple of 4 bytes long. If you want interoperability with other base64 encoded md5 digests you might want to append the string "==" to the result.

=back

=head1 EXAMPLES

The simplest way to use this library is to import the md5_hex() function (or one of its cousins):

    use Digest::MD5 qw(md5_hex);
    print "Digest is ", md5_hex("foo\tbar\tbaz"), "\n";

The above example would print out the message:

    Digest is 6df23dc03f9b54cc38a0fc1483df6e21

The same checksum can also be calculated in OO style:

    use Digest::MD5;

    $md5 = Digest::MD5->new;
    $md5->add('foo', 'bar');
    $md5->add('baz');
    $digest = $md5->hexdigest;

    print "Digest is $digest\n";

With OO style, you can break the message arbitrarily. This means that we are no longer limited to have space for the whole message in memory, i.e. we can handle messages of any size.
This is useful when calculating checksum for files:

```perl
use Digest::MD5;

my $filename = shift || "/etc/passwd";
open (my $fh, '<', $filename) or die "Can't open '$filename': $!";
binmode($fh);

$md5 = Digest::MD5->new;
while (<$fh>) {
    $md5->add($_);
}
close($fh);
print $md5->b64digest, " $filename\n";
```

Or we can use the addfile method for more efficient reading of the file:

```perl
use Digest::MD5;

my $filename = shift || "/etc/passwd";
open (my $fh, '<', $filename) or die "Can't open '$filename': $!";
binmode ($fh);

print Digest::MD5->new->addfile($fh)->hexdigest, " $filename\n";
```

Since the MD5 algorithm is only defined for strings of bytes, it can not be used on strings that contains chars with ordinal number above 255 (Unicode strings). The MD5 functions and methods will croak if you try to feed them such input data:

```perl
use Digest::MD5 qw(md5_hex);

my $str = "abc\x{300}";
print md5_hex($str), "\n";  # croaks
# Wide character in subroutine entry
```

What you can do is calculate the MD5 checksum of the UTF-8 representation of such strings. This is achieved by filtering the string through encode_utf8() function:

```perl
use Digest::MD5 qw(md5_hex);
use Encode qw(encode_utf8);

my $str = "abc\x{300}";
print md5_hex(encode_utf8($str)), "\n";
# 8c2d46911f3f5a326455f0ed7a8ed3b3
```
SEE ALSO

Digest, Digest::MD2, Digest::SHA, Digest::HMAC

md5sum(1)

RFC 1321


The paper "How to Break MD5 and Other Hash Functions" by Xiaoyun Wang and Hongbo Yu.

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=head1 AUTHORS

The original C<MD5> interface was written by Neil Winton
(C<N.Winton@axion.bt.co.uk>).

The C<Digest::MD5> module is written by Gisle Aas <gisle@ActiveState.com>.

=cut

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1009548130_1591379411.76/0/perl-Digest-MD5-2.55-396.el8.src.rpm-cosi-expand-archive-qfwrDrJx/Digest-MD5-2.55.tar.gz-cosi-expand-archive-xOrAnhrN/Digest-MD5-2.55/MD5.pm
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1.1186 iprutils 2.4.19 1.el8

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* /bin/grep

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1.1192 libssh 0.9.4-3.el8

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1.1195 seccomp 0.9.1

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

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1.1196.2 Available under license:
The Independent JPEG Group's JPEG software

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README for release 6b of 27-Mar-1998
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Serious users of this software (particularly those incorporating it into larger programs) should contact IJG at jpeg-info@uunet.uu.net to be added to our electronic mailing list. Mailing list members are notified of updates and have a chance to participate in technical discussions, etc.

This software is the work of Tom Lane, Philip Gladstone, Jim Boucher, Lee Crocker, Julian Minguillon, Luis Ortiz, George Phillips, Davide Rossi, Guido Vollbeding, Ge’ Weijers, and other members of the Independent JPEG Group.

IJG is not affiliated with the official ISO JPEG standards committee.

DOCUMENTATION ROADMAP

This file contains the following sections:

OVERVIEW General description of JPEG and the IJG software.
LEGAL ISSUES Copyright, lack of warranty, terms of distribution.
REFERENCES Where to learn more about JPEG.
ARCHIVE LOCATIONS Where to find newer versions of this software.
RELATED SOFTWARE Other stuff you should get.
FILE FORMAT WARS Software *not* to get.
TO DO Plans for future IJG releases.

Other documentation files in the distribution are:

User documentation:
install.doc How to configure and install the IJG software.
usage.doc Usage instructions for cjpeg, djpeg, jpegtran,
rdjpgcom, and wrjpgcom.
*.1 Unix-style man pages for programs (same info as usage.doc).
wizard.doc Advanced usage instructions for JPEG wizards only.
change.log        Version-to-version change highlights.
Programmer and internal documentation:
libjpeg.doc       How to use the JPEG library in your own programs.
example.c         Sample code for calling the JPEG library.
structure.doc     Overview of the JPEG library's internal structure.
filelist.doc      Road map of IJG files.
coderules.doc     Coding style rules --- please read if you contribute code.

Please read at least the files install.doc and usage.doc. Useful information
 can also be found in the JPEG FAQ (Frequently Asked Questions) article. See
 ARCHIVE LOCATIONS below to find out where to obtain the FAQ article.

If you want to understand how the JPEG code works, we suggest reading one or
 more of the REFERENCES, then looking at the documentation files (in roughly
 the order listed) before diving into the code.

OVERVIEW
========

This package contains C software to implement JPEG image compression and
decompression. JPEG (pronounced "jay-peg") is a standardized compression
method for full-color and gray-scale images. JPEG is intended for compressing
"real-world" scenes; line drawings, cartoons and other non-realistic images
are not its strong suit. JPEG is lossy, meaning that the output image is not
exactly identical to the input image. Hence you must not use JPEG if you
have to have identical output bits. However, on typical photographic images,
very good compression levels can be obtained with no visible change, and
remarkably high compression levels are possible if you can tolerate a
low-quality image. For more details, see the references, or just experiment
with various compression settings.

This software implements JPEG baseline, extended-sequential, and progressive
compression processes. Provision is made for supporting all variants of these
processes, although some uncommon parameter settings aren't implemented yet.
For legal reasons, we are not distributing code for the arithmetic-coding
variants of JPEG; see LEGAL ISSUES. We have made no provision for supporting
the hierarchical or lossless processes defined in the standard.

We provide a set of library routines for reading and writing JPEG image files,
plus two sample applications "cjpeg" and "djpeg", which use the library to
perform conversion between JPEG and some other popular image file formats.
The library is intended to be reused in other applications.

In order to support file conversion and viewing software, we have included
considerable functionality beyond the bare JPEG coding/decoding capability;
for example, the color quantization modules are not strictly part of JPEG
decoding, but they are essential for output to colormapped file formats or
colormapped displays. These extra functions can be compiled out of the library if not required for a particular application. We have also included "jpegtran", a utility for lossless transcoding between different JPEG processes, and "rdjpgcom" and "wrjpgcom", two simple applications for inserting and extracting textual comments in JFIF files.

The emphasis in designing this software has been on achieving portability and flexibility, while also making it fast enough to be useful. In particular, the software is not intended to be read as a tutorial on JPEG. (See the REFERENCES section for introductory material.) Rather, it is intended to be reliable, portable, industrial-strength code. We do not claim to have achieved that goal in every aspect of the software, but we strive for it.

We welcome the use of this software as a component of commercial products. No royalty is required, but we do ask for an acknowledgement in product documentation, as described under LEGAL ISSUES.

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2. You can use this software for whatever you want. You don't have to pay us.
3. You may not pretend that you wrote this software. If you use it in a program, you must acknowledge somewhere in your documentation that you've used the IJG code.

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(2) If only executable code is distributed, then the accompanying
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The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub, ltconfig, ltmain.sh). Another support script, install-sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the
resulting GIF files are larger than usual, but are readable by all standard
GIF decoders.

We are required to state that
"The Graphics Interchange Format(c) is the Copyright property of
CompuServe Incorporated. GIF(sm) is a Service Mark property of
CompuServe Incorporated."

REFERENCES
==========

We highly recommend reading one or more of these references before trying to
understand the innards of the JPEG software.

The best short technical introduction to the JPEG compression algorithm is
Wallace, Gregory K. "The JPEG Still Picture Compression Standard",
Communications of the ACM, April 1991 (vol. 34 no. 4), pp. 30-44.
(Adjacent articles in that issue discuss MPEG motion picture compression,
applications of JPEG, and related topics.) If you don't have the CACM issue
handy, a PostScript file containing a revised version of Wallace's article is
available at ftp://ftp.uu.net/graphics/jpeg/wallace.ps.gz. The file (actually
a preprint for an article that appeared in IEEE Trans. Consumer Electronics)
omits the sample images that appeared in CACM, but it includes corrections
and some added material. Note: the Wallace article is copyright ACM and IEEE,
and it may not be used for commercial purposes.

A somewhat less technical, more leisurely introduction to JPEG can be found in
“The Data Compression Book” by Mark Nelson and Jean-loup Gailly, published by
good explanations and example C code for a multitude of compression methods
including JPEG. It is an excellent source if you are comfortable reading C
code but don't know much about data compression in general. The book's JPEG
sample code is far from industrial-strength, but when you are ready to look
at a full implementation, you've got one here...

The best full description of JPEG is the textbook "JPEG Still Image Data
Compression Standard" by William B. Pennebaker and Joan L. Mitchell, published
The book includes the complete text of the ISO JPEG standards (DIS 10918-1
and draft DIS 10918-2). This is by far the most complete exposition of JPEG
in existence, and we highly recommend it.

The JPEG standard itself is not available electronically; you must order a
paper copy through ISO or ITU. (Unless you feel a need to own a certified
official copy, we recommend buying the Pennebaker and Mitchell book instead;
it's much cheaper and includes a great deal of useful explanatory material.)
In the USA, copies of the standard may be ordered from ANSI Sales at (212)
642-4900, or from Global Engineering Documents at (800) 854-7179. (ANSI doesn't take credit card orders, but Global does.) It's not cheap: as of 1992, ANSI was charging $95 for Part 1 and $47 for Part 2, plus 7% shipping/handling. The standard is divided into two parts, Part 1 being the actual specification, while Part 2 covers compliance testing methods. Part 1 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 1: Requirements and guidelines" and has document numbers ISO/IEC IS 10918-1, ITU-T T.81. Part 2 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 2: Compliance testing" and has document numbers ISO/IEC IS 10918-2, ITU-T T.83.

Some extensions to the original JPEG standard are defined in JPEG Part 3, a newer ISO standard numbered ISO/IEC IS 10918-3 and ITU-T T.84. IJG currently does not support any Part 3 extensions.

The JPEG standard does not specify all details of an interchangeable file format. For the omitted details we follow the "JFIF" conventions, revision 1.02. A copy of the JFIF spec is available from:

Literature Department
C-Cube Microsystems, Inc.
1778 McCarthy Blvd.
Milpitas, CA 95035
phone (408) 944-6300, fax (408) 944-6314
A PostScript version of this document is available by FTP at ftp://ftp.uu.net/graphics/jpeg/jfif.ps.gz. There is also a plain text version at ftp://ftp.uu.net/graphics/jpeg/jfif.txt.gz, but it is missing the figures.

The TIFF 6.0 file format specification can be obtained by FTP from ftp://ftp.sgi.com/graphics/tiff/TIFF6.ps.gz. The JPEG incorporation scheme found in the TIFF 6.0 spec of 3-June-92 has a number of serious problems. IJG does not recommend use of the TIFF 6.0 design (TIFF Compression tag 6). Instead, we recommend the JPEG design proposed by TIFF Technical Note #2 (Compression tag 7). Copies of this Note can be obtained from ftp.sgi.com or from ftp://ftp.uu.net/graphics/jpeg/. It is expected that the next revision of the TIFF spec will replace the 6.0 JPEG design with the Note's design. Although IJG's own code does not support TIFF/JPEG, the free libtiff library uses our library to implement TIFF/JPEG per the Note. libtiff is available from ftp://ftp.sgi.com/graphics/tiff/.

ARCHIVE LOCATIONS
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The "official" archive site for this software is ftp.uu.net (Internet address 192.48.96.9). The most recent released version can always be found there in directory graphics/jpeg. This particular version will be archived as ftp://ftp.uu.net/graphics/jpeg/jpegsrc.v6b.tar.gz. If you don't have
direct Internet access, UUNET's archives are also available via UUCP; contact help@uunet.uu.net for information on retrieving files that way.

Numerous Internet sites maintain copies of the UUNET files. However, only ftp.uu.net is guaranteed to have the latest official version.

You can also obtain this software in DOS-compatible "zip" archive format from the SimTel archives (ftp://ftp.simtel.net/pub/simtelnet/msdos/graphics/), or on CompuServe in the Graphics Support forum (GO CIS:GRAPHSUP), library 12 "JPEG Tools". Again, these versions may sometimes lag behind the ftp.uu.net release.

The JPEG FAQ (Frequently Asked Questions) article is a useful source of general information about JPEG. It is updated constantly and therefore is not included in this distribution. The FAQ is posted every two weeks to Usenet newsgroups comp.graphics.misc, news.answers, and other groups. It is available on the World Wide Web at http://www.faqs.org/faqs/jpeg-faq/ and other news.answers archive sites, including the official news.answers archive at rtfm.mit.edu: ftp://rtfm.mit.edu/pub/usenet/news.answers/jpeg-faq/.

If you don't have Web or FTP access, send e-mail to mail-server@rtfm.mit.edu with body

send usenet/news.answers/jpeg-faq/part1
send usenet/news.answers/jpeg-faq/part2

RELATED SOFTWARE
================

Numerous viewing and image manipulation programs now support JPEG. (Quite a few of them use this library to do so.) The JPEG FAQ described above lists some of the more popular free and shareware viewers, and tells where to obtain them on Internet.

If you are on a Unix machine, we highly recommend Jef Poskanzer's free PBMPLUS software, which provides many useful operations on PPM-format image files. In particular, it can convert PPM images to and from a wide range of other formats, thus making cjpeg/djpeg considerably more useful. The latest version is distributed by the NetPBM group, and is available from numerous sites, notably ftp://wuarchive.wustl.edu/graphics/graphics/packages/NetPBM/.

Unfortunately PBMPLUS/NETPBM is not nearly as portable as the IJG software is; you are likely to have difficulty making it work on any non-Unix machine.

A different free JPEG implementation, written by the PVRG group at Stanford, is available from ftp://havefun.stanford.edu/pub/jpeg/. This program is designed for research and experimentation rather than production use; it is slower, harder to use, and less portable than the IJG code, but it is easier to read and modify. Also, the PVRG code supports lossless JPEG, which we do not. (On the other hand, it doesn't do progressive JPEG.)
FILE FORMAT WARS
================

Some JPEG programs produce files that are not compatible with our library. The root of the problem is that the ISO JPEG committee failed to specify a concrete file format. Some vendors "filled in the blanks" on their own, creating proprietary formats that no one else could read. (For example, none of the early commercial JPEG implementations for the Macintosh were able to exchange compressed files.)

The file format we have adopted is called JFIF (see REFERENCES). This format has been agreed to by a number of major commercial JPEG vendors, and it has become the de facto standard. JFIF is a minimal or "low end" representation. We recommend the use of TIFF/JPEG (TIFF revision 6.0 as modified by TIFF Technical Note #2) for "high end" applications that need to record a lot of additional data about an image. TIFF/JPEG is fairly new and not yet widely supported, unfortunately.

The upcoming JPEG Part 3 standard defines a file format called SPIFF. SPIFF is interoperable with JFIF, in the sense that most JFIF decoders should be able to read the most common variant of SPIFF. SPIFF has some technical advantages over JFIF, but its major claim to fame is simply that it is an official standard rather than an informal one. At this point it is unclear whether SPIFF will supersede JFIF or whether JFIF will remain the de-facto standard. IJG intends to support SPIFF once the standard is frozen, but we have not decided whether it should become our default output format or not. (In any case, our decoder will remain capable of reading JFIF indefinitely.)

Various proprietary file formats incorporating JPEG compression also exist. We have little or no sympathy for the existence of these formats. Indeed, one of the original reasons for developing this free software was to help force convergence on common, open format standards for JPEG files. Don't use a proprietary file format!

TO DO
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The major thrust for v7 will probably be improvement of visual quality. The current method for scaling the quantization tables is known not to be very good at low Q values. We also intend to investigate block boundary smoothing, "poor man's variable quantization", and other means of improving quality-vs-file-size performance without sacrificing compatibility.

In future versions, we are considering supporting some of the upcoming JPEG Part 3 extensions --- principally, variable quantization and the SPIFF file
format.

As always, speeding things up is of great interest.

Please send bug reports, offers of help, etc. to jpeg-info@uunet.uu.net.

1.1197 netty-resolver 4.1.62.Final

1.1197.1 Available under license:

No license file was found, but licenses were detected in source scan.

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Found in path(s):
* /opt/cola/permits/1171712276_1623127845.45/0/netty-resolver-4-1-62-final-jar/META-INF/maven/io.netty/netty-resolver/pom.xml
No license file was found, but licenses were detected in source scan.

Manifest-Version: 1.0
Implementation-Title: Netty/Resolver
Bundle-Description: Netty is an asynchronous event-driven network application framework for rapid development of maintainable high performance protocol servers and clients.
Automatic-Module-Name: io.netty.resolver
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0
Bundle-SymbolicName: io.netty.resolver
Implementation-Version: 4.1.62.Final
Built-By: norman
Bnd-LastModified: 1617128233709
Bundle-ManifestVersion: 2
Implementation-Vendor-Id: io.netty
Bundle-DocURL: https://netty.io/
Bundle-Vendor: The Netty Project
Import-Package: io.netty.util;version="[4.1,5)",io.netty.util.concurrent
1.1198 lxml 4.8.0

1.1198.1 Available under license:

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lib/erl/src/Makefile.am
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--------------------------------------------------
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--------------------------------------------------
For the lib/nodejs/lib/thrift/json_parse.js:

/*
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*/
(By Douglas Crockford <douglas@crockford.com>)

--------------------------------------------------
For lib/cpp/src/thrift/windows/SocketPair.cpp

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 */

--------------------------------------------------
For lib/py/compat/win32/stdint.h

// ISO C9x compliant stdint.h for Microsoft Visual Studio
// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124
//
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1.1202 go-pubsub 1.17.0
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package compute_test

import (  
  "context"

  compute "cloud.google.com/go/compute/apiv1"  
  "google.golang.org/api/iterator"  
  computepb "google.golang.org/genproto/googleapis/cloud/compute/v1"
 )

func ExampleNewLicensesRESTClient() {  
  ctx := context.Background()  
  c, err := compute.NewLicensesRESTClient(ctx)  
  if err != nil {  
    // TODO: Handle error.  
    }  
  defer c.Close()

  // TODO: Use client.  
  _ = c
}

func ExampleLicensesClient_Delete() {  
  ctx := context.Background()  
  c, err := compute.NewLicensesRESTClient(ctx)  
  if err != nil {  
    // TODO: Handle error.  
    }  
  defer c.Close()

  req := &computepb.DeleteLicenseRequest{
    }
// TODO: Fill request struct fields.
// See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#DeleteLicenseRequest.
}
resp, err := c.Delete(ctx, req)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Get() {
ctx := context.Background()
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
// TODO: Handle error.
}
deferr := c.Close()

req := &computepb.GetLicenseRequest{
// TODO: Fill request struct fields.
// See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetLicenseRequest.
}
resp, err := c.Get(ctx, req)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
ctx := context.Background()
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
// TODO: Handle error.
}
deferr := c.Close()

req := &computepb.GetIamPolicyLicenseRequest{
// TODO: Fill request struct fields.
// See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.

func ExampleLicensesClient_Insert() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.InsertLicenseRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#InsertLicenseRequest.
    }
    resp, err := c.Insert(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
}

func ExampleLicensesClient_List() {
    ctx := context.Background()
    c, err := compute.NewLicensesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.ListLicensesRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#ListLicensesRequest.
    }
    it := c.List(ctx, req)
    for {
        resp, err := it.Next()
        if err == iterator.Done {
            break
        }
        if err != nil {
            // TODO: Handle error.
        }
        // TODO: Use resp.
        _ = resp
    }
}
func ExampleLicensesClient_SetIamPolicy() {
ctx := context.Background()
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
// TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
// TODO: Fill request struct fields.
// See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
// TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
// TODO: Fill request struct fields.
// See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

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package compute_test

import (
    "context"

    compute "cloud.google.com/go/compute/apiv1"
    computepb "google.golang.org/genproto/googleapis/cloud/compute/v1"
)

func ExampleNewLicenseCodesRESTClient() {
    ctx := context.Background()
    c, err := compute.NewLicenseCodesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()
    
    // TODO: Use client.
    _ = c
}

func ExampleLicenseCodesClient_Get() {
    ctx := context.Background()
    c, err := compute.NewLicenseCodesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()
    
    req := &computepb.GetLicenseCodeRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#GetLicenseCodeRequest.
    }
    resp, err := c.Get(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
func ExampleLicenseCodesClient_TestIamPermissions() {
    ctx := context.Background()
    c, err := compute.NewLicenseCodesRESTClient(ctx)
    if err != nil {
        // TODO: Handle error.
    }
    defer c.Close()

    req := &computepb.TestIamPermissionsLicenseCodeRequest{
        // TODO: Fill request struct fields.
        // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/compute/v1#TestIamPermissionsLicenseCodeRequ est.
    }
    resp, err := c.TestIamPermissions(ctx, req)
    if err != nil {
        // TODO: Handle error.
    }
    // TODO: Use resp.
    _ = resp
}

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package compute

import (  
  "bytes"  
  "context"  
  "fmt"  
  "io/ioutil"  
  "net/http"  
  "net/url"

  gax "github.com/googleapis/gax-go/v2"  
  "google.golang.org/api/googleapi"  
  "google.golang.org/api/option"  
  "google.golang.org/api/option/internaloption"  
  httptransport "google.golang.org/api/transport/http"  
  computepb "google.golang.org/genproto/googleapis/cloud/compute/v1"  
  "google.golang.org/grpc"  
  "google.golang.org/grpc/metadata"  
  "google.golang.org/protobuf/encoding/protojson"
)

var newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
  Get []gax.CallOption  
  TestIamPermissions []gax.CallOption
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
    Close() error
    setGoogleClientInfo(...string)
    Connection() *grpc.ClientConn
    Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
    TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API. 
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with 
// method calls.
//
// The LicenseCodes API.
//
type LicenseCodesClient struct {
    // The internal transport-dependent client.
    internalClient internalLicenseCodesClient
}

// The call options for this service.
//
// CallOptions *LicenseCodesCallOptions
//
// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when 
// the client is no longer required.
//
// func (c *LicenseCodesClient) Close() error { 
//    return c.internalClient.Close()
// }

// setGoogleClientInfo sets the name and version of the application in 
// the `x-goog-api-client` header passed on each request. Intended for 
// use by Google-written clients.
//
// func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
//    c.internalClient.setGoogleClientInfo(keyval...)
// }

// Connection returns a connection to the API service.
//
// Deprecated.
//
// func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
//    return c.internalClient.Connection()
// }

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the 
// License Code.  Caution This resource is intended for use only by third-party partners who are creating Cloud 
// Marketplace images.
//
// func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *compute.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*compute.TestPermissionsResponse, error) {
    return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
    // The http endpoint to connect to.
    endpoint string

    // The http client.
    httpClient *http.Client

    // The x-goog-* metadata to be sent with each request.
    xGoogMetadata metadata.MD
}

// NewLicenseCodesRESTClient creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
    clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
    httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
    if err != nil {
        return nil, err
    }

c := &licenseCodesRESTClient{
    endpoint: endpoint,
    httpClient: httpClient,
}
c.setGoogleClientInfo()

    return &LicenseCodesClient{internalClient: c, CallOptions: &LicenseCodesCallOptions{ }}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
    return []option.ClientOption{
        internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
        internaloption.WithDefaultMtlsEndpoint("https://compute.mtls.googleapis.com"),
    }
}
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
  kv := append([]string{"gl-go", versionGo()}, keyval...)
  kv = append(kv, "gapi", "gapic", "gax", gax.Version, "rest", "UNKNOWN")
  c.xGoogMetadata = metadata.Pairs("x-goog-api-client", gax.XGoogHeader(kv...))
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
  // Replace httpClient with nil to force cleanup.
  c.httpClient = nil
  return nil
}

// Connection returns a connection to the API service.
// Deprecated.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
  return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...
gax.CallOption) (*computepb.LicenseCode, error) {
  baseUrl, _ := url.Parse(c.endpoint)
  req.GetLicenseCode())

  if err != nil {
    return nil, err
  }
  httpReq = httpReqWithContext(ctx)
  // Set the headers
  for k, v := range c.xGoogMetadata {
    httpReq.Header[k] = v
  }
  httpReq.Header["Content-Type"] = []string{"application/json"}
httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.LicenseCode{}
return rsp, unm.Unmarshal(buf, rsp)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestIamPermissionsResponse, error) {
    m := protojson.MarshalOptions{AllowPartial: true}
    body := req.GetTestPermissionsRequestResource()
    jsonReq, err := m.Marshal(body)
    if err != nil {
        return nil, err
    }

    baseUrl, _ := url.Parse(c.endpoint)
    baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
        req.GetProject(), req.GetResource())

    if err != nil {
        return nil, err
    }
    httpReq = httpReqWithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = []string{"application/json"}
httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
defer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.TestPermissionsResponse{
}

return rsp, unm.Unmarshal(buf, rsp)

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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
    "bytes"
    "context"
    "fmt"
    "io/ioutil"
    "math"
    "net/http"
    "net/url"
var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
    Delete   []gax.CallOption
    Get      []gax.CallOption
    GetIamPolicy []gax.CallOption
    Insert   []gax.CallOption
    List     []gax.CallOption
    SetIamPolicy []gax.CallOption
    TestIamPermissions []gax.CallOption
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
    Close() error
    setGoogleClientInfo(...string)
    Connection() *grpc.ClientConn
    Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error)
    Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error)
    GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error)
    Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error)
    List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator
    SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error)
    TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestIamPermissionsResponse, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The Licenses API.
type LicensesClient struct {
    // The internal transport-dependent client.
    internalClient internalLicensesClient

    // The call options for this service.
    CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
    return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
    c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated.
func (c *LicensesClient) Connection() *grpc.ClientConn {
    return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
    return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
    return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *compute徙IamPolicyLicenseRequest, opts ...gax.CallOption) (*compute徙IamPolicy, error) {
// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
    return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
    return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
    return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
    return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
    // The http endpoint to connect to.
    endpoint string

    // The http client.
    httpClient *http.Client

    // The x-goog-* metadata to be sent with each request.
    xGoogMetadataMetadata metadata.MD
}

return c.internalClient.GetIamPolicy(ctx, req, opts...)
}
// NewLicensesRESTClient creates a new licenses rest client.
//
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
    clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
    httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
    if err != nil {
        return nil, err
    }

    c := &licensesRESTClient{
        endpoint: endpoint,
        httpClient: httpClient,
    }
    c.setGoogleClientInfo()

    return &LicensesClient{internalClient: c, CallOptions: &LicensesCallOptions{}}}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
    return []option.ClientOption{
        internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
        internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
        internaloption.WithDefaultAudience("https://compute.googleapis.com/")
    }
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
    kv := append([]string{"gl-go", versionGo()}, keyval...)
    kv = append(kv, "gapic", c.versionClient, "gax", gax.Version, "rest", "UNKNOWN")
    c.xGoogMetadata = metadata.Pairs("x-goog-api-client", gax.XGoogHeader(kv...))
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
    // Replace httpClient with nil to force cleanup.
    c.httpClient = nil
    return nil
}

// Connection returns a connection to the API service.
//
// Deprecated.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
    return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...
gax.CallOption) (*Operation, error) {
    baseUrl, _ := url.Parse(c.endpoint)

    params := url.Values{}
    if req != nil && req.RequestId != nil {
        params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
    }

    baseUrl.RawQuery = params.Encode()

    if err != nil {
        return nil, err
    }

    httpReq = httpReq.WithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = []string{"application/json"}

    httpRsp, err := c.httpClient.Do(httpReq)
    if err != nil {
        return nil, err
    }

    defer httpRsp.Body.Close()

    if err = googleapi.CheckResponse(httpRsp); err != nil {
        return nil, err
    }

    buf, err := ioutil.ReadAll(httpRsp.Body)
    if err != nil {
        return nil, err
    }

    unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
    rsp := &computepb.Operation{}

    if err := unm.Unmarshal(buf, rsp); err != nil {

func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
    baseUrl, _ := url.Parse(c.endpoint)

    if err != nil {
        return nil, err
    }

    httpReq = httpReqWithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = []string{
        "application/json"
    }

    httpRsp, err := c.httpClient.Do(httpReq)
    if err != nil {
        return nil, err
    }
    defer httpRsp.Body.Close()

    if err = googleapi.CheckResponse(httpRsp); err != nil {
        return nil, err
    }

    buf, err := ioutil.ReadAll(httpRsp.Body)
    if err != nil {
        return nil, err
    }

    unm := protojson.UnmarshalOptions{
        AllowPartial: true,
        DiscardUnknown: true,
    }

    rsp := &computepb.License{
    }

    return rsp, unm.Unmarshal(buf, rsp)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,

opts ...gax.CallOption) (*computepb.Policy, error) {
baseUrl, _ := url.Parse(c.endpoint)

params := url.Values{
    if req != nil && req.OptionsRequestedPolicyVersion != nil {
    }

    baseUrl.RawQuery = params.Encode()

    if err != nil {
        return nil, err
    }
    httpReq = httpReq.WithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = []string{"application/json"}

    httpRsp, err := c.httpClient.Do(httpReq)
    if err != nil {
        return nil, err
    }
    defer httpRsp.Body.Close()

    if err = googleapi.CheckResponse(httpRsp); err != nil {
        return nil, err
    }

    buf, err := ioutil.ReadAll(httpRsp.Body)
    if err != nil {
        return nil, err
    }

    unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
    rsp := &computepb.Policy{}

    return rsp, unm.Unmarshal(buf, rsp)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
m := protojson.MarshalOptions{AllowPartial: true}
body := req.GetLicenseResource()
jsonReq, err := m.Marshal(body)
if err != nil {
    return nil, err
}

baseUrl, _ := url.Parse(c.endpoint)

params := url.Values{}
if req != nil && req.RequestId != nil {
    params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}
baseUrl.RawQuery = params.Encode()

if err != nil {
    return nil, err
}
httpReq = httpReqWithContext(ctx)
// Set the headers
for k, v := range c.xGoogMetadata {
    httpReq.Header[k] = v
}
httpReq.Header["Content-Type"] = []string{"application/json"}

httpRsp, err := c.httpClient.Do(httpReq)
if err != nil {
    return nil, err
}
derfer httpRsp.Body.Close()

if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
}

buf, err := ioutil.ReadAll(httpRsp.Body)
if err != nil {
    return nil, err
}

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
rsp := &computepb.Operation{
}
if err := unm.Unmarshal(buf, rsp); err != nil {
    return nil, err
}
op := &Operation{proto: rsp}
return op, err

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...
gax.CallOption) *LicenseIterator {
  it := &LicenseIterator{
    req = proto.Clone(req).(*computepb.ListLicensesRequest)
    unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
    it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
      resp := &computepb.LicensesListResponse{
        if pageToken != "" {
          req.PageToken = proto.String(pageToken)
        }
        if pageSize > math.MaxInt32 {
          req.MaxResults = proto.Uint32(math.MaxInt32)
        } else if pageSize != 0 {
          req.MaxResults = proto.Uint32(uint32(pageSize))
        }
        baseUrl, _ := url.Parse(c.endpoint)

        params := url.Values{
          if req != nil && req.Filter != nil {
            params.Add("filter", fmt.Sprintf("%v", req.Filter()))
          }
          if req != nil && req.MaxResults != nil {
            params.Add("maxResults", fmt.Sprintf("%v", req.MaxResults()))
          }
          if req != nil && req.OrderBy != nil {
            params.Add("orderBy", fmt.Sprintf("%v", req.OrderBy()))
          }
          if req != nil && req.PageToken != nil {
          }
          if req != nil && req.ReturnPartialSuccess != nil {
          }
        }
        baseUrl.RawQuery = params.Encode()

if err != nil {
        return nil, "", err
    }

    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }

    httpReq.Header["Content-Type"] = []string{"application/json"}
    httpRsp, err := c.httpClient.Do(httpReq)
    if err != nil {
        return nil, "", err
    }
    defer httpRsp.Body.Close()

    if err = googleapi.CheckResponse(httpRsp); err != nil {
        return nil, "", err
    }

    buf, err := ioutil.ReadAll(httpRsp.Body)
    if err != nil {
        return nil, "", err
    }

    unm.Unmarshal(buf, resp)
    it.Response = resp
    return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
    items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
    if err != nil {
        return "", err
    }
    it.items = append(it.items, items...)
    return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
    m := protojson.MarshalOptions{AllowPartial: true}
    body := req.GetGlobalSetPolicyRequestResource()
    jsonReq, err := m.Marshal(body)
    if err != nil {
        return nil, err
    }

    baseUrl, _ := url.Parse(c.endpoint)

    if err != nil {
        return nil, err
    }
    httpReq = httpReqWithContext(ctx)
    // Set the headers
    for k, v := range c.xGoogMetadata {
        httpReq.Header[k] = v
    }
    httpReq.Header["Content-Type"] = []string{"application/json"}

    httpRsp, err := c.httpClient.Do(httpReq)
    if err != nil {
        return nil, err
    }
    defer httpRsp.Body.Close()

    if err = googleapi.CheckResponse(httpRsp); err != nil {
        return nil, err
    }

    buf, err := ioutil.ReadAll(httpRsp.Body)
    if err != nil {
        return nil, err
    }

    unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
    rsp := &computepb.Policy{

    }

    return rsp, unm.Unmarshal(buf, rsp)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
  m := protojson.MarshalOptions{AllowPartial: true}
  body := req.GetTestPermissionsRequestResource()
  jsonReq, err := m.Marshal(body)
  if err != nil {
    return nil, err
  }

  baseUrl, _ := url.Parse(c.endpoint)

  if err != nil {
    return nil, err
  }
  httpReq = httpReqWithContext(ctx)
  // Set the headers
  for k, v := range c.xGoogMetadata {
    httpReq.Header[k] = v
  }
  httpReq.Header["Content-Type"] = []string{"application/json"}

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
    return nil, err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
    return nil, err
  }

  buf, err := ioutil.ReadAll(httpRsp.Body)
  if err != nil {
    return nil, err
  }

  unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
  rsp := &computepb.TestPermissionsResponse{}

  return rsp, unm.Unmarshal(buf, rsp)
}

// LicenseIterator manages a stream of *computepb.License.
type LicenseIterator struct {
  items []*computepb.License
}
// Response is the raw response for the current page. // It must be cast to the RPC response type. // Calling Next() or InternalFetch() updates this value. Response interface{} }

// InternalFetch is for use by the Google Cloud Libraries only. // It is not part of the stable interface of this package. // // InternalFetch returns results from a single call to the underlying RPC. // The number of results is no greater than pageSize. // If there are no more results, nextPageToken is empty and err is nil. InternalFetch func(pageSize int, pageToken string) (results []*computepb.License, nextPageToken string, err error) }

// PageInfo supports pagination. See the google.golang.org/api/iterator package for details. func (it *LicenseIterator) PageInfo() *iterator.PageInfo { return it.pageInfo }

// Next returns the next result. Its second return value is iterator.Done if there are no more results. Once Next returns Done, all subsequent calls will return Done. func (it *LicenseIterator) Next() (*computepb.License, error) { var item *computepb.License
if err := it.nextFunc(); err != nil {
    return item, err
}
item = it.items[0]
it.items = it.items[1:]
return item, nil }

func (it *LicenseIterator) bufLen() int { return len(it.items) }

func (it *LicenseIterator) takeBuf() interface{} { b := it.items
it.items = nil
return b }

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1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

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1.1212 aliyun-alibaba-cloud-sdk-go 1.61.1004

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import (
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests"
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses"
)

// RecognizeDriverLicense invokes the ocr.RecognizeDriverLicense API synchronously
func (client *Client) RecognizeDriverLicense(request *RecognizeDriverLicenseRequest) (response
    *RecognizeDriverLicenseResponse, err error) {
    response = CreateRecognizeDriverLicenseResponse() 
    err = client.DoAction(request, response) 
    return 
}

// RecognizeDriverLicenseWithChan invokes the ocr.RecognizeDriverLicense API asynchronously
func (client *Client) RecognizeDriverLicenseWithChan(request *RecognizeDriverLicenseRequest) (<-chan
    *RecognizeDriverLicenseResponse, <-chan error) {
    responseChan := make(chan *RecognizeDriverLicenseResponse, 1)
    errChan := make(chan error, 1)
    err := client.AddAsyncTask(func() {
        defer close(responseChan)
        defer close(errChan)
        response, err := client.RecognizeDriverLicense(request)
        if err != nil {
            errChan <- err
        } else {
            responseChan <- response
        }
    })
    if err != nil {
        errChan <- err
    } else {
        close(responseChan)
        close(errChan)
    }
    return responseChan, errChan
}

// RecognizeDriverLicenseWithCallback invokes the ocr.RecognizeDriverLicense API asynchronously
func (client *Client) RecognizeDriverLicenseWithCallback(request *RecognizeDriverLicenseRequest, callback
    func(response *RecognizeDriverLicenseResponse, err error)) <-chan int {
    result := make(chan int, 1)
    err := client.AddAsyncTask(func() {
        var response *RecognizeDriverLicenseResponse
        var err error
        defer close(result)
        response, err = client.RecognizeDriverLicense(request)
        if err != nil {
            result <- err
        } else {
            result <- response
        }
    })
    if err != nil {
        result <- err
    } else {
        close(result)
    }
    return result
}
callback(response, err)
result <- 1
}
if err != nil {
    defer close(result)
callback(nil, err)
result <- 0
}
return result

// RecognizeDriverLicenseRequest is the request struct for api RecognizeDriverLicense
type RecognizeDriverLicenseRequest struct {
    *requests.RpcRequest
    ImageType requests.Integer `position:"Body" name:"ImageType"
    Side string `position:"Body" name:"Side"
    ImageURL string `position:"Body" name:"ImageURL"
}

// RecognizeDriverLicenseResponse is the response struct for api RecognizeDriverLicense
type RecognizeDriverLicenseResponse struct {
    *responses.BaseResponse
    RequestId string `json:"RequestId" xml:"RequestId"
    Code string `json:"Code" xml:"Code"
    Message string `json:"Message" xml:"Message"
    Data Data `json:"Data" xml:"Data"
}

// CreateRecognizeDriverLicenseRequest creates a request to invoke RecognizeDriverLicense API
func CreateRecognizeDriverLicenseRequest() (request *RecognizeDriverLicenseRequest) {
    request = &RecognizeDriverLicenseRequest{
        RpcRequest: &requests.RpcRequest{
    }
    request.InitWithApiInfo("ocr", "2019-12-30", "RecognizeDriverLicense", "ocr", "openAPI")
    request.Method = requests.POST
    return
}

// CreateRecognizeDriverLicenseResponse creates a response to parse from RecognizeDriverLicense response
func CreateRecognizeDriverLicenseResponse() (response *RecognizeDriverLicenseResponse) {
    response = &RecognizeDriverLicenseResponse{
        BaseResponse: &responses.BaseResponse{
    }
    return
}

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import (  
github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests  
github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses
)

// GetLicense invokes the mts.GetLicense API synchronously
func (client *Client) GetLicense(request *GetLicenseRequest) (response *GetLicenseResponse, err error) {  
response = CreateGetLicenseResponse()  
err = client.DoAction(request, response)  
return
}

// GetLicenseWithChan invokes the mts.GetLicense API asynchronously
func (client *Client) GetLicenseWithChan(request *GetLicenseRequest) (<-chan *GetLicenseResponse, <-chan error) {  
responseChan := make(chan *GetLicenseResponse, 1)  
errChan := make(chan error, 1)  
err := client.AddAsyncTask(func() {  
defer close(responseChan)  
deffer close(errChan)  
response, err := client.GetLicense(request)  
if err != nil {  
errChan <- err  
} else {  
responseChan <- response  
}
})  
if err != nil {  
errChan <- err  
close(responseChan)  
close(errChan)  
}  
return responseChan, errChan
}
// GetLicenseWithCallback invokes the mts.GetLicense API asynchronously
func (client *Client) GetLicenseWithCallback(request *GetLicenseRequest, callback func(response *GetLicenseResponse, err error)) <-chan int {
    result := make(chan int, 1)
    err := client.AddAsyncTask(func() {
        var response *GetLicenseResponse
        var err error
        defer close(result)
        response, err = client.GetLicense(request)
        callback(response, err)
        result <- 1
    })
    if err != nil {
        defer close(result)
        callback(nil, err)
        result <- 0
    }
    return result
}

// GetLicenseRequest is the request struct for api GetLicense
type GetLicenseRequest struct {
    *requests.RpcRequest
    ResourceOwnerId      string `position:"Query" name:"ResourceOwnerId"`
    Data                 string `position:"Query" name:"Data"`
    Type                 string `position:"Query" name:"Type"`
    ResourceOwnerAccount string `position:"Query" name:"ResourceOwnerAccount"`
    OwnerAccount         string `position:"Query" name:"OwnerAccount"`
    OwnerId              string `position:"Query" name:"OwnerId"`
    MediaId              string `position:"Query" name:"MediaId"`
    Header               string `position:"Query" name:"Header"`
    LicenseUrl           string `position:"Query" name:"LicenseUrl"`
}

// GetLicenseResponse is the response struct for api GetLicense
type GetLicenseResponse struct {
    *responses.BaseResponse
    RequestId string `json:"RequestId" xml:"RequestId"`
    License   string `json:"License" xml:"License"`
}

// CreateGetLicenseRequest creates a request to invoke GetLicense API
func CreateGetLicenseRequest() (request *GetLicenseRequest) {
    request = &GetLicenseRequest{
        RpcRequest: &requests.RpcRequest{}
    }
    request.InitWithApiInfo("Mts", "2014-06-18", "GetLicense", "mts", "openAPI")
request.Method = requests.POST
return

// CreateGetLicenseResponse creates a response to parse from GetLicense response
func CreateGetLicenseResponse() (response *GetLicenseResponse) {
    response = &GetLicenseResponse{
        BaseResponse: &responses.BaseResponse{},
    }
    return
}

package market

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import (
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests"
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses"
)

// ActivateLicense invokes the market.ActivateLicense API synchronously
func (client *Client) ActivateLicense(request *ActivateLicenseRequest) (response *ActivateLicenseResponse, err error) {
    response = CreateActivateLicenseResponse()
    err = client.DoAction(request, response)
    return
}

// ActivateLicenseWithChan invokes the market.ActivateLicense API asynchronously
func (client *Client) ActivateLicenseWithChan(request *ActivateLicenseRequest) (<-chan *ActivateLicenseResponse, <-chan error) {
    responseChan := make(chan *ActivateLicenseResponse, 1)
    errChan := make(chan error, 1)
    go client.DoActionAsync(request, responseChan, errChan)
    return responseChan, errChan
}
errChan := make(chan error, 1)
err := client.AddAsyncTask(func() {
    defer close(responseChan)
    defer close(errChan)
    response, err := client.ActivateLicense(request)
    if err != nil {
        errChan <- err
    } else {
        responseChan <- response
    }
})
if err != nil {
    errChan <- err
    close(responseChan)
    close(errChan)
}
return responseChan, errChan

// ActivateLicenseWithCallback invokes the market.ActivateLicense API asynchronously
func (client *Client) ActivateLicenseWithCallback(request *ActivateLicenseRequest, callback func(response *ActivateLicenseResponse, err error)) <-chan int {
    result := make(chan int, 1)
    err := client.AddAsyncTask(func() {
        var response *ActivateLicenseResponse
        var err error
        defer close(result)
        response, err = client.ActivateLicense(request)
        callback(response, err)
        result <- 1
    })
    if err != nil {
        defer close(result)
        callback(nil, err)
        result <- 0
    }
    return result
}

// ActivateLicenseRequest is the request struct for api ActivateLicense
type ActivateLicenseRequest struct {
    *requests.RpcRequest
    Identification string `position:"Query" name:"Identification"
    LicenseCode   string `position:"Query" name:"LicenseCode"
}
// ActivateLicenseResponse is the response struct for api ActivateLicense

package activate_license_response

import (  
    "github.com/aliyun/fuxi-openapi-sdk-go-sdk/requests"
)

// ActivateLicenseResponse is the response struct for api ActivateLicense

type ActivateLicenseResponse struct {
    RequestId string `json:"RequestId" xml:"RequestId"
    Success   bool   `json:"Success" xml:"Success"
}

// CreateActivateLicenseRequest creates a request to invoke ActivateLicense API
func CreateActivateLicenseRequest() (request *ActivateLicenseRequest) {
    request = &ActivateLicenseRequest{
        RpcRequest: &requests.RpcRequest{
            RequestId: &activate_license_request.RequestId {
                Value: "",
            },
        },
    }
    request.InitWithApiInfo("Market", "2015-11-01", "ActivateLicense", "yunmarket", "openAPI")
    return
}

// CreateActivateLicenseResponse creates a response to parse from ActivateLicense response
func CreateActivateLicenseResponse() (response *ActivateLicenseResponse) {
    response = &ActivateLicenseResponse{
        BaseResponse: &requests.BaseResponse{
            RequestId: &activate_license_response.RequestId {
                Value: "",
            },
        },
    }
    return
}

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    apic.go
    emitterc.go
    parserc.go
    readerc.go
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func (client *Client) RecognizeLicensePlateWithChan(request *RecognizeLicensePlateRequest) (<-chan *RecognizeLicensePlateResponse, <-chan error) {
    responseChan := make(chan *RecognizeLicensePlateResponse, 1)
    errChan := make(chan error, 1)
    err := client.AddAsyncTask(func() {
        defer close(responseChan)
        defer close(errChan)
        response, err := client.RecognizeLicensePlate(request)
        if err != nil {
            errChan <- err
        } else {
            responseChan <- response
        }
    })
    if err != nil {
        errChan <- err
        close(responseChan)
        close(errChan)
    }
    return responseChan, errChan
}

// RecognizeLicensePlateWithCallback invokes the ocr.RecognizeLicensePlate API asynchronously
func (client *Client) RecognizeLicensePlateWithCallback(request *RecognizeLicensePlateRequest, callback func(response *RecognizeLicensePlateResponse, err error)) <-chan int {
    result := make(chan int, 1)
    err := client.AddAsyncTask(func() {
        var response *RecognizeLicensePlateResponse
        var err error
        defer close(result)
        response, err = client.RecognizeLicensePlate(request)
        callback(response, err)
        result <- 1
    })
    if err != nil {
        defer close(result)
        callback(nil, err)
        result <- 0
    }
    return result
}

// RecognizeLicensePlateRequest is the request struct for api RecognizeLicensePlate
type RecognizeLicensePlateRequest struct {
    *requests.RpcRequest
    ImageType requests.Integer `position:"Body" name:"ImageType"`
ImageURL string `position:"Body" name:"ImageURL"`
}

// RecognizeLicensePlateResponse is the response struct for api RecognizeLicensePlate
type RecognizeLicensePlateResponse struct {
    *responses.BaseResponse
    RequestId string `json:"RequestId" xml:"RequestId"`
    Code      string `json:"Code" xml:"Code"`
    Message   string `json:"Message" xml:"Message"`
    Data      Data `json:"Data" xml:"Data"`
}

// CreateRecognizeLicensePlateRequest creates a request to invoke RecognizeLicensePlate API
func CreateRecognizeLicensePlateRequest() (request *RecognizeLicensePlateRequest) {
    request = &RecognizeLicensePlateRequest{
        RpcRequest: &requests.RpcRequest{
            RequestId: &requests.RpcRequest{},
        },
    }
    request.InitWithApiInfo("ocr", "2019-12-30", "RecognizeLicensePlate", "ocr", "openAPI")
    request.Method = requests.POST
    return
}

// CreateRecognizeLicensePlateResponse creates a response to parse from RecognizeLicensePlate response
func CreateRecognizeLicensePlateResponse() (response *RecognizeLicensePlateResponse) {
    response = &RecognizeLicensePlateResponse{
        BaseResponse: &responses.BaseResponse{},
    }
    return
}

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// PositionsInRecognizeLicensePlate is a nested struct in ocr response
type PositionsInRecognizeLicensePlate struct {
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import (  
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests"  
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses"
)

// RecognizeBusinessLicense invokes the ocr.RecognizeBusinessLicense API synchronously
func (client *Client) RecognizeBusinessLicense(request *RecognizeBusinessLicenseRequest) (response *RecognizeBusinessLicenseResponse, err error) {
response = CreateRecognizeBusinessLicenseResponse()
err = client.DoAction(request, response)
return

// RecognizeBusinessLicenseWithChan invokes the ocr.RecognizeBusinessLicense API asynchronously
func (client *Client) RecognizeBusinessLicenseWithChan(request *RecognizeBusinessLicenseRequest) (<-chan *RecognizeBusinessLicenseResponse, <-chan error) {
    responseChan := make(chan *RecognizeBusinessLicenseResponse, 1)
    errChan := make(chan error, 1)
    err := client.AddAsyncTask(func() {
        defer close(responseChan)
        defer close(errChan)
        response, err := client.RecognizeBusinessLicense(request)
        if err != nil {
            errChan <- err
        } else {
            responseChan <- response
        }
    })
    if err != nil {
        errChan <- err
        close(responseChan)
        close(errChan)
    }
    return responseChan, errChan
}

// RecognizeBusinessLicenseWithCallback invokes the ocr.RecognizeBusinessLicense API asynchronously
func (client *Client) RecognizeBusinessLicenseWithCallback(request *RecognizeBusinessLicenseRequest, callback func(response *RecognizeBusinessLicenseResponse, err error)) <-chan int {
    result := make(chan int, 1)
    err := client.AddAsyncTask(func() {
        var response *RecognizeBusinessLicenseResponse
        var err error
        defer close(result)
        response, err = client.RecognizeBusinessLicense(request)
        callback(response, err)
        result <- 1
    })
    if err != nil {
        defer close(result)
        callback(nil, err)
        result <- 0
    }
    return result
}
RecognizeBusinessLicenseRequest is the request struct for api RecognizeBusinessLicense

type RecognizeBusinessLicenseRequest struct {
  *requests.RpcRequest
  ImageType requests.Integer `position:"Body" name:"ImageType"
  ImageURL string `position:"Body" name:"ImageURL"
}

RecognizeBusinessLicenseResponse is the response struct for api RecognizeBusinessLicense

type RecognizeBusinessLicenseResponse struct {
  *responses.BaseResponse
  RequestId string `json:"RequestId" xml:"RequestId"
  Data Data `json:"Data" xml:"Data"
}

CreateRecognizeBusinessLicenseRequest creates a request to invoke RecognizeBusinessLicense API
func CreateRecognizeBusinessLicenseRequest() (request *RecognizeBusinessLicenseRequest) {
  request = &RecognizeBusinessLicenseRequest{
    RpcRequest: &requests.RpcRequest{},
  }
  request.InitWithApiInfo("ocr", "2019-12-30", "RecognizeBusinessLicense", "ocr", "openAPI")
  request.Method = requests.POST
  return
}

CreateRecognizeBusinessLicenseResponse creates a response to parse from RecognizeBusinessLicense response
func CreateRecognizeBusinessLicenseResponse() (response *RecognizeBusinessLicenseResponse) {
  response = &RecognizeBusinessLicenseResponse{
    BaseResponse: &responses.BaseResponse{},
  }
  return
}

package linkface

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import (  
"github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests"  
"github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses"
)

// QueryLicenses invokes the linkface.QueryLicenses API synchronously  
func (client *Client) QueryLicenses(request *QueryLicensesRequest) (response *QueryLicensesResponse, err error)  
{  
response = CreateQueryLicensesResponse()  
err = client.DoAction(request, response)  
return  
}

// QueryLicensesWithChan invokes the linkface.QueryLicenses API asynchronously  
func (client *Client) QueryLicensesWithChan(request *QueryLicensesRequest) (<-chan *QueryLicensesResponse, <-chan error) {  
responseChan := make(chan *QueryLicensesResponse, 1)  
errChan := make(chan error, 1)  
err := client.AddAsyncTask(func() {  
defer close(responseChan)  
defer close(errChan)  
response, err := client.QueryLicenses(request)  
if err != nil {  
errChan <- err  
} else {  
responseChan <- response  
}  
})  
if err != nil {  
errChan <- err  
close(responseChan)  
close(errChan)  
}  
return responseChan, errChan  
}

// QueryLicensesWithCallback invokes the linkface.QueryLicenses API asynchronously  
func (client *Client) QueryLicensesWithCallback(request *QueryLicensesRequest, callback func(response *QueryLicensesResponse, err error)) <-chan int {  
result := make(chan int, 1)  
err := client.AddAsyncTask(func() {  
var response *QueryLicensesResponse  
var err error  
})  
result <- int{ response: response, err: err }  
return result  
}
defer close(result)
response, err = client.QueryLicenses(request)
callback(response, err)
result <- 1
})
if err != nil {
defer close(result)
callback(nil, err)
result <- 0
}
return result

// QueryLicensesRequest is the request struct for api QueryLicenses
type QueryLicensesRequest struct {
  *requests.RpcRequest
  LicenseType requests.Integer `position:"Body" name:"LicenseType"`
  PageSize requests.Integer `position:"Body" name:"PageSize"`
  CurrentPage requests.Integer `position:"Body" name:"CurrentPage"`
}

// QueryLicensesResponse is the response struct for api QueryLicenses
type QueryLicensesResponse struct {
  *responses.BaseResponse
  RequestId string `json:"RequestId" xml:"RequestId"
  Code int `json:"Code" xml:"Code"
  Message string `json:"Message" xml:"Message"
  PageCount int `json:"PageCount" xml:"PageCount"
  PageSize int `json:"PageSize" xml:"PageSize"
  Page int `json:"Page" xml:"Page"
  Total int `json:"Total" xml:"Total"
  Success bool `json:"Success" xml:"Success"
  Data []DataItem `json:"Data" xml:"Data"
}

// CreateQueryLicensesRequest creates a request to invoke QueryLicenses API
func CreateQueryLicensesRequest() (request *QueryLicensesRequest) {
  request = &QueryLicensesRequest{
    RpcRequest: &requests.RpcRequest{},
  }
  request.InitWithApiInfo("LinkFace", "2018-07-20", "QueryLicenses", ", ", ")
  return
}

// CreateQueryLicensesResponse creates a response to parse from QueryLicenses response
func CreateQueryLicensesResponse() (response *QueryLicensesResponse) {
  response = &QueryLicensesResponse{
    BaseResponse: &responses.BaseResponse{},
}
package imm

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//
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// Changes may cause incorrect behavior and will be lost if the code is regenerated.

import (
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests"
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses"
)

// GetDRMLicense invokes the imm.GetDRMLicense API synchronously
func (client *Client) GetDRMLicense(request *GetDRMLicenseRequest) (response *GetDRMLicenseResponse, err error) {
    response = CreateGetDRMLicenseResponse()
    err = client.DoAction(request, response)
    return
}

// GetDRMLicenseWithChan invokes the imm.GetDRMLicense API asynchronously
func (client *Client) GetDRMLicenseWithChan(request *GetDRMLicenseRequest) (<-chan *GetDRMLicenseResponse, <-chan error) {
    responseChan := make(chan *GetDRMLicenseResponse, 1)
    errChan := make(chan error, 1)
    err := client.AddAsyncTask(func() {
        defer close(responseChan)
        defer close(errChan)
        response, err := client.GetDRMLicense(request)
        if err != nil {
            errChan <- err
        } else {
            responseChan <- response
        }
    })
    return responseChan, errChan
}
if err != nil {
    errChan <- err
    close(responseChan)
    close(errChan)
}
return responseChan, errChan

// GetDRMLicenseWithCallback invokes the imm.GetDRMLicense API asynchronously
func (client *Client) GetDRMLicenseWithCallback(request *GetDRMLicenseRequest, callback func(response *GetDRMLicenseResponse, err error)) <-chan int {
    result := make(chan int, 1)
    err := client.AddAsyncTask(func() {
        var response *GetDRMLicenseResponse
        var err error
        defer close(result)
        response, err = client.GetDRMLicense(request)
        callback(response, err)
        result <- 1
    })
    if err != nil {
        defer close(result)
        callback(nil, err)
        result <- 0
    }
    return result
}

// GetDRMLicenseRequest is the request struct for api GetDRMLicense
type GetDRMLicenseRequest struct {
    *requests.RpcRequest
    Project    string `position:"Query" name:"Project"`
    DRMType    string `position:"Query" name:"DRMType"`
    DRMLicense string `position:"Query" name:"DRMLicense"`
}

// GetDRMLicenseResponse is the response struct for api GetDRMLicense
type GetDRMLicenseResponse struct {
    *responses.BaseResponse
    RequestId  string `json:"RequestId" xml:"RequestId"`
    DeviceInfo string `json:"DeviceInfo" xml:"DeviceInfo"`
    DRMDData    string `json:"DRMDData" xml:"DRMDData"`
}

// CreateGetDRMLicenseRequest creates a request to invoke GetDRMLicense API
func CreateGetDRMLicenseRequest() (request *GetDRMLicenseRequest) {
    request = &GetDRMLicenseRequest{
        RpcRequest: &requests.RpcRequest{
    },
request.InitWithApiInfo("imm", "2017-09-06", "GetDRMLicense", "imm", "openAPI")
request.Method = requests.POST
return

// CreateGetDRMLicenseResponse creates a response to parse from GetDRMLicense response
func CreateGetDRMLicenseResponse() (response *GetDRMLicenseResponse) {
    response = &GetDRMLicenseResponse{
        BaseResponse: &responses.BaseResponse{},
    }
    return
}

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// License is a nested struct in market response

type License struct {
    LicenseStatus string `json:"LicenseStatus" xml:"LicenseStatus"
    LicenseCode   string `json:"LicenseCode" xml:"LicenseCode"
    InstanceId    string `json:"InstanceId" xml:"InstanceId"
    CreateTime    string `json:"CreateTime" xml:"CreateTime"
    ExpiredTime   string `json:"ExpiredTime" xml:"ExpiredTime"
    ActivateTime  string `json:"ActivateTime" xml:"ActivateTime"
    ProductSkuId  string `json:"ProductSkuId" xml:"ProductSkuId"
    ProductCode   string `json:"ProductCode" xml:"ProductCode"
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import (
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests"
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses"
)

// DescribeLicense invokes the market.DescribeLicense API synchronously
func (client *Client) DescribeLicense(request *DescribeLicenseRequest) (response *DescribeLicenseResponse, err error) {
    response = CreateDescribeLicenseResponse()
    err = client.DoAction(request, response)
    return
}

// DescribeLicenseWithChan invokes the market.DescribeLicense API asynchronously
func (client *Client) DescribeLicenseWithChan(request *DescribeLicenseRequest) (<-chan *DescribeLicenseResponse, <-chan error) {
    responseChan := make(chan *DescribeLicenseResponse, 1)
    errChan := make(chan error, 1)
    err := client.AddAsyncTask(func() {
    defer close(responseChan)
    defer close(errChan)
    response, err := client.DescribeLicense(request)
    if err != nil {
        // Handle error
        return
    }
    responseChan <- response

    })
    errChan := client.WaitForAsyncTask(errChan)
    return responseChan, errChan
errChan <- err
} else {
  responseChan <- response
}
})
if err != nil {
  errChan <- err
  close(responseChan)
  close(errChan)
}
return responseChan, errChan

// DescribeLicenseWithCallback invokes the market.DescribeLicense API asynchronously
func (client *Client) DescribeLicenseWithCallback(request *DescribeLicenseRequest, callback func(response *DescribeLicenseResponse, err error)) <-chan int {
  result := make(chan int, 1)
  err := client.AddAsyncTask(func() {
    var response *DescribeLicenseResponse
    var err error
    defer close(result)
    response, err = client.DescribeLicense(request)
    callback(response, err)
    result <- 1
  })
  if err != nil {
    defer close(result)
    callback(nil, err)
    result <- 0
  }
  return result
}

// DescribeLicenseRequest is the request struct for api DescribeLicense
type DescribeLicenseRequest struct {
  *requests.RpcRequest
  LicenseCode string `position:"Query" name:"LicenseCode"
}

// DescribeLicenseResponse is the response struct for api DescribeLicense
type DescribeLicenseResponse struct {
  *responses.BaseResponse
  RequestId string `json:"RequestId" xml:"RequestId"
  License License `json:"License" xml:"License"
}
// CreateDescribeLicenseRequest creates a request to invoke DescribeLicense API
func CreateDescribeLicenseRequest() (request *DescribeLicenseRequest) {
    request = &DescribeLicenseRequest{
        RpcRequest: &requests.RpcRequest{
            
        }
    }
    request.InitWithApiInfo("Market", "2015-11-01", "DescribeLicense", "yunmarket", "openAPI")
    return
}

// CreateDescribeLicenseResponse creates a response to parse from DescribeLicense response
func CreateDescribeLicenseResponse() (response *DescribeLicenseResponse) {
    response = &DescribeLicenseResponse{
        BaseResponse: &responses.BaseResponse{
            
        }
    }
    return
}

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//
//Code generated by Alibaba Cloud SDK Code Generator.
//Changes may cause incorrect behavior and will be lost if the code is regenerated.
// LicenseAttribute is a nested struct in market response

type LicenseAttribute struct {
    Code  string `json:"Code" xml:"Code"`
    Value string `json:"Value" xml:"Value"`
}

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package linkwan

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import (
  "github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests"
  "github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses"
)

// GetUserLicense invokes the linkwan.GetUserLicense API synchronously
func (client *Client) GetUserLicense(request *GetUserLicenseRequest) (response *GetUserLicenseResponse, err error) {
  response = CreateGetUserLicenseResponse()
  err = client.DoAction(request, response)
  return
}

// GetUserLicenseWithChan invokes the linkwan.GetUserLicense API asynchronously
func (client *Client) GetUserLicenseWithChan(request *GetUserLicenseRequest) (<-chan *GetUserLicenseResponse, <-chan error) {
  responseChan := make(chan *GetUserLicenseResponse, 1)
  errChan := make(chan error, 1)
  err := client.AddAsyncTask(func() {
    defer close(responseChan)
    defer close(errChan)
    response, err := client.GetUserLicense(request)
    if err != nil {
      errChan <- err
    } else {
      responseChan <- response
    }
  })
  return responseChan, errChan
}
if err != nil {
    errChan <- err
    close(responseChan)
    close(errChan)
}
return responseChan, errChan
}

// GetUserLicenseWithCallback invokes the linkwan.GetUserLicense API asynchronously
func (client *Client) GetUserLicenseWithCallback(request *GetUserLicenseRequest, callback func(response *GetUserLicenseResponse, err error)) <-chan int {
    result := make(chan int, 1)
    err := client.AddAsyncTask(func() {
        var response *GetUserLicenseResponse
        var err error
        defer close(result)
        response, err = client.GetUserLicense(request)
        callback(response, err)
        result <- 1
    })
    if err != nil {
        defer close(result)
        callback(nil, err)
        result <- 0
    }
    return result
}

// GetUserLicenseRequest is the request struct for api GetUserLicense
type GetUserLicenseRequest struct {
    *requests.RpcRequest
    ApiProduct  string `position:"Body" name:"ApiProduct"`
    ApiRevision string `position:"Body" name:"ApiRevision"`
}

// GetUserLicenseResponse is the response struct for api GetUserLicense
type GetUserLicenseResponse struct {
    *responses.BaseResponse
    Success   bool   `json:"Success" xml:"Success"`
    RequestId string `json:"RequestId" xml:"RequestId"`
    Data      Data   `json:"Data" xml:"Data"`
}

// CreateGetUserLicenseRequest creates a request to invoke GetUserLicense API
func CreateGetUserLicenseRequest() (request *GetUserLicenseRequest) {
    request = &GetUserLicenseRequest{
        RpcRequest: &requests.RpcRequest{}},
request.InitWithApiInfo("LinkWAN", "2019-03-01", "GetUserLicense", "linkwan", "openAPI")
request.Method = requests.POST
return

// CreateGetUserLicenseResponse creates a response to parse from GetUserLicense response
func CreateGetUserLicenseResponse() (response *GetUserLicenseResponse) {
    response = &GetUserLicenseResponse{
        BaseResponse: &responses.BaseResponse{},
    }
    return
}

package arms

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import (
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests"
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses"
)

// DescribeTraceLicenseKey invokes the arms.DescribeTraceLicenseKey API synchronously
func (client *Client) DescribeTraceLicenseKey(request *DescribeTraceLicenseKeyRequest) (response *DescribeTraceLicenseKeyResponse, err error) {
    response = CreateDescribeTraceLicenseKeyResponse()
    err = client.DoAction(request, response)
    return
}

// DescribeTraceLicenseKeyWithChan invokes the arms.DescribeTraceLicenseKey API asynchronously
func (client *Client) DescribeTraceLicenseKeyWithChan(request *DescribeTraceLicenseKeyRequest) (<-chan *DescribeTraceLicenseKeyResponse, <-chan error) {
    responseChan := make(chan *DescribeTraceLicenseKeyResponse, 1)
    errorChan := make(chan error, 1)
err := client.AddAsyncTask(func() {
    defer close(responseChan)
    defer close(errChan)
    response, err := client.DescribeTraceLicenseKey(request)
    if err != nil {
        errChan <- err
    } else {
        responseChan <- response
    }
})
if err != nil {
    errChan <- err
    close(responseChan)
    close(errChan)
}
return responseChan, errChan

// DescribeTraceLicenseKeyWithCallback invokes the arms.DescribeTraceLicenseKey API asynchronously
func (client *Client) DescribeTraceLicenseKeyWithCallback(request *DescribeTraceLicenseKeyRequest, callback func(response *DescribeTraceLicenseKeyResponse, err error)) <-chan int {
    result := make(chan int, 1)
    err := client.AddAsyncTask(func() {
        var response *DescribeTraceLicenseKeyResponse
        var err error
        defer close(result)
        response, err = client.DescribeTraceLicenseKey(request)
        callback(response, err)
        result <- 1
    })
    if err != nil {
        defer close(result)
        callback(nil, err)
        result <- 0
    }
    return result
}

// DescribeTraceLicenseKeyRequest is the request struct for api DescribeTraceLicenseKey
type DescribeTraceLicenseKeyRequest struct {
    *requests.RpcRequest
}

// DescribeTraceLicenseKeyResponse is the response struct for api DescribeTraceLicenseKey
type DescribeTraceLicenseKeyResponse struct {
    *responses.BaseResponse
    RequestId string `json:"RequestId" xml:"RequestId"
    LicenseKey string `json:"LicenseKey" xml:"LicenseKey"`
// CreateDescribeTraceLicenseKeyRequest creates a request to invoke DescribeTraceLicenseKey API
func CreateDescribeTraceLicenseKeyRequest() (request *DescribeTraceLicenseKeyRequest) {
    request = &DescribeTraceLicenseKeyRequest{
        RpcRequest: &requests.RpcRequest{},
    }
    request.InitWithApiInfo("ARMS", "2019-08-08", "DescribeTraceLicenseKey", "arms", "openAPI")
    request.Method = requests.POST
    return
}

// CreateDescribeTraceLicenseKeyResponse creates a response to parse from DescribeTraceLicenseKey response
func CreateDescribeTraceLicenseKeyResponse() (response *DescribeTraceLicenseKeyResponse) {
    response = &DescribeTraceLicenseKeyResponse{
        BaseResponse: &responses.BaseResponse{},
    }
    return
}

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import (
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/requests"
    "github.com/aliyun/alibaba-cloud-sdk-go/sdk/responses"
)

// RecognizeDrivingLicense invokes the ocr.RecognizeDrivingLicense API synchronously
func (client *Client) RecognizeDrivingLicense(request *RecognizeDrivingLicenseRequest) (response *RecognizeDrivingLicenseResponse, err error) {
    response = CreateRecognizeDrivingLicenseResponse()
    err = client.DoAction(request, response)
    return
}

// RecognizeDrivingLicenseWithChan invokes the ocr.RecognizeDrivingLicense API asynchronously
func (client *Client) RecognizeDrivingLicenseWithChan(request *RecognizeDrivingLicenseRequest) (<-chan *RecognizeDrivingLicenseResponse, <-chan error) {
    responseChan := make(chan *RecognizeDrivingLicenseResponse, 1)
    errChan := make(chan error, 1)
    err := client.AddAsyncTask(func() {
        defer close(responseChan)
        defer close(errChan)
        response, err = client.RecognizeDrivingLicense(request)
        if err != nil {
            errChan <- err
        } else {
            responseChan <- response
        }
    })
    if err != nil {
        errChan <- err
    }
    return responseChan, errChan

// RecognizeDrivingLicenseWithCallback invokes the ocr.RecognizeDrivingLicense API asynchronously
func (client *Client) RecognizeDrivingLicenseWithCallback(request *RecognizeDrivingLicenseRequest, callback func(response *RecognizeDrivingLicenseResponse, err error)) {
    responseChan := make(chan *RecognizeDrivingLicenseResponse, 1)
    errChan := make(chan error, 1)
    err := client.AddAsyncTask(func() {
        defer close(responseChan)
        defer close(errChan)
        response, err = client.RecognizeDrivingLicense(request)
        if err != nil {
            errChan <- err
        } else {
            responseChan <- response
        }
    })
    if err != nil {
        errChan <- err
    }
    go func() {
        response := <-responseChan
        callback(response, nil)
    }()
close(responseChan)
close(errChan)
}
return responseChan, errChan
}

// RecognizeDrivingLicenseWithCallback invokes the ocr.RecognizeDrivingLicense API asynchronously
func (client *Client) RecognizeDrivingLicenseWithCallback(request *RecognizeDrivingLicenseRequest, callback func(response *RecognizeDrivingLicenseResponse, err error)) <-chan int {
result := make(chan int, 1)
err := client.AddAsyncTask(func() {
var response *RecognizeDrivingLicenseResponse
var err error
deffer close(result)
response, err = client.RecognizeDrivingLicense(request)
callback(response, err)
result <- 1
})
if err != nil {
defer close(result)
callback(nil, err)
result <- 0
}
return result
}

// RecognizeDrivingLicenseRequest is the request struct for api RecognizeDrivingLicense
type RecognizeDrivingLicenseRequest struct {
*requests.RpcRequest
ImageType requests.Integer `position:"Body" name:"ImageType"`
Side string `position:"Body" name:"Side"`
ImageURL string `position:"Body" name:"ImageURL"`
}

// RecognizeDrivingLicenseResponse is the response struct for api RecognizeDrivingLicense
type RecognizeDrivingLicenseResponse struct {
*responses.BaseResponse
RequestId string `json:"RequestId" xml:"RequestId"
Data Data `json:"Data" xml:"Data"
}

// CreateRecognizeDrivingLicenseRequest creates a request to invoke RecognizeDrivingLicense API
func CreateRecognizeDrivingLicenseRequest() (request *RecognizeDrivingLicenseRequest) {
request = &RecognizeDrivingLicenseRequest{
RpcRequest: &requests.RpcRequest{},
}
request.InitWithApiInfo("ocr", "2019-12-30", "RecognizeDrivingLicense", "ocr", "openAPI")
request.Method = requests.POST
// CreateRecognizeDrivingLicenseResponse creates a response to parse from RecognizeDrivingLicense response
func CreateRecognizeDrivingLicenseResponse() (response *RecognizeDrivingLicenseResponse) {
    response = &RecognizeDrivingLicenseResponse{
        BaseResponse: &responses.BaseResponse{},
    }
    return
}

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=head1 NAME
Thread::Queue - Thread-safe queues

=head1 VERSION
This document describes Thread::Queue version 3.13

=head1 SYNOPSIS

use strict;
use warnings;

use threads;
use Thread::Queue;

my $q = Thread::Queue->new();    # A new empty queue

# Worker thread
my $thr = threads->create(
    sub {
        # Thread will loop until no more work
        while (defined(my $item = $q->dequeue())) {
            # Do work on $item

return
}
...  
}  
}  
);

# Send work to the thread
$q->enqueue($item1, ...);
# Signal that there is no more work to be sent
$q->end();
# Join up with the thread when it finishes
$thr->join();
...

# Count of items in the queue
my $left = $q->pending();

# Non-blocking dequeue
if (defined(my $item = $q->dequeue_nb())) {
    # Work on $item
}

# Blocking dequeue with 5-second timeout
if (defined(my $item = $q->dequeue_timed(5))) {
    # Work on $item
}

# Set a size for a queue
$q->limit = 5;

# Get the second item in the queue without dequeuing anything
my $item = $q->peek(1);

# Insert two items into the queue just behind the head
$q->insert(1, $item1, $item2);

# Extract the last two items on the queue
my ($item1, $item2) = $q->extract(-2, 2);

=head1 DESCRIPTION

This module provides thread-safe FIFO queues that can be accessed safely by any number of threads.

Any data types supported by L<threads::shared> can be passed via queues:
=over
Ordinary scalars are added to queues as they are.

If not already thread-shared, the other complex data types will be cloned (recursively, if needed, and including any C<bless>ings and read-only settings) into thread-shared structures before being placed onto a queue.

For example, the following would cause L<Thread::Queue> to create a empty, shared array reference via C<&shared([])>, copy the elements 'foo', 'bar' and 'baz' from C<@ary> into it, and then place that shared reference onto the queue:

my @ary = qw/foo bar baz/;
$q->enqueue(@ary);

However, for the following, the items are already shared, so their references are added directly to the queue, and no cloning takes place:

my @ary :shared = qw/foo bar baz/;
$q->enqueue(@ary);

my $obj = &shared({});
$$obj{foo} = 'bar';
$$obj{qux} = 99;
bless($obj, 'My::Class');
$q->enqueue($obj);

See L</"LIMITATIONS"> for caveats related to passing objects via queues.

=head1 QUEUE CREATION

=over

=item ->new()

=back

Creates a new empty queue.
=item ->new(LIST)

Creates a new queue pre-populated with the provided list of items.

=back

=head1 BASIC METHODS

The following methods deal with queues on a FIFO basis.

=over

=item ->enqueue(LIST)

Adds a list of items onto the end of the queue.

=item ->dequeue()

=item ->dequeue(COUNT)

Removes the requested number of items (default is 1) from the head of the queue, and returns them. If the queue contains fewer than the requested number of items, then the thread will be blocked until the requisite number of items are available (i.e., until other threads C<enqueue> more items).

=item ->dequeue_nb()

=item ->dequeue_nb(COUNT)

Removes the requested number of items (default is 1) from the head of the queue, and returns them. If the queue contains fewer than the requested number of items, then it immediately (i.e., non-blocking) returns whatever items there are on the queue. If the queue is empty, then C<undef> is returned.

=item ->dequeue_timed(TIMEOUT)

=item ->dequeue_timed(TIMEOUT, COUNT)

Removes the requested number of items (default is 1) from the head of the queue, and returns them. If the queue contains fewer than the requested number of items, then the thread will be blocked until the requisite number of items are available, or until the timeout is reached. If the timeout is reached, it returns whatever items there are on the queue, or C<undef> if the queue is empty.

The timeout may be a number of seconds relative to the current time (e.g., 5 seconds from when the call is made), or may be an absolute timeout in I<epoch>
seconds the same as would be used with
L<cond_timedwait()threads::shared/"cond_timedwait VARIABLE, ABS_TIMEOUT">.
Fractional seconds (e.g., 2.5 seconds) are also supported (to the extent of
the underlying implementation).

If C<TIMEOUT> is missing, C<undef>, or less than or equal to 0, then this call
behaves the same as C<dequeue_nb>.

=item ->pending()

Returns the number of items still in the queue. Returns C<undef> if the queue
has been ended (see below), and there are no more items in the queue.

=item ->limit

Sets the size of the queue. If set, calls to C<enqueue()> will block until
the number of pending items in the queue drops below the C<limit>. The
C<limit> does not prevent enqueuing items beyond that count:

my $q = Thread::Queue->new(1, 2);
$q->limit = 4;
$q->enqueue(3, 4, 5);  # Does not block
$q->enqueue(6);        # Blocks until at least 2 items are
           # dequeued
my $size = $q->limit;  # Returns the current limit (may return
           # 'undef')
$q->limit = 0;         # Queue size is now unlimited

Calling any of the dequeue methods with C<COUNT> greater than a queue's
C<limit> will generate an error.

=item ->end()

Declares that no more items will be added to the queue.

All threads blocking on C<dequeue()> calls will be unblocked with any
remaining items in the queue and/or C<undef> being returned. Any subsequent
calls to C<dequeue()> will behave like C<dequeue_nb>.

Once ended, no more items may be placed in the queue.

=back

=head1 ADVANCED METHODS

The following methods can be used to manipulate items anywhere in a queue.

To prevent the contents of a queue from being modified by another thread
while it is being examined and/or changed, L<lock>threads::shared/"lock VARIABLE"> the queue inside a local block:

{
    lock($q);  # Keep other threads from changing the queue's contents
    my $item = $q->peek();
    if ($item ...) {
        ...
    }
}  # Queue is now unlocked

=item ->peek()

=item ->peek(INDEX)

Returns an item from the queue without dequeuing anything. Defaults to the the head of queue (at index position 0) if no index is specified. Negative index values are supported as with L<arrays/perl/"Subscripts"> (i.e., -1 is the end of the queue, -2 is next to last, and so on).

If no items exists at the specified index (i.e., the queue is empty, or the index is beyond the number of items on the queue), then C<undef> is returned.

Remember, the returned item is not removed from the queue, so manipulating a C<peek>ed at reference affects the item on the queue.

=item ->insert(INDEX, LIST)

Adds the list of items to the queue at the specified index position (0 is the head of the list). Any existing items at and beyond that position are pushed back past the newly added items:

$q->enqueue(1, 2, 3, 4);
$q->insert(1, qw/foo bar/);
# Queue now contains:  1, foo, bar, 2, 3, 4

Specifying an index position greater than the number of items in the queue just adds the list to the end.

Negative index positions are supported:

$q->enqueue(1, 2, 3, 4);
$q->insert(-2, qw/foo bar/);
# Queue now contains:  1, 2, foo, bar, 3, 4
Specifying a negative index position greater than the number of items in the queue adds the list to the head of the queue.

=item ->extract()
=item ->extract(INDEX)
=item ->extract(INDEX, COUNT)

Removes and returns the specified number of items (defaults to 1) from the specified index position in the queue (0 is the head of the queue). When called with no arguments, C<extract> operates the same as C<dequeue_nb>.

This method is non-blocking, and will return only as many items as are available to fulfill the request:

$q->enqueue(1, 2, 3, 4);
my $item  = $q->extract(2)     # Returns 3
             # Queue now contains: 1, 2, 4
my @items = $q->extract(1, 3) # Returns (2, 4)
             # Queue now contains: 1

Specifying an index position greater than the number of items in the queue results in C<undef> or an empty list being returned.

$q->enqueue('foo');
my $nada = $q->extract(3)      # Returns undef
my @nada = $q->extract(1, 3)   # Returns ()

Negative index positions are supported. Specifying a negative index position greater than the number of items in the queue may return items from the head of the queue (similar to C<dequeue_nb>) if the count overlaps the head of the queue from the specified position (i.e. if queue size + index + count is greater than zero):

$q->enqueue(qw/foo bar baz/);
my @nada = $q->extract(-6, 2); # Returns ()   - (3+(-6)+2) <= 0
my @some = $q->extract(-6, 4); # Returns (foo) - (3+(-6)+4) > 0
              # Queue now contains: bar, baz
my @rest = $q->extract(-3, 4); # Returns (bar, baz) -
              #                   (2+(-3)+4) > 0

Notes

Queues created by L<Thread::Queue> can be used in both threaded and non-threaded applications.
LIMITATIONS

Passing objects on queues may not work if the objects' classes do not support sharing. See L<threads::shared/"BUGS AND LIMITATIONS"> for more.

Passing array/hash refs that contain objects may not work for Perl prior to 5.10.0.

SEE ALSO

Thread::Queue on MetaCPAN:
L<https://metacpan.org/release/Thread-Queue>

Code repository for CPAN distribution:
L<https://github.com/Dual-Life/Thread-Queue>

L<threads>, L<threads::shared>

Sample code in the I<examples> directory of this distribution on CPAN.

MAINTAINER

Jerry D. Hedden, S<E<lt>jdhedden AT cpan DOT orgE<gt>>

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configure_requires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 1
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@end page
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In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

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In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python
releases have also been GPL-compatible; the table below summarizes the various releases.

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Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

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CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2

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cabundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#
This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:
It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication.
Just configure this file as the SSLCACertificateFile.#

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@(#) $RCSfile: certdata.txt,v $ $Revision: 1.80 $ $Date: 2011/11/03 15:11:58 $ License

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gevent/libuv/_coreffi_source.c
gevent/libuv/_coreffi_cdef.c

Originally based on code from https://github.com/veegee/guv

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<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

1.1237 pymysql 1.0.2
1.1237.1 Available under license:
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1.1238 apache-arrow-go-arrow 0.0.0-20211006091945-a69884db78f4
1.1238.1 Available under license:
No license file was found, but licenses were detected in source scan.

/opt/cola/permits/1219538005_1652753100.9400022/0/telegraf-1.21.4-1.x86_64.src.rpm-cosi-expand-archive-NK33rePD/usr/bin/telegraf: binary file matches

Found in path(s):
  */bin/grep
No license file was found, but licenses were detected in source scan.

# Telegraf Configuration
#
# Telegraf is entirely plugin driven. All metrics are gathered from the
# declared inputs, and sent to the declared outputs.
#
# Plugins must be declared in here to be active.
# To deactivate a plugin, comment out the name and any variables.
#
# Use 'telegraf -config telegraf.conf -test' to see what metrics a config
# file would generate.
#
# Environment variables can be used anywhere in this config file, simply surround
# them with ${}. For strings the variable must be within quotes (ie, "${STR_VAR}")
# for numbers and booleans they should be plain (ie, ${INT_VAR}, ${BOOL_VAR})

# Global tags can be specified here in key="value" format.
[global_tags]
  # dc = "us-east-1" # will tag all metrics with dc=us-east-1
  # rack = "1a"
  ## Environment variables can be used as tags, and throughout the config file
  # user = "$USER"

# Configuration for telegraf agent
[agent]
## Default data collection interval for all inputs
interval = "10s"
## Rounds collection interval to 'interval'
## ie, if interval="10s" then always collect on :00, :10, :20, etc.
round_interval = true

## Telegraf will send metrics to outputs in batches of at most
## metric_batch_size metrics.
## This controls the size of writes that Telegraf sends to output plugins.
metric_batch_size = 1000

## Maximum number of unwritten metrics per output. Increasing this value
## allows for longer periods of output downtime without dropping metrics at the
## cost of higher maximum memory usage.
metric_buffer_limit = 10000

## Collection jitter is used to jitter the collection by a random amount.
## Each plugin will sleep for a random time within jitter before collecting.
## This can be used to avoid many plugins querying things like sysfs at the
## same time, which can have a measurable effect on the system.
collection_jitter = "0s"

## Default flushing interval for all outputs. Maximum flush_interval will be
## flush_interval + flush_jitter
flush_interval = "10s"
## Jitter the flush interval by a random amount. This is primarily to avoid
## large write spikes for users running a large number of telegraf instances.
## ie, a jitter of 5s and interval 10s means flushes will happen every 10-15s
flush_jitter = "0s"

## By default or when set to "0s", precision will be set to the same
## timestamp order as the collection interval, with the maximum being 1s.
## ie, when interval = "10s", precision will be "1s"
## when interval = "250ms", precision will be "1ms"
## Precision will NOT be used for service inputs. It is up to each individual
## service input to set the timestamp at the appropriate precision.
## Valid time units are "ns", "us" (or "µs"), "ms", "s".
precision = ""
# logtarget = "file"

## Name of the file to be logged to when using the "file" logtarget. If set to the empty string then logs are written to stderr.
# logfile = ""

## The logfile will be rotated after the time interval specified. When set to 0 no time based rotation is performed. Logs are rotated only when written to, if there is no log activity rotation may be delayed.
# logfile_rotation_interval = "0d"

## The logfile will be rotated when it becomes larger than the specified size. When set to 0 no size based rotation is performed.
# logfile_rotation_max_size = "0MB"

## Maximum number of rotated archives to keep, any older logs are deleted.
## If set to -1, no archives are removed.
# logfile_rotation_max_archives = 5

## Pick a timezone to use when logging or type 'local' for local time.
## Example: America/Chicago
# log_with_timezone = ""

## Override default hostname, if empty use os.Hostname()
hostname = ""
## If set to true, do no set the "host" tag in the telegraf agent.
omit_hostname = false

# Configuration for sending metrics to InfluxDB
[[outputs.influxdb]]
## The full HTTP or UDP URL for your InfluxDB instance.
## Multiple URLs can be specified for a single cluster, only ONE of the urls will be written to each interval.
# urls = ["unix:///var/run/influxdb.sock"]
# urls = ["udp://127.0.0.1:8089"]
# urls = ["http://127.0.0.1:8086"]

## The target database for metrics; will be created as needed.
## For UDP url endpoint database needs to be configured on server side.
# database = "telegraf"

## The value of this tag will be used to determine the database. If this
## tag is not set the 'database' option is used as the default.
# database_tag = ""

## If true, the 'database_tag' will not be included in the written metric.
# exclude_database_tag = false

## If true, no CREATE DATABASE queries will be sent. Set to true when using
## Telegraf with a user without permissions to create databases or when the
## database already exists.
# skip_database_creation = false

## Name of existing retention policy to write to. Empty string writes to
## the default retention policy. Only takes effect when using HTTP.
# retention_policy = ""

## The value of this tag will be used to determine the retention policy. If this
## tag is not set the 'retention_policy' option is used as the default.
# retention_policy_tag = ""

## If true, the 'retention_policy_tag' will not be included in the written metric.
# exclude_retention_policy_tag = false

## Write consistency (clusters only), can be: "any", "one", "quorum", "all".
## Only takes effect when using HTTP.
# write_consistency = "any"

## Timeout for HTTP messages.
# timeout = "5s"

## HTTP Basic Auth
# username = "telegraf"
# password = "metricsmetricsmetricsmetrics"

## HTTP User-Agent
# user_agent = "telegraf"

## UDP payload size is the maximum packet size to send.
# udp_payload = "512B"

## Optional TLS Config for use on HTTP connections.
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## HTTP Proxy override, if unset values the standard proxy environment
## variables are consulted to determine which proxy, if any, should be used.
# http_proxy = "http://corporate.proxy:3128"

## Additional HTTP headers
# http_headers = { "X-Special-Header" = "Special-Value" }

## HTTP Content-Encoding for write request body, can be set to "gzip" to
## compress body or "identity" to apply no encoding.
# content_encoding = "gzip"

## When true, Telegraf will output unsigned integers as unsigned values,
## i.e.: "42u".  You will need a version of InfluxDB supporting unsigned
## integer values.  Enabling this option will result in field type errors if
## existing data has been written.
# influx_uint_support = false

## Configuration for Amon Server to send metrics to.
# [[outputs.amon]]
# ## Amon Server Key
# server_key = "my-server-key" # required.
#
# ## Amon Instance URL
# amon_instance = "https://youramoninstance" # required
#
# ## Connection timeout.
# # timeout = "5s"

## Publishes metrics to an AMQP broker
# [[outputs.amqp]]
# ## Broker to publish to.
# #  deprecated in 1.7; use the brokers option
# # url = "amqp://localhost:5672/influxdb"
#
# ## Brokers to publish to.  If multiple brokers are specified a random broker
# ## will be selected anytime a connection is established.  This can be
# ## helpful for load balancing when not using a dedicated load balancer.
# brokers = ["amqp://localhost:5672/influxdb"]
#
# ## Maximum messages to send over a connection.  Once this is reached, the
# ## connection is closed and a new connection is made.  This can be helpful for
# ## load balancing when not using a dedicated load balancer.
# # max_messages = 0
#
# ## Exchange to declare and publish to.
# # exchange = "telegraf"
#
# ## Exchange type; common types are "direct", "fanout", "topic", "header", "x-consistent-hash".
# exchange_type = "topic"
#
# If true, exchange will be passively declared.
# exchange_passive = false
#
# Exchange durability can be either "transient" or "durable".
# exchange_durability = "durable"
#
# Additional exchange arguments.
# exchange_arguments = { }
# exchange_arguments = {"hash_property" = "timestamp"}
#
# Authentication credentials for the PLAIN auth_method.
# username = ""
# password = ""
#
# Auth method. PLAIN and EXTERNAL are supported
# Using EXTERNAL requires enabling the rabbitmq_auth_mechanism_ssl plugin as
# described here: https://www.rabbitmq.com/plugins.html
# auth_method = "PLAIN"
#
# Metric tag to use as a routing key.
# ie, if this tag exists, its value will be used as the routing key
# routing_tag = "host"
#
# Static routing key. Used when no routing_tag is set or as a fallback
# when the tag specified in routing_tag is not found.
# routing_key = ""
# routing_key = "telegraf"
#
# Delivery Mode controls if a published message is persistent.
# One of "transient" or "persistent".
# delivery_mode = "transient"
#
# InfluxDB database added as a message header.
# deprecated in 1.7; use the headers option
# database = "telegraf"
#
# InfluxDB retention policy added as a message header
# deprecated in 1.7; use the headers option
# retention_policy = "default"
#
# Static headers added to each published message.
# headers = { }
# headers = {"database" = "telegraf", "retention_policy" = "default"}
#
# Connection timeout. If not provided, will default to 5s. 0s means no
# timeout (not recommended).
# timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## If true use batch serialization format instead of line based delimiting.
# ## Only applies to data formats which are not line based such as JSON.
# ## Recommended to set to true.
# # use_batch_format = false
#
# ## Content encoding for message payloads, can be set to "gzip" to or
# ## "identity" to apply no encoding.
# ## Please note that when use_batch_format = false each amqp message contains only
# ## a single metric, it is recommended to use compression with batch format
# ## for best results.
# # content_encoding = "identity"
#
# ## Data format to output.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# # data_format = "influx"

## Send metrics to Azure Application Insights
# [[outputs.application_insights]]
# ## Instrumentation key of the Application Insights resource.
# # instrumentation_key = "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxx"
#
# ## Regions that require endpoint modification https://docs.microsoft.com/en-us/azure/azure-monitor/app/custom-endpoints
# # endpoint_url = "https://dc.services.visualstudio.com/v2/track"
#
# ## Timeout for closing (default: 5s).
# # timeout = "5s"
#
# ## Enable additional diagnostic logging.
# # enable_diagnostic_logging = false
#
# ## Context Tag Sources add Application Insights context tags to a tag value.
# ## For list of allowed context tag keys see:
# ## https://github.com/microsoft/ApplicationInsights-Go/blob/master/appinsights/contracts/contexttagkeys.go
# # [outputs.application_insights.context_tag_sources]
# #  "ai.cloud.role" = "kubernetes_container_name"
# #  "ai.cloud.roleInstance" = "kubernetes_pod_name"

## Sends metrics to Azure Data Explorer
## [outputs.azure_data_explorer]
## Azure Data Explorer cluster endpoint
## ex: endpoint_url = "https://clusternamaustraliasoutheast.kusto.windows.net"
# endpoint_url = ""
#
## The Azure Data Explorer database that the metrics will be ingested into.
## The plugin will NOT generate this database automatically, it's expected that this database already exists before ingestion.
## ex: "exampledatabase"
# database = ""
#
## Timeout for Azure Data Explorer operations
## timeout = "20s"
#
## Type of metrics grouping used when pushing to Azure Data Explorer.
## Default is "TablePerMetric" for one table per different metric.
## For more information, please check the plugin README.
## metrics_grouping_type = "TablePerMetric"
#
## Name of the single table to store all the metrics (Only needed if metrics_grouping_type is "SingleTable").
## table_name = ""
#
## Creates tables and relevant mapping if set to true(default).
## Skips table and mapping creation if set to false, this is useful for running Telegraf with the lowest possible permissions i.e. table ingestor role.
## create_tables = true

## Send aggregate metrics to Azure Monitor
## [outputs.azure_monitor]
## Timeout for HTTP writes.
## timeout = "20s"
#
## Set the namespace prefix, defaults to "Telegraf/<input-name>".
## namespace_prefix = "Telegraf/"
#
## Azure Monitor doesn't have a string value type, so convert string
## fields to dimensions (a.k.a. tags) if enabled. Azure Monitor allows
## a maximum of 10 dimensions so Telegraf will only send the first 10
## alphanumeric dimensions.
## strings_as_dimensions = false
Both region and resource_id must be set or be available via the Instance Metadata service on Azure Virtual Machines.

Azure Region to publish metrics against.

- `region = ""`

Azure Resource ID against which metric will be logged, e.g.

- `resource_id = ""`

Optionally, if in Azure US Government, China or other sovereign cloud environment, set appropriate REST endpoint for receiving metrics. (Note: region may be unused in this context)

- `endpoint_url = "https://monitoring.core.usgovcloudapi.net"

---

Configuration for Google Cloud BigQuery to send entries

### Credentials File

- `credentials_file = "/path/to/service/account/key.json"`

### Google Cloud Platform Project

- `project = "my-gcp-project"

### The namespace for the metric descriptor

- `dataset = "telegraf"

### Timeout for BigQuery operations.

- `timeout = "5s"

### Character to replace hyphens on Metric name

- `replace_hyphen_to = "_"`

---

Publish Telegraf metrics to a Google Cloud PubSub topic

### Required. Name of Google Cloud Platform (GCP) Project that owns the given PubSub topic.

- `project = "my-project"

### Required. Name of PubSub topic to publish metrics to.

- `topic = "my-topic"

### Required. Data format to consume.

- Each data format has its own unique set of configuration options.
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# ## Read more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# ## Optional. Filepath for GCP credentials JSON file to authorize calls to
# ## PubSub APIs. If not set explicitly, Telegraf will attempt to use
# ## Application Default Credentials, which is preferred.
# credentials_file = "path/to/my/creds.json"
#
# ## Optional. If true, will send all metrics per write in one PubSub message.
# send_batched = true
#
# ## The following publish_* parameters specifically configures batching
# requests made to the GCP Cloud PubSub API via the PubSub Golang library. Read
# more here: https://godoc.org/cloud.google.com/go/pubsub#PublishSettings
#
# ## Optional. Send a request to PubSub (i.e. actually publish a batch)
# when it has this many PubSub messages. If send_batched is true,
# this is ignored and treated as if it were 1.
# publish_count_threshold = 1000
#
# ## Optional. Send a request to PubSub (i.e. actually publish a batch)
# when it has this many PubSub messages. If send_batched is true,
# this is ignored and treated as if it were 1
# publish_byte_threshold = 1000000
#
# ## Optional. Specifically configures requests made to the PubSub API.
# publish_num_go_routines = 2
#
# ## Optional. Specifies a timeout for requests to the PubSub API.
# publish_timeout = "30s"
#
# ## Optional. If true, published PubSub message data will be base64-encoded.
# base64_data = false
#
# ## Optional. PubSub attributes to add to metrics.
# [outputs.cloud_pubsub.attributes]
# my_attr = "tag_value"
#

# Configuration for AWS CloudWatch output.
# [[outputs.cloudwatch]]
# ## Amazon REGION
# region = "us-east-1"
#
# ## Amazon Credentials
# ## Credentials are loaded in the following order
# ## 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# ## 2) Assumed credentials via STS if role_arn is specified
# ## 3) explicit credentials from 'access_key' and 'secret_key'
# ## 4) shared profile from 'profile'
# ## 5) environment variables
# ## 6) shared credentials file
# ## 7) EC2 Instance Profile

# access_key = ""
# secret_key = ""
# token = ""
# role_arn = ""
# web_identity_token_file = ""
# role_session_name = ""
# profile = ""
# shared_credential_file = ""

# ## Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
# default.
# ex: endpoint_url = "http://localhost:8000"
# endpoint_url = ""

# ## Namespace for the CloudWatch MetricDatums
# namespace = "InfluxData/Telegraf"

# ## If you have a large amount of metrics, you should consider to send statistic
# values instead of raw metrics which could not only improve performance but
# also save AWS API cost. If enable this flag, this plugin would parse the required
# CloudWatch statistic fields (count, min, max, and sum) and send them to CloudWatch.
# You could use basicstats aggregator to calculate those fields. If not all statistic
# fields are available, all fields would still be sent as raw metrics.
# write_statistics = false

# ## Enable high resolution metrics of 1 second (if not enabled, standard resolution are of 60 seconds precision)
# high_resolution_metrics = false

# # Configuration for AWS CloudWatchLogs output.
# [[outputs.cloudwatch_logs]]
# The region is the Amazon region that you wish to connect to.
# Examples include but are not limited to:
# - us-west-1
# - us-west-2
# - us-east-1
# - ap-southeast-1
# - ap-southeast-2
# ...
# region = "us-east-1"
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# ## Amazon Credentials
# ## Credentials are loaded in the following order
# ## 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# ## 2) Assumed credentials via STS if role_arn is specified
# ## 3) explicit credentials from 'access_key' and 'secret_key'
# ## 4) shared profile from 'profile'
# ## 5) environment variables
# ## 6) shared credentials file
# ## 7) EC2 Instance Profile

## endpoint_url = ""
## access_key = ""
## secret_key = ""
## token = ""
## role_arn = ""
## web_identity_token_file = ""
## role_session_name = ""
## profile = ""
## shared_credential_file = ""

# ## Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
default.

## endpoint_url = "http://localhost:8000"

# ## Cloud watch log group. Must be created in AWS cloudwatch logs upfront!
## For example, you can specify the name of the k8s cluster here to group logs from all cluster in one place
log_group = "my-group-name"

# ## Log stream in log group
## Either log group name or reference to metric attribute, from which it can be parsed:
## tag:<TAG_NAME> or field:<FIELD_NAME>. If log stream is not exist, it will be created.
## Since AWS is not automatically delete logs streams with expired logs entries (i.e. empty log stream)
## you need to put in place appropriate house-keeping

## log_stream = "tag:location"
# ## Source of log data - metric name
## specify the name of the metric, from which the log data should be retrieved.
## I.e., if you are using docker_log plugin to stream logs from container, then
## specify log_data_metric_name = "docker_log"
# log_data_metric_name = "docker_log"

# ## Specify from which metric attribute the log data should be retrieved:
## tag:<TAG_NAME> or field:<FIELD_NAME>.
## I.e., if you are using docker_log plugin to stream logs from container, then
## specify log_data_source = "field:message"
# log_data_source = "field:message"
```yaml
# # Configuration for CrateDB to send metrics to.
# [[outputs.crate]]
# # A github.com/jackc/pgx/v4 connection string.
# # See https://pkg.go.dev/github.com/jackc/pgx/v4#ParseConfig
# url = "postgres://user:password@localhost/schema?sslmode=disable"
# # Timeout for all CrateDB queries.
# timeout = "5s"
# # Name of the table to store metrics in.
# table = "metrics"
# # If true, and the metrics table does not exist, create it automatically.
# table_create = true
# # The character(s) to replace any '.' in an object key with
# key_separator = "_"

# # Configuration for DataDog API to send metrics to.
# [[outputs.datadog]]
# ## Datadog API key
# apikey = "my-secret-key"
# # ## Connection timeout.
# # timeout = "5s"
# # ## Write URL override; useful for debugging.
# # url = "https://app.datadoghq.com/api/v1/series"
# # ## Set http_proxy (telegraf uses the system wide proxy settings if it isn't set)
# # http_proxy_url = "http://localhost:8888"

# # Send metrics to nowhere at all
# [[outputs.discard]]
# # no configuration

# # Send telegraf metrics to a Dynatrace environment
# [[outputs.dynatrace]]
# ## For usage with the Dynatrace OneAgent you can omit any configuration,
# ## the only requirement is that the OneAgent is running on the same host.
# ## Only setup environment url and token if you want to monitor a Host without the OneAgent present.
# ##
# ## Your Dynatrace environment URL.
# ## For Dynatrace OneAgent you can leave this empty or set it to "http://127.0.0.1:14499/metrics/ingest" (default)
# ## For Dynatrace SaaS environments the URL scheme is "https://{your-environment-id}.live.dynatrace.com/api/v2/metrics/ingest"
# ## For Dynatrace Managed environments the URL scheme is "https://{your-domain}/{environment-id}/api/v2/metrics/ingest"
```
url = ""

## Your Dynatrace API token.
## Create an API token within your Dynatrace environment, by navigating to Settings > Integration > Dynatrace API
## The API token needs data ingest scope permission. When using OneAgent, no API token is required.
api_token = ""

## Optional prefix for metric names (e.g.: "telegraf")
prefix = "telegraf"

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"

## Optional flag for ignoring tls certificate check
insecure_skip_verify = false

## Connection timeout, defaults to "5s" if not set.
timeout = "5s"

## If you want metrics to be treated and reported as delta counters, add the metric names here
additional_counters = [ ]

## Optional dimensions to be added to every metric
# [outputs.dynatrace.default_dimensions]
default_key = "default value"

## Configuration for Elasticsearch to send metrics to.
[[outputs.elasticsearch]]
## The full HTTP endpoint URL for your Elasticsearch instance
## Multiple urls can be specified as part of the same cluster,
## this means that only ONE of the urls will be written to each interval.
urls = [ "http://node1.es.example.com:9200" ] # required.
## Elasticsearch client timeout, defaults to "5s" if not set.
timeout = "5s"
## Set to true to ask Elasticsearch a list of all cluster nodes,
## thus it is not necessary to list all nodes in the urls config option.
enable_sniffer = false
## Set to true to enable gzip compression
enable_gzip = false
## Setting to "0s" will disable the health check (not recommended in production)
health_check_interval = "10s"
## HTTP basic authentication details
## Index Config
### The target index for metrics (Elasticsearch will create if it not exists).
### You can use the date specifiers below to create indexes per time frame.
### The metric timestamp will be used to decide the destination index name
### %Y - year (2016)
### %y - last two digits of year (00..99)
### %m - month (01..12)
### %d - day of month (e.g., 01)
### %H - hour (00..23)
### %V - week of the year (ISO week) (01..53)
### Additionally, you can specify a tag name using the notation {{tag_name}}
### which will be used as part of the index name. If the tag does not exist,
### the default tag value will be used.
### index_name = "telegraf-{{host}}-%Y.%m.%d"
### default_tag_value = "none"
### index_name = "telegraf-%Y.%m.%d" # required.

### Optional TLS Config
### tls_ca = "/etc/telegraf/ca.pem"
### tls_cert = "/etc/telegraf/cert.pem"
### tls_key = "/etc/telegraf/key.pem"
### Use TLS but skip chain & host verification
### insecure_skip_verify = false

### Template Config
### Set to true if you want telegraf to manage its index template.
### If enabled it will create a recommended index template for telegraf indexes
### manage_template = true
### The template name used for telegraf indexes
### template_name = "telegraf"
### Set to true if you want telegraf to overwrite an existing template
### overwrite_template = false
### If set to true a unique ID hash will be sent as sha256(concat(timestamp,measurement,series-hash)) string
### it will enable data resend and update metric points avoiding duplicated metrics with different id's
### force_document_id = false

### Specifies the handling of NaN and Inf values.
### This option can have the following values:
### none -- do not modify field-values (default); will produce an error if NaNs or infs are encountered
### drop -- drop fields containing NaNs or infs
### replace -- replace with the value in "float_replacement_value" (default: 0.0)
### NaNs and inf will be replaced with the given number, -inf with the negative of that number
### float_handling = "none"
### float_replacement_value = 0.0
## Configuration for Event Hubs output plugin

```yaml
[[outputs.event_hubs]]
# ## The full connection string to the Event Hub (required)
# ## The shared access key must have "Send" permissions on the target Event Hub.
# connection_string = "Endpoint=sb://namespace.servicebus.windows.net/;SharedAccessKeyName=RootManageSharedAccessKey;SharedAccessKey=superSecret1234=;EntityPath=hubName"
#
# ## Client timeout (defaults to 30s)
# timeout = "30s"
#
# ## Data format to output.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "json"
```

## Send metrics to command as input over stdin

```yaml
[[outputs.exec]]
# ## Command to ingest metrics via stdin.
# command = ["tee", "-a", "/dev/null"]
#
# ## Timeout for command to complete.
# timeout = "5s"
#
# ## Data format to output.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
```

## Run executable as long-running output plugin

```yaml
[[outputs.execd]]
# ## Program to run as daemon
# command = ["my-telegraf-output", "--some-flag", "value"]
#
# ## Delay before the process is restarted after an unexpected termination
# restart_delay = "10s"
#
# ## Data format to export.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
```
## Send telegraf metrics to file(s)

### Files to write to, "stdout" is a specially handled file.
- files = ["stdout", "/tmp/metrics.out"]

- Use batch serialization format instead of line based delimiting. The batch format allows for the production of non line based output formats and may more efficiently encode metric groups.
- use_batch_format = false

- The file will be rotated after the time interval specified. When set to 0 no time based rotation is performed.
- rotation_interval = "0d"

- The logfile will be rotated when it becomes larger than the specified size. When set to 0 no size based rotation is performed.
- rotation_max_size = "0MB"

- Maximum number of rotated archives to keep, any older logs are deleted.
- rotation_max_archives = 5

- Data format to output.

### Each data format has its own unique set of configuration options, read more about them here:
- https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
- data_format = "influx"

## Configuration for Graphite server to send metrics to

### TCP endpoint for your graphite instance.
- servers = ["localhost:2003"]

- Prefix metrics name
- prefix = ""

- Graphite output template
- see https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
- template = "host.tags.measurement.field"

- Enable Graphite tags support
- graphite_tag_support = false

- Define how metric names and tags are sanitized; options are "strict", or "compatible"
- strict - Default method, and backwards compatible with previous version of Telegraf
- compatible - More relaxed sanitizing when using tags, and compatible with the graphite spec
# graphite_tag_sanitize_mode = "strict"

# Character for separating metric name and field for Graphite tags
# graphite_separator = "."

# Graphite templates patterns
# 1. Template for cpu
# 2. Template for disk*
# 3. Default template
# templates = [
#   "cpu tags.measurement.host.field",
#   "disk* measurement.field",
#   "host.measurement.tags.field"
# ]

# timeout in seconds for the write connection to graphite
# timeout = 2

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"

## Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Send telegraf metrics to graylog
[[outputs.graylog]]
  # Endpoints for your graylog instances.
  servers = ["udp://127.0.0.1:12201"]
  
  # Connection timeout.
  # timeout = "5s"

  # The field to use as the GELF short_message, if unset the static string
  # "telegraf" will be used.
  # example: short_message_field = "message"
  # short_message_field = ""

  # According to GELF payload specification, additional fields names must be prefixed
  # with an underscore. Previous versions did not prefix custom field 'name' with underscore.
  # Set to true for backward compatibility.
  # name_field_no_prefix = false

  # Optional TLS Config
  # tls_ca = "/etc/telegraf/ca.pem"
  # tls_cert = "/etc/telegraf/cert.pem"
  # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false

### Send telegraf metrics to GroundWork Monitor
### [outputs.groundwork]
# URL of your groundwork instance.
# url = "https://groundwork.example.com"
#
# Agent uuid for GroundWork API Server.
# agent_id = ""
#
# Username and password to access GroundWork API.
# username = ""
# password = ""
#
# Default display name for the host with services(metrics).
# default_host = "telegraf"
#
# Default service state.
# default_service_state = "SERVICE_OK"
#
# The name of the tag that contains the hostname.
# resource_tag = "host"

### Configurable HTTP health check resource based on metrics
### [outputs.health]
# Address and port to listen on.
# service_address = "http://localhost:8080"
# service_address = "unix:///var/run/telegraf-health.sock"
# service_address = "http://:8080"
#
# The maximum duration for reading the entire request.
# read_timeout = "5s"
# The maximum duration for writing the entire response.
# write_timeout = "5s"
#
# Username and password to accept for HTTP basic authentication.
# basic_username = "user1"
# basic_password = "secret"
#
# Allowed CA certificates for client certificates.
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# TLS server certificate and private key.
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# One or more check sub-tables should be defined, it is also recommended to
# use metric filtering to limit the metrics that flow into this output.

# When using the default buffer sizes, this example will fail when the
# metric buffer is half full.

# namepass = ["internal_write"]
# tagpass = { output = ["influxdb"] }

# [outputs.health.comares]
# field = "buffer_size"
# lt = 5000.0

# [outputs.health.contains]
# field = "buffer_size"

## A plugin that can transmit metrics over HTTP
## [outputs.http]
## URL is the address to send metrics to
## url = "http://127.0.0.1:8080/telegraf"

## Timeout for HTTP message
## timeout = "5s"

## HTTP method, one of: "POST" or "PUT"
## method = "POST"

## HTTP Basic Auth credentials
## username = "username"
## password = "pa$$word"

## OAuth2 Client Credentials Grant
## client_id = "clientid"
## client_secret = "secret"
## token_url = "https://identityprovider/oauth2/v1/token"
## scopes = ["urn:opc:idm:__myscopes__"]

## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
## insecure_skip_verify = false

## Optional Cookie authentication
## cookie_auth_url = "https://localhost/authMe"
# cookie_auth_method = "POST"
# cookie_auth_username = "username"
# cookie_auth_password = "pa$$word"
# cookie_auth_body = '{"username": "user", "password": "pa$$word", "authenticate": "me"}'
## cookie_auth_renewal not set or set to "0" will auth once and never renew the cookie
# cookie_auth_renewal = "5m"
#
## Data format to output.
## Each data format has it's own unique set of configuration options, read
## more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
#
## Use batch serialization format (default) instead of line based format.
## Batch format is more efficient and should be used unless line based
## format is really needed.
# use_batch_format = true
#
## HTTP Content-Encoding for write request body, can be set to "gzip" to
## compress body or "identity" to apply no encoding.
# content_encoding = "identity"
#
## Additional HTTP headers
# [outputs.http.headers]
#   # Should be set manually to "application/json" for json data_format
#   Content-Type = "text/plain; charset=utf-8"
#
## Idle (keep-alive) connection timeout.
## Maximum amount of time before idle connection is closed.
## Zero means no limit.
# idle_conn_timeout = 0

# Configuration for sending metrics to InfluxDB
[[outputs.influxdb_v2]]
## The URLs of the InfluxDB cluster nodes.
##
## Multiple URLs can be specified for a single cluster, only ONE of the
## urls will be written to each interval.
## ex: urls = ["https://us-west-2-1.aws.cloud2.influxdata.com"]
# urls = ["http://127.0.0.1:8086"
#
## Token for authentication.
# token = ""
#
## Organization is the name of the organization you wish to write to; must exist.
# organization = ""
## Configuration for sending metrics to an Instrumental project

```yaml
# [[outputs.instrumental]]
# ## Project API Token (required)
# api_token = "API Token" # required
# ## Prefix the metrics with a given name
# prefix = ""
# ## Stats output template (Graphite formatting)
# template = "host.tags.measurement.field"
# ## Timeout in seconds to connect
```
# timeout = "2s"
# Display Communication to Instrumental
# debug = false

## Configuration for the Kafka server to send metrics to
# [[outputs.kafka]]
## URLs of kafka brokers
# brokers = ['localhost:9092']
## Kafka topic for producer messages
# topic = "telegraf"
#
## The value of this tag will be used as the topic. If not set the 'topic'
## option is used.
# topic_tag = ""
#
## If true, the 'topic_tag' will be removed from to the metric.
# exclude_topic_tag = false
#
## Optional Client id
# client_id = "Telegraf"
#
## Set the minimal supported Kafka version. Setting this enables the use of new
## Kafka features and APIs. Of particular interest, lz4 compression
## requires at least version 0.10.0.0.
# version = "1.1.0"
# version = ""
#
## Optional topic suffix configuration.
## If the section is omitted, no suffix is used.
## Following topic suffix methods are supported:
## measurement - suffix equals to separator + measurement's name
## tags        - suffix equals to separator + specified tags' values
##             interleaved with separator
#
## Suffix equals to "_" + measurement name
# [outputs.kafka.topic_suffix]
# method = "measurement"
# separator = "_"
#
## Suffix equals to "__" + measurement's "foo" tag value.
## If there's no such a tag, suffix equals to an empty string
# [outputs.kafka.topic_suffix]
# method = "tags"
# keys = ["foo"]
# separator = "__"
#
## Suffix equals to "_" + measurement's "foo" and "bar"
# tag values, separated by ",". If there is no such tags,
# their values treated as empty strings.
# [outputs.kafka.topic_suffix]
# method = "tags"
# keys = ["foo", "bar"]
# separator = "_"

# The routing tag specifies a tagkey on the metric whose value is used as
# the message key. The message key is used to determine which partition to
# send the message to. This tag is preferred over the routing_key option.
# routing_tag = "host"

# The routing key is set as the message key and used to determine which
# partition to send the message to. This value is only used when no
# routing_tag is set or as a fallback when the tag specified in routing tag
# is not found.
#
# If set to "random", a random value will be generated for each message.
#
# When unset, no message key is added and each message is routed to a random
# partition.
#
# ex: routing_key = "random"
#     routing_key = "telegraf"
#     routing_key = ""

# Compression codec represents the various compression codecs recognized by
# Kafka in messages.
# 0 : None
# 1 : Gzip
# 2 : Snappy
# 3 : LZ4
# 4 : ZSTD
# compression_codec = 0

# Idempotent Writes
# If enabled, exactly one copy of each message is written.
# idempotent_writes = false

# RequiredAcks is used in Produce Requests to tell the broker how many
# replica acknowledgements it must see before responding
# 0 : the producer never waits for an acknowledgement from the broker.
# This option provides the lowest latency but the weakest durability
# guarantees (some data will be lost when a server fails).
# 1 : the producer gets an acknowledgement after the leader replica has
# received the data. This option provides better durability as the
# client waits until the server acknowledges the request as successful
# (only messages that were written to the now-dead leader but not yet
## Replicated

-1: the producer gets an acknowledgement after all in-sync replicas have received the data. This option provides the best durability, we guarantee that no messages will be lost as long as at least one in sync replica remains.

### Required Acks

-1

### Maximum Retries

The maximum number of times to retry sending a metric before failing until the next flush.

### Maximum Message Size

The maximum permitted size of a message. Should be set equal to or smaller than the broker's `message_max.bytes`.

### Optional TLS Config

- `tls_ca = "/etc/telegraf/ca.pem"`
- `tls_cert = "/etc/telegraf/cert.pem"`
- `tls_key = "/etc/telegraf/key.pem"`

### Optional SASL Config

- `sasl_username = "kafka"
- `sasl_password = "secret"

### Optional SASL Mechanism

- one of: OAUTHBEARER, PLAIN, SCRAM-SHA-256, SCRAM-SHA-512, GSSAPI (default to PLAIN)
- `sasl_mechanism = ""`

### Optional SASL Service Name

- `sasl_gssapi_service_name = ""`

### Optional SASL Key Tab Path

- `sasl_gssapi_key_tab_path = ""`

### Optional SASL Realm

- `sasl_gssapi_realm = "realm"

### Optional SASL Disable PA Fast

- `sasl_gssapi_disable_pafxfast = false`

### Optional SASL Access Token

- `sasl_access_token = ""`

### SASL Protocol Version

- `sasl_version = 1`

### Kafka Metadata Full Fetch

- `metadata_full = false`
## Configuration for the AWS Kinesis output.

```yaml
[[outputs.kinesis]]
```

### Amazon REGION of kinesis endpoint.
- `region = "ap-southeast-2"`

### Amazon Credentials
- Credentials are loaded in the following order:
  1. Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
  2. Assumed credentials via STS if role_arn is specified
  3. explicit credentials from 'access_key' and 'secret_key'
  4. shared profile from 'profile'
  5. environment variables
  6. shared credentials file
  7. EC2 Instance Profile

### Endpoint to make request against, the correct endpoint is automatically determined and this option should only be set if you wish to override the default.
- `ex: endpoint_url = "http://localhost:8000"`
- `endpoint_url = ""`

### Kinesis StreamName must exist prior to starting telegraf.
- `streamname = "StreamName"
- `partitionkey = "PartitionKey"

### Use a static value for all writes:
# # [outputs.kinesis.partition]
# # method = "static"
# # key = "howdy"
# 
# ### Use a random partition key on each write:
# # [outputs.kinesis.partition]
# # method = "random"
# 
# ### Use the measurement name as the partition key:
# # [outputs.kinesis.partition]
# # method = "measurement"
# 
# ### Use the value of a tag for all writes, if the tag is not set the empty
default option will be used. When no default, defaults to "telegraf"
# # [outputs.kinesis.partition]
# # method = "tag"
# # key = "host"
# # default = "mykey"
# 
# ### Data format to output.
# Each data format has its own unique set of configuration options, read
# more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
# 
# ### debug will show upstream aws messages.
# debug = false

# # Configuration for Librato API to send metrics to.
# [[][outputs.librato]]
# ### Librato API Docs
# ### http://dev.librato.com/v1/metrics-authentication
# ### Librato API user
# # api_user = "telegraf@influxdb.com" # required.
# ### Librato API token
# # api_token = "my-secret-token" # required.
# ### Debug
# # debug = false
# ### Connection timeout.
# # timeout = "5s"
# ### Output source Template (same as graphite buckets)
# ### see https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md#graphite
# ### This template is used in librato's source (not metric's name)
# # template = "host"
# 
#
## Send aggregate metrics to Logz.io

```yaml
## [outputs.logzio]
## ## Connection timeout, defaults to "5s" if not set.
## timeout = "5s"
##
## ## Optional TLS Config
## # tls_ca = "/etc/telegraf/ca.pem"
## # tls_cert = "/etc/telegraf/cert.pem"
## # tls_key = "/etc/telegraf/key.pem"
##
## ## Logz.io account token
## token = "your logz.io token" # required
##
## ## Use your listener URL for your Logz.io account region.
## # url = "https://listener.logz.io:8071"
```

## Send logs to Loki

```yaml
## [outputs.loki]
## ## The domain of Loki
## domain = "https://loki.domain.tld"
##
## ## Endpoint to write api
## # endpoint = "/loki/api/v1/push"
##
## ## Connection timeout, defaults to "5s" if not set.
## # timeout = "5s"
##
## ## Basic auth credential
## # username = "loki"
## # password = "pass"
##
## ## Additional HTTP headers
## # http_headers = {"X-Scope-OrgID" = "1"}
##
## ## If the request must be gzip encoded
## # gzip_request = false
##
## ## Optional TLS Config
## # tls_ca = "/etc/telegraf/ca.pem"
## # tls_cert = "/etc/telegraf/cert.pem"
## # tls_key = "/etc/telegraf/key.pem"
```

## Sends metrics to MongoDB

```yaml
## [outputs.mongodb]
## # connection string examples for mongodb
```
# dsn = "mongodb://localhost:27017"
# # dsn = "mongodb://mongod1:27017,mongod2:27017,mongod3:27017/admin&replicaSet=myReplSet&w=1"
#
# # overrides serverSelectionTimeoutMS in dsn if set
# # timeout = "30s"
#
# # default authentication, optional
# # authentication = "NONE"
#
# # for SCRAM-SHA-256 authentication
# # authentication = "SCRAM"
# # username = "root"
# # password = "****"
#
# # for x509 certificate authentication
# # authentication = "X509"
# # tls_ca = "ca.pem"
# # tls_key = "client.pem"
# # # tls_key_pwd = "changeme" # required for encrypted tls_key
# # insecure_skip_verify = false
#
# # database to store measurements and time series collections
# # database = "telegraf"
#
# # granularity can be seconds, minutes, or hours.
# # configuring this value will be based on your input collection frequency.
# # see https://docs.mongodb.com/manual/core/timeseries-collections/#create-a-time-series-collection
# # granularity = "seconds"
#
# # optionally set a TTL to automatically expire documents from the measurement collections.
# # ttl = "360h"

### Configuration for MQTT server to send metrics to
# [[outputs.mqtt]]
## MQTT Brokers
## The list of brokers should only include the hostname or IP address and the
## port to the broker. This should follow the format '{host}:{port}'. For
## example, "localhost:1883" or "127.0.0.1:8883".
## servers = ["localhost:1883"]
#
## MQTT Topic for Producer Messages
## MQTT outputs send metrics to this topic format:
## <topic_prefix>/<hostname>/<pluginname>/ (e.g. prefix/web01.example.com/mem)
## topic_prefix = "telegraf"
#
## QoS policy for messages
## The mqtt QoS policy for sending messages.
# # See https://www.ibm.com/support/knowledgecenter/en/SSFKSJ_9.0.0/com.ibm.mq.dev.doc/q029090_.htm
# # 0 = at most once
# # 1 = at least once
# # 2 = exactly once
# # qos = 2
#
# # Keep Alive
# # Defines the maximum length of time that the broker and client may not
# # communicate. Defaults to 0 which turns the feature off.
# ##
# # For version v2.0.12 and later mosquitto there is a bug
# # (see https://github.com/eclipse/mosquitto/issues/2117), which requires
# # this to be non-zero. As a reference eclipse/paho.mqtt.golang defaults to 30.
# # keep_alive = 0
#
# # username and password to connect MQTT server.
# # username = "telegraf"
# # password = "metricsmetricsmetricsmetrics"
#
# # client ID
# # The unique client id to connect MQTT server. If this parameter is not set
# # then a random ID is generated.
# # client_id = ""
#
# # Timeout for write operations. default: 5s
# # timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# # When true, metrics will be sent in one MQTT message per flush. Otherwise,
# metrics are written one metric per MQTT message.
# batch = false
#
# # When true, metric will have RETAIN flag set, making broker cache entries until someone
# # actually reads it
# retain = false
#
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"
## Send telegraf measurements to NATS
#
# [outputs.nats]
#
# ## URLs of NATS servers
# servers = ["nats://localhost:4222"]
#
# ## Optional client name
# name = ""
#
# ## Optional credentials
# username = ""
# password = ""
#
# ## Optional NATS 2.0 and NATS NGS compatible user credentials
# credentials = "/etc/telegraf/nats.creds"
#
# ## NATS subject for producer messages
# subject = "telegraf"
#
# ## Use Transport Layer Security
# secure = false
#
# ## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

## Send metrics to New Relic metrics endpoint
#
# [outputs.newrelic]
#
# ## New Relic Insights API key
# insights_key = "insights api key"
#
# ## Prefix to add to add to metric name for easy identification.
# metric_prefix = ""
#
# ## Timeout for writes to the New Relic API.
# timeout = "15s"
#
# ## HTTP Proxy override. If unset use values from the standard
# proxy environment variables to determine proxy, if any.
# http_proxy = "http://corporate.proxy:3128"
#
# Metric URL override to enable geographic location endpoints.
# If not set use values from the standard
# metric_url = "https://metric-api.newrelic.com/metric/v1"

# Send telegraf measurements to NSQD
 [[outputs.nsq]]
# Location of nsqd instance listening on TCP
# server = "localhost:4150"
# NSQ topic for producer messages
# topic = "telegraf"
#
# Data format to output.
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_OUTPUT.md
# data_format = "influx"

# Send OpenTelemetry metrics over gRPC
 [[outputs.opentelemetry]]
# Override the default (localhost:4317) OpenTelemetry gRPC service
# service_address = "localhost:4317"
#
# Override the default (5s) request timeout
# timeout = "5s"
#
# Optional TLS Config.
#
# Root certificates for verifying server certificates encoded in PEM format.
# tls_ca = "/etc/telegraf/ca.pem"
# The public and private keypairs for the client encoded in PEM format.
# May contain intermediate certificates.
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS, but skip TLS chain and host verification.
# insecure_skip_verify = false
# Send the specified TLS server name via SNI.
# tls_server_name = "foo.example.com"
#
# Override the default (gzip) compression used to send data.
# Supports: "gzip", "none"
# compression = "gzip"
## Additional OpenTelemetry resource attributes
# [outputs.opentelemetry.attributes]
# "service.name" = "demo"
#
## Additional gRPC request metadata
# [outputs.opentelemetry.headers]
# key1 = "value1"

## Configuration for OpenTSDB server to send metrics to
[[outputs.opentsdb]]
## prefix for metrics keys
prefix = "my.specific.prefix."
#
## DNS name of the OpenTSDB server
## Using "opentsdb.example.com" or "tcp://opentsdb.example.com" will use the
telnet API. "http://opentsdb.example.com" will use the Http API.
host = "opentsdb.example.com"
#
## Port of the OpenTSDB server
port = 4242
#
## Number of data points to send to OpenTSDB in Http requests.
## Not used with telnet API.
http_batch_size = 50
#
## URI Path for Http requests to OpenTSDB.
## Used in cases where OpenTSDB is located behind a reverse proxy.
http_path = "/api/put"
#
## Debug true - Prints OpenTSDB communication
debug = false
#
## Separator separates measurement name from field
separator = "_"

## Configuration for the Prometheus client to spawn
[[outputs.prometheus_client]]
## Address to listen on
listen = ":9273"
#
## Metric version controls the mapping from Telegraf metrics into
## Prometheus format. When using the prometheus input, use the same value in
## both plugins to ensure metrics are round-tripped without modification.
##
## example: metric_version = 1;
## metric_version = 2; recommended version
# metric_version = 1
#
# ## Use HTTP Basic Authentication.
# basic_username = "Foo"
# basic_password = "Bar"
#
# ## If set, the IP Ranges which are allowed to access metrics.
# ex: ip_range = ["192.168.0.0/24", "192.168.1.0/30"]
# ip_range = []
#
# ## Path to publish the metrics on.
# path = "/metrics"
#
# ## Expiration interval for each metric. 0 == no expiration
# expiration_interval = "60s"
#
# ## Collectors to enable, valid entries are "gocollector" and "process".
# If unset, both are enabled.
# collectors_exclude = ["gocollector", "process"]
#
# ## Send string metrics as Prometheus labels.
# Unless set to false all string metrics will be sent as labels.
# string_as_label = true
#
# ## If set, enable TLS with the given certificate.
# tls_cert = "/etc/ssl/telegraf.crt"
# tls_key = "/etc/ssl/telegraf.key"
#
# ## Set one or more allowed client CA certificate file names to enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# ## Export metric collection time.
# export_timestamp = false

# Configuration for the Riemann server to send metrics to
[# [outputs.riemann]]
# The full TCP or UDP URL of the Riemann server
# url = "tcp://localhost:5555"
#
# Riemann event TTL, floating-point time in seconds.
# Defines how long that an event is considered valid for in Riemann
# ttl = 30.0
#
# Separator to use between measurement and field name in Riemann service name
# This does not have any effect if `measurement_as_attribute` is set to `true`
# separator = "/"
### Configuration for the Riemann server to send metrics to
```yaml
[[outputs.riemann_legacy]]
# ## DEPRECATED: The 'riemann_legacy' plugin is deprecated in version 1.3.0, use 'outputs.riemann' instead (see https://github.com/influxdata/telegraf/issues/1878).
# ## URL of server
# url = "localhost:5555"
# ## transport protocol to use either tcp or udp
# transport = "tcp"
# ## separator to use between input name and field name in Riemann service name
# separator = " "
```

### Send aggregate metrics to Sensu Monitor
```yaml
[[outputs.sensu]]
# ## BACKEND API URL is the Sensu Backend API root URL to send metrics to
# ## (protocol, host, and port only). The output plugin will automatically
# ## append the corresponding backend API path
# ## /api/core/v2/namespaces/:entity_namespace/events/:entity_name/:check_name).
# ##
# ## Backend Events API reference:
# ## https://docs.sensu.io/sensu-go/latest/api/events/
# ##
# ## AGENT API URL is the Sensu Agent API root URL to send metrics to
# ## (protocol, host, and port only). The output plugin will automatically
# ## append the corresponding agent API path (/events).
```
# Agent API Events API reference:
# https://docs.sensu.io/sensu-go/latest/api/events/

# NOTE: if backend_api_url and agent_api_url and api_key are set, the output
# plugin will use backend_api_url. If backend_api_url and agent_api_url are
# not provided, the output plugin will default to use an agent_api_url of
# http://127.0.0.1:3031

# backend_api_url = "http://127.0.0.1:8080"
# agent_api_url = "http://127.0.0.1:3031"

# API KEY is the Sensu Backend API token
# Generate a new API token via:

# $ sensuctl cluster-role create telegraf --verb create --resource events,entities
# $ sensuctl cluster-role-binding create telegraf --cluster-role telegraf
# $ sensuctl user create telegraf --group telegraf --password REDACTED
# $ sensuctl api-key grant telegraf

# For more information on Sensu RBAC profiles & API tokens, please visit:
# - https://docs.sensu.io/sensu-go/latest/reference/rbac/
# - https://docs.sensu.io/sensu-go/latest/reference/apikeys/

# api_key = "$SENSU_API_KEY"

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Timeout for HTTP message
# timeout = "5s"

# HTTP Content-Encoding for write request body, can be set to "gzip" to
# compress body or "identity" to apply no encoding.
# content_encoding = "identity"

# Sensu Event details

# Below are the event details to be sent to Sensu. The main portions of the
# event are the check, entity, and metrics specifications. For more information
# on Sensu events and its components, please visit:
# - Events - https://docs.sensu.io/sensu-go/latest/reference/events
# - Checks - https://docs.sensu.io/sensu-go/latest/reference/checks
# - Entities - https://docs.sensu.io/sensu-go/latest/reference/entities
# ## - Metrics - https://docs.sensu.io/sensu-go/latest/reference/events#metrics
# ##
# ## Check specification
# ## The check name is the name to give the Sensu check associated with the event
# ## created. This maps to check.metadata.name in the event.
# [outputs.sensu.check]
# name = "telegraf"
#
# ## Entity specification
# ## Configure the entity name and namespace, if necessary. This will be part of
# ## the entity.metadata in the event.
# ##
# ## NOTE: if the output plugin is configured to send events to a
# ## backend_api_url and entity_name is not set, the value returned by
# ## osHostname() will be used; if the output plugin is configured to send
# ## events to an agent_api_url, entity_name and entity_namespace are not used.
# [outputs.sensu.entity]
# # name = "server-01"
# # namespace = "default"
#
# ## Metrics specification
# ## Configure the tags for the metrics that are sent as part of the Sensu event
# [outputs.sensu.tags]
# # source = "telegraf"
#
# ## Configure the handler(s) for processing the provided metrics
# [outputs.sensu.metrics]
# # handlers = ["influxdb","elasticsearch"]

# # Send metrics and events to SignalFx
# [[outputs.signalfx]]
# # SignalFx Org Access Token
# access_token = "my-secret-token"
# # The SignalFx realm that your organization resides in
# signalfx_realm = "us9"  # Required if ingest_url is not set
# # You can optionally provide a custom ingest url instead of the
# # signalfx_realm option above if you are using a gateway or proxy
# # instance. This option takes precedent over signalfx_realm.
# ingest_url = "https://my-custom-ingest/"
# # # Event typed metrics are omitted by default,
# # # If you require an event typed metric you must specify the
# # # metric name in the following list.
# included_event_names = ["plugin.metric_name"]
## Generic socket writer capable of handling multiple socket types.

```# [outputs.socket_writer]

# # URL to connect to
# # address = "tcp://127.0.0.1:8094"
# # address = "http://example.com:http"
# # address = "tcp4://127.0.0.1:8094"
# # address = "tcp6://127.0.0.1:8094"
# # address = "udp://127.0.0.1:8094"
# # address = "udp4://127.0.0.1:8094"
# # address = "udp6://127.0.0.1:8094"
# # address = "unix:///tmp/telegraf.sock"
# # address = "unixgram:///tmp/telegraf.sock"

# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false

# # Period between keep alive probes.
# # Only applies to TCP sockets.
# # 0 disables keep alive probes.
# # Defaults to the OS configuration.
# keep_alive_period = "5m"

# # Content encoding for packet-based connections (i.e. UDP, unixgram).
# # Can be set to "gzip" or to "identity" to apply no encoding.
# # content_encoding = "identity"

# # Data format to generate.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

## Send metrics to SQL Database

```# [outputs.sql]

# # Database driver
# # Valid options: mssql (Microsoft SQL Server), mysql (MySQL), pgx (Postgres),
# # sqlite (SQLite3), snowflake (snowflake.com)
# # driver = ""

# # Data source name
# The format of the data source name is different for each database driver.
# See the plugin readme for details.
# data_source_name = ""
#
# Timestamp column name
# timestamp_column = "timestamp"
#
# Table creation template
# Available template variables:
# {TABLE} - table name as a quoted identifier
# {TABLELITERAL} - table name as a quoted string literal
# {COLUMN} - column definitions (list of quoted identifiers and types)
# table_template = "CREATE TABLE {TABLE}({COLUMNS})"
#
# Table existence check template
# Available template variables:
# {TABLE} - tablename as a quoted identifier
# table_exists_template = "SELECT 1 FROM {TABLE} LIMIT 1"
#
# Initialization SQL
# init_sql = ""
#
# Metric type to SQL type conversion
# The values on the left are the data types Telegraf has and the values on
# the right are the data types Telegraf will use when sending to a database.
# The database values used must be data types the destination database
# understands. It is up to the user to ensure that the selected data type is
# available in the database they are using. Refer to your database
# documentation for what data types are available and supported.
# [outputs.sql.convert]
# integer = "INT"
# real = "DOUBLE"
# text = "TEXT"
# timestamp = "TIMESTAMP"
# defaultvalue = "TEXT"
# unsigned = "UNSIGNED"

# Configuration for Google Cloud Stackdriver to send metrics to
# [outputs.stackdriver]
# GCP Project
# project = "erudite-bloom-151019"
#
# The namespace for the metric descriptor
# namespace = "telegraf"
#
# Custom resource type
# resource_type = "generic_node"
#
# Additional resource labels
# [outputs.stackdriver.resource_labels]
# node_id = "$HOSTNAME"
# namespace = "myapp"
# location = "eu-north0"

# A plugin that can transmit metrics to Sumo Logic HTTP Source
[[outputs.sumologic]]
## Unique URL generated for your HTTP Metrics Source.
## This is the address to send metrics to.
# url = "https://events.sumologic.net/receiver/v1/http/<UniqueHTTPCollectorCode>"
#
## Data format to be used for sending metrics.
## This will set the "Content-Type" header accordingly.
## Currently supported formats:
## * graphite - for Content-Type of application/vnd.sumologic.graphite
## * carbon2 - for Content-Type of application/vnd.sumologic.carbon2
## * prometheus - for Content-Type of application/vnd.sumologic.prometheus
##
## More information can be found at:
## https://help.sumologic.com/03Send-Data/Sources/02Sources-for-Hosted-Collectors/HTTP-Source/Upload-Metrics-to-an-HTTP-Source#content-type-headers-for-metrics
#
## NOTE:
## When unset, telegraf will by default use the influx serializer which is currently unsupported
## in HTTP Source.
# data_format = "carbon2"
#
## Timeout used for HTTP request
# timeout = "5s"
#
## Max HTTP request body size in bytes before compression (if applied).
## By default 1MB is recommended.
## NOTE:
## Bear in mind that in some serializer a metric even though serialized to multiple
## lines cannot be split any further so setting this very low might not work
## as expected.
# max_request_body_size = 1000000
#
## Additional, Sumo specific options.
## Full list can be found here:
## https://help.sumologic.com/03Send-Data/Sources/02Sources-for-Hosted-Collectors/HTTP-Source/Upload-Metrics-to-an-HTTP-Source#supported-http-headers
#
## Desired source name.
# ## Useful if you want to override the source name configured for the source.
# source_name = ""
#
# Desired host name.
## Useful if you want to override the source host configured for the source.
# source_host = ""
#
# Desired source category.
## Useful if you want to override the source category configured for the source.
# source_category = ""
#
# Comma-separated key=value list of dimensions to apply to every metric.
## Custom dimensions will allow you to query your metrics at a more granular level.
# dimensions = ""

# Configuration for Syslog server to send metrics to
[[outputs.syslog]]
## URL to connect to
# ex: address = "tcp://127.0.0.1:8094"
# ex: address = "tcp4://127.0.0.1:8094"
# ex: address = "tcp6://127.0.0.1:8094"
# ex: address = "tcp6://[2001:db8::1]:8094"
# ex: address = "udp://127.0.0.1:8094"
# ex: address = "udp4://127.0.0.1:8094"
# ex: address = "udp6://127.0.0.1:8094"
# address = "tcp://127.0.0.1:8094"
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
## Period between keep alive probes.
## Only applies to TCP sockets.
## 0 disables keep alive probes.
## Defaults to the OS configuration.
# keep_alive_period = "5m"
#
## The framing technique with which it is expected that messages are
## transported (default = "octet-counting"). Whether the messages come
## using the octect-counting (RFC5425#section-4.3.1, RFC6587#section-3.4.1),
## or the non-transparent framing technique (RFC6587#section-3.4.2). Must
## be one of "octet-counting", "non-transparent".
# framing = "octet-counting"
### Example:
```yaml
[outputs.syslog]
sdparam_separator = "_"
default_sdid = "default@32473"
sdids = ["foo@123", "bar@456"]
```
```yaml
input => xyzzy,x=y foo@123_value=42,bar@456_value2=84,something_else=1
output (structured data only) => [foo@123 value=42][bar@456 value2=84][default@32473 something_else=1 x=y]
```

### SD-PARAMs separator between the sdid and tag/field key (default = "_")
sdparam_separator = "_"

### Default sdid used for tags/fields that don't contain a prefix defined in
### the explicit sdids setting below If no default is specified, no SD-PARAMs
### will be used for unrecognized field.
default_sdid = "default@32473"

### List of explicit prefixes to extract from tag/field keys and use as the
### SDID, if they match (see above example for more details):
sdids = ["foo@123", "bar@456"]

### Default severity value. Severity and Facility are used to calculate the
### message PRI value (RFC5424#section-6.2.1). Used when no metric field
### with key "severity_code" is defined. If unset, 5 (notice) is the default
default_severity_code = 5

### Default facility value. Facility and Severity are used to calculate the
### message PRI value (RFC5424#section-6.2.1). Used when no metric field with
### key "facility_code" is defined. If unset, 1 (user-level) is the default
default_facility_code = 1

### Default APP-NAME value (RFC5424#section-6.2.5)
### Used when no metric tag with key "appname" is defined.
### If unset, "Telegraf" is the default
default_appname = "Telegraf"

### Configuration for Amazon Timestream output.
# [[outputs.timestream]]
# ## Amazon Region
# region = "us-east-1"
#
# ## Amazon Credentials
# Credentials are loaded in the following order:
# 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# 2) Assumed credentials via STS if role_arn is specified
# 3) explicit credentials from 'access_key' and 'secret_key'
# 4) shared profile from 'profile'
# 5) environment variables
# 6) shared credentials file
#
# ## EC2 Instance Profile
# access_key = ""
# secret_key = ""
# token = ""
# role_arn = ""
# web_identity_token_file = ""
# role_session_name = ""
# profile = ""
# shared_credential_file = ""
#
# ## Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
# default.
# ex: endpoint_url = "http://localhost:8000"
# endpoint_url = ""
#
# ## Timestream database where the metrics will be inserted.
# The database must exist prior to starting Telegraf.
# database_name = "yourDatabaseNameHere"
#
# ## Specifies if the plugin should describe the Timestream database upon starting
# to validate if it has access necessary permissions, connection, etc., as a safety check.
# If the describe operation fails, the plugin will not start
# and therefore the Telegraf agent will not start.
# describe_database_on_start = false
#
# ## The mapping mode specifies how Telegraf records are represented in Timestream.
# Valid values are: single-table, multi-table.
# For example, consider the following data in line protocol format:
# weather.location=us-midwest,season=summer temperature=82,humidity=71 1465839830100400200
# airquality.location=us-west no2=5,pm25=16 1465839830100400200
# where weather and airquality are the measurement names, location and season are tags,
# temperature, humidity, no2, pm25 are fields.
# In multi-table mode:
# - first line will be ingested to table named weather
# - second line will be ingested to table named airquality
- the tags will be represented as dimensions
- first table (weather) will have two records:
  one with measurement name equals to temperature,
  another with measurement name equals to humidity
- second table (airquality) will have two records:
  one with measurement name equals to no2,
  another with measurement name equals to pm25
- the Timestream tables from the example will look like this:

```plaintext
TABLE "weather":
<table>
<thead>
<tr>
<th>time</th>
<th>location</th>
<th>season</th>
<th>measure_name</th>
<th>measure_value::bigint</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-06-13 17:43:50</td>
<td>us-midwest</td>
<td>summer</td>
<td>temperature</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>humidity</td>
<td>71</td>
</tr>
</tbody>
</table>

TABLE "airquality":
<table>
<thead>
<tr>
<th>time</th>
<th>location</th>
<th>measure_name</th>
<th>measure_value::bigint</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-06-13 17:43:50</td>
<td>us-west</td>
<td>no2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pm25</td>
<td>16</td>
</tr>
</tbody>
</table>
```

In single-table mode:
- the data will be ingested to a single table, which name will be valueOf(single_table_name)
- measurement name will stored in dimension named valueOf(single_table_dimension_name_for_telegraf_measurement_name)
- location and season will be represented as dimensions
- the Timestream table from the example will look like this:

```
Assuming:
- single_table_name = "my_readings"
- single_table_dimension_name_for_telegraf_measurement_name = "namespace"

TABLE "my_readings":
<table>
<thead>
<tr>
<th>time</th>
<th>location</th>
<th>season</th>
<th>namespace</th>
<th>measure_name</th>
<th>measure_value::bigint</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-06-13 17:43:50</td>
<td>us-midwest</td>
<td>summer</td>
<td>weather</td>
<td>temperature</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>humidity</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NULL</td>
<td>airquality</td>
<td>no2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NULL</td>
<td>airquality</td>
<td>pm25</td>
</tr>
</tbody>
</table>
```

In most cases, using multi-table mapping mode is recommended.
However, you can consider using single-table in situations when you have thousands of measurement names.

# mapping_mode = "multi-table"

## Only valid and required for mapping_mode = "single-table"
## Specifies the Timestream table where the metrics will be uploaded.
# single_table_name = "yourTableNameHere"

## Only valid and required for mapping_mode = "single-table"
## Describes what will be the Timestream dimension name for the Telegraf
## measurement name.
# single_table_dimension_name_for_telegraf_measurement_name = "namespace"

## Specifies if the plugin should create the table, if the table do not exist.
## The plugin writes the data without prior checking if the table exists.
## When the table does not exist, the error returned from Timestream will cause
## The plugin to create the table, if this parameter is set to true.
# create_table_if_not_exists = true
#
## Only valid and required if create_table_if_not_exists = true
## Specifies the Timestream table magnetic store retention period in days.
## Check Timestream documentation for more details.
create_table_magnetic_store_retention_period_in_days = 365
#
## Only valid and required if create_table_if_not_exists = true
## Specifies the Timestream table memory store retention period in hours.
## Check Timestream documentation for more details.
create_table_memory_store_retention_period_in_hours = 24
#
## Only valid and optional if create_table_if_not_exists = true
## Specifies the Timestream table tags.
## Check Timestream documentation for more details
create_table_tags = { "foo" = "bar", "environment" = "dev"}
#
## Specify the maximum number of parallel go routines to ingest/write data
## If not specified, defaulted to 1 go routines
max_write_go_routines = 25

## Write metrics to Warp 10
[[outputs.warp10]]
## Prefix to add to the measurement.
prefix = "telegraf."
#
## URL of the Warp 10 server
warp_url = "http://localhost:8080"
#
## Write token to access your app on warp 10
token = "Token"
#
## Warp 10 query timeout
timeout = "15s"
#
## Print Warp 10 error body
print_error_body = false
#
## Max string error size
max_string_error_size = 511
#
## Optional TLS Config
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Configuration for Wavefront server to send metrics to

#[outputs.wavefront]

### Url for Wavefront Direct Ingestion or using HTTP with Wavefront Proxy

### If using Wavefront Proxy, also specify port. example: http://proxyserver:2878

url = "https://metrics.wavefront.com"

### Authentication Token for Wavefront. Only required if using Direct Ingestion

token = "DUMMY_TOKEN"

### DNS name of the wavefront proxy server. Do not use if url is specified

host = "wavefront.example.com"

### Port that the Wavefront proxy server listens on. Do not use if url is specified

port = 2878

### prefix for metrics keys

prefix = "my.specific.prefix."

### whether to use "value" for name of simple fields. default is false

simple_fields = false

### character to use between metric and field name. default is . (dot)

metric_separator = "."

### Convert metric name paths to use metricSeparator character

### When true will convert all _ (underscore) characters in final metric name. default is true

convert_paths = true

### Use Strict rules to sanitize metric and tag names from invalid characters

### When enabled forward slash (/) and comma (,) will be accepted

use_strict = false

### Use Regex to sanitize metric and tag names from invalid characters

### Regex is more thorough, but significantly slower. default is false

use_regex = false

### point tags to use as the source name for Wavefront (if none found, host will be used)

source_override = ["hostname", "address", "agent_host", "node_host"]

### whether to convert boolean values to numeric values, with false -> 0.0 and true -> 1.0. default is true

convert_bool = true

### Truncate metric tags to a total of 254 characters for the tag name value. Wavefront will reject any

### data point exceeding this limit if not truncated. Defaults to 'false' to provide backwards compatibility.

truncate_tags = false
# Flush the internal buffers after each batch. This effectively bypasses the background sending of metrics normally done by the Wavefront SDK. This can be used if you are experiencing buffer overruns. The sending of metrics will block for a longer time, but this will be handled gracefully by the internal buffering in Telegraf.

```yaml
#immediate_flush = true
```

# Define a mapping, namespaced by metric prefix, from string values to numeric values
deprecated in 1.9; use the enum processor plugin

```yaml
[[outputs.wavefront.string_to_number.elasticsearch]]
#  green = 1.0
#  yellow = 0.5
#  red = 0.0
```

# Generic WebSocket output writer.

```yaml
[[outputs.websocket]]
```

## URL is the address to send metrics to. Make sure ws or wss scheme is used.
```
url = "ws://127.0.0.1:8080/telegraf"
```

## Timeouts (make sure read_timeout is larger than server ping interval or set to zero).
```
connect_timeout = "30s"
write_timeout = "30s"
read_timeout = "30s"
```

## Optionally turn on using text data frames (binary by default).
```
use_text_frames = false
```

## Optional TLS Config
```
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"
```

## Use TLS but skip chain & host verification
```
insecure_skip_verify = false
```

## Data format to output.
```
data_format = "influx"
```

## Additional HTTP Upgrade headers
```
[[outputs.websocket.headers]]
Authorization = "Bearer <TOKEN>"
```

## Send aggregated metrics to Yandex.Cloud Monitoring
```
[[outputs.yandex_cloud_monitoring]]
```
Timeout for HTTP writes.

```
# timeout = "20s"
#
```

Yandex.Cloud monitoring API endpoint. Normally should not be changed

```
# endpoint_url = "https://monitoring.api.cloud.yandex.net/monitoring/v2/data/write"
#
```

All user metrics should be sent with "custom" service specified. Normally should not be changed

```
# service = "custom"
```

# PROCESSOR PLUGINS

Attach AWS EC2 metadata to metrics

```
[[processors.aws_ec2]]
# Instance identity document tags to attach to metrics.
# For more information see:
#
# Available tags:
# * accountId
# * architecture
# * availabilityZone
# * billingProducts
# * imageId
# * instanceId
# * instanceType
# * kernelId
# * pendingTime
# * privateIp
# * ramdiskId
# * region
# * version
# imds_tags = []
#
# EC2 instance tags retrieved with DescribeTags action.
# In case tag is empty upon retrieval it's omitted when tagging metrics.
# Note that in order for this to work, role attached to EC2 instance or AWS
# credentials available from the environment must have a policy attached, that
# allows ec2:DescribeTags.
# For more information see:
# https://docs.aws.amazon.com/AWSEC2/latest/APIReference/API_DescribeTags.html
# ec2_tags = []
#
# Timeout for http requests made by against aws ec2 metadata endpoint.
# timeout = "10s"
#
# ## ordered controls whether or not the metrics need to stay in the same order
# ## this plugin received them in. If false, this plugin will change the order
# ## with requests hitting cached results moving through immediately and not
# ## waiting on slower lookups. This may cause issues for you if you are
# ## depending on the order of metrics staying the same. If so, set this to true.
# ## Keeping the metrics ordered may be slightly slower.
# ## ordered = false
#
# ## max_parallel_calls is the maximum number of AWS API calls to be in flight
# ## at the same time.
# ## It's probably best to keep this number fairly low.
# max_parallel_calls = 10

# # Clone metrics and apply modifications.
# [[processors.clone]]
# ## All modifications on inputs and aggregators can be overridden:
# # name_override = "new_name"
# # name_prefix = "new_name_prefix"
# # name_suffix = "new_name_suffix"
##
# ## Tags to be added (all values must be strings)
# # [processors.clone.tags]
# #   additional_tag = "tag_value"

# # Convert values to another metric value type
# [[processors.converter]]
# ## Tags to convert
# ##
# ## The table key determines the target type, and the array of key-values
# ## select the keys to convert. The array may contain globs.
# ##   <target-type> = [<tag-key>...]
# # [processors.converter.tags]
# #   measurement = []
# #   string = []
# #   integer = []
# #   unsigned = []
# #   boolean = []
# #   float = []
#
# ## Fields to convert
# ##
# ## The table key determines the target type, and the array of key-values
# ## select the keys to convert. The array may contain globs.
# ##   <target-type> = [<field-key>...]
# [processors.converter.fields]
# measurement = []
# tag = []
# string = []
# integer = []
# unsigned = []
# boolean = []
# float = []

## Dates measurements, tags, and fields that pass through this filter.
## [[[processors.date]]]
# New tag to create
# tag_key = "month"
#
## New field to create (cannot set both field_key and tag_key)
## field_key = "month"
#
## Date format string, must be a representation of the Go "reference time"
## which is "Mon Jan 2 15:04:05 -0700 MST 2006".
## date_format = "Jan"
#
## If destination is a field, date format can also be one of
## "unix", "unix_ms", "unix_us", or "unix_ns", which will insert an integer field.
## date_format = "unix"
#
## Offset duration added to the date string when writing the new tag.
## date_offset = "0s"
#
## Timezone to use when creating the tag or field using a reference time
## string. This can be set to one of "UTC", "Local", or to a location name
## in the IANA Time Zone database.
## example: timezone = "America/Los_Angeles"
## timezone = "UTC"

## Filter metrics with repeating field values
## [[[processors.dedup]]]
## Maximum time to suppress output
## dedup_interval = "600s"

## Defaults sets default value(s) for specified fields that are not set on incoming metrics.
## [[[processors.defaults]]]
## Ensures a set of fields always exists on your metric(s) with their
## respective default value.
## For any given field pair (key = default), if it's not set, a field
## is set on the metric with the specified default.
A field is considered not set if it is nil on the incoming metric;

or it is not nil but its value is an empty string or is a string

of one or more spaces.

<target-field> = <value>

# [processors.defaults.fields]
field_1 = "bar"
time_idle = 0
is_error = true

# Map enum values according to given table.
# [[processors.enum]]
# [[processors.enum.mapping]]
# Name of the field to map. Globs accepted.
field = "status"
#
# Name of the tag to map. Globs accepted.
tag = "status"
#
# Destination tag or field to be used for the mapped value. By default the
# source tag or field is used, overwriting the original value.
dest = "status_code"
#
# Default value to be used for all values not contained in the mapping
# table. When unset, the unmodified value for the field will be used if no
# match is found.
default = 0
#
# Table of mappings
[processors.enum.mapping.value_mappings]
green = 1
amber = 2
red = 3

# Run executable as long-running processor plugin
# [[processors.execd]]
# Program to run as daemon
# eg: command = ["/path/to/your_program", "arg1", "arg2"]
command = ["cat"]
#
# Delay before the process is restarted after an unexpected termination
restart_delay = "10s"

# Performs file path manipulations on tags and fields
# [[processors/filepath]]
## Treat the tag value as a path and convert it to its last element, storing the result in a new tag
# # [processors/filepath.basename]
# # tag = "path"
# # dest = "basepath"
#
## Treat the field value as a path and keep all but the last element of path, typically the path's directory
# # [processors/filepath.dirname]
# # field = "path"
#
## Treat the tag value as a path, converting it to its last element without its suffix
# # [processors/filepath.stem]
# # tag = "path"
#
## Treat the tag value as a path, converting it to the shortest path name equivalent
## to path by purely lexical processing
# # [processors/filepath.clean]
# # tag = "path"
#
## Treat the tag value as a path, converting it to a relative path that is lexically
## equivalent to the source path when joined to 'base_path'
# # [processors/filepath.rel]
# # tag = "path"
# # base_path = "/var/log"
#
## Treat the tag value as a path, replacing each separator character in path with a '/' character. Has only
## effect on Windows
# # [processors/filepath.toslash]
# # tag = "path"

## Add a tag of the network interface name looked up over SNMP by interface number
# [processors.ifname]
# ## Name of tag holding the interface number
# # tag = "ifIndex"
#
## Name of output tag where service name will be added
# # dest = "ifName"
#
## Name of tag of the SNMP agent to request the interface name from
# # agent = "agent"
#
## Timeout for each request.
# # timeout = "5s"
#
## SNMP version; can be 1, 2, or 3.
# # version = 2
#
## SNMP community string.
## community = "public"

## Number of retries to attempt.
## retries = 3

## The GETBULK max-repetitions parameter.
## max_repetitions = 10

## SNMPv3 authentication and encryption options.

## Security Name.
## sec_name = "myuser"

## Authentication protocol; one of "MD5", "SHA", or "".
## auth_protocol = "MD5"

## Authentication password.
## auth_password = "pass"

## Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".
## sec_level = "authNoPriv"

## Context Name.
## context_name = ""

## Privacy protocol used for encrypted messages; one of "DES", "AES" or "".
## priv_protocol = ""

## Privacy password used for encrypted messages.
## priv_password = ""

## max_parallel_lookups is the maximum number of SNMP requests to make at the same time.
## max_parallel_lookups = 100

## ordered controls whether or not the metrics need to stay in the same order this plugin received them in. If false, this plugin may change the order when data is cached. If you need metrics to stay in order set this to true. keeping the metrics ordered may be slightly slower
## ordered = false

## cache_ttl is the amount of time interface names are cached for a given agent. After this period elapses if names are needed they will be retrieved again.
## cache_ttl = "8h"

## Apply metric modifications using override semantics.
[[processors.override]]
## All modifications on inputs and aggregators can be overridden:
## name_override = "new_name"
## name_prefix = "new_name_prefix"
## name_suffix = "new_name_suffix"
# Tags to be added (all values must be strings)
# [processors.override.tags]
# additional_tag = "tag_value"

## Parse a value in a specified field/tag(s) and add the result in a new metric
# [[processors.parser]]
# The name of the fields whose value will be parsed.
# parse_fields = []
#
# If true, incoming metrics are not emitted.
# drop_original = false
#
# If set to override, emitted metrics will be merged by overriding the
# original metric using the newly parsed metrics.
# merge = "override"
#
# The dataformat to be read from files
# Each data format has its own unique set of configuration options, read
# more about them here:
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# Rotate a single valued metric into a multi field metric
# [[processors.pivot]]
# Tag to use for naming the new field.
# tag_key = "name"
# Field to use as the value of the new field.
# value_key = "value"

# Given a tag/field of a TCP or UDP port number, add a tag/field of the service name looked up in the system services file
# [[processors.port_name]]
# [[processors.port_name]]
# Name of tag holding the port number
# tag = "port"
# Or name of the field holding the port number
# field = "port"
#
# Name of output tag or field (depending on the source) where service name will be added
# dest = "service"
#
# Default tcp or udp
# default_protocol = "tcp"
# # Tag containing the protocol (tcp or udp, case-insensitive)
# # protocol_tag = "proto"
#
# # Field containing the protocol (tcp or udp, case-insensitive)
# # protocol_field = "proto"

## Print all metrics that pass through this filter.
# [processors.printer]

## Transforms tag and field values as well as measurement, tag and field names with regex pattern
# [processors.regex]
### Tag and field conversions defined in a separate sub-tables
# [
### # Tag to change
### #   key = "resp_code"
### #   Regular expression to match on a tag value
### #   pattern = "^(\d)\d\d$"
### #   Matches of the pattern will be replaced with this string. Use ${1}
### #   notation to use the text of the first submatch.
### #   replacement = "${1}xx"
#
### Field to change
### #   key = "request"
### #   All the power of the Go regular expressions available here
### #   For example, named subgroups
### #   pattern = "^/api(?P<method>[/\w/]+)$"
### #   If result_key is present, a new field will be created
### #   instead of changing existing field
### #   result_key = "method"
#
### Multiple conversions may be applied for one field sequentially
### Let's extract one more value
# [processors.regex.fields]
### # key = "request"
### # pattern = ".*category=(\w+).*"
### # replacement = "${1}"
### # result_key = "search_category"
#
### Rename metric fields
# [processors.regex.field_rename]
### # Regular expression to match on a field name
### # pattern = "^search_(\w+)d$"
### # Matches of the pattern will be replaced with this string. Use ${1}
### # notation to use the text of the first submatch.
# # replacement = "$[1]"
# # ## If the new field name already exists, you can either "overwrite" the
# # ## existing one with the value of the renamed field OR you can "keep"
# # ## both the existing and source field.
# # # result_key = "keep"
#
# ## Rename metric tags
# # # [processors.regex.tag_rename]
# # ## Regular expression to match on a tag name
# # ## pattern = "^search_(\w)+d$"
# # ## Matches of the pattern will be replaced with this string. Use $[1]
# # ## notation to use the text of the first submatch.
# # ## replacement = "$[1]"
# # ## If the new tag name already exists, you can either "overwrite" the
# # ## existing one with the value of the renamed tag OR you can "keep"
# # ## both the existing and source tag.
# # # result_key = "keep"
#
# ## Rename metrics
# # # [processors.regex.metric_rename]
# # ## Regular expression to match on an metric name
# # ## pattern = "^search_(\w)+d$"
# # ## Matches of the pattern will be replaced with this string. Use $[1]
# # ## notation to use the text of the first submatch.
# # ## replacement = "$[1]"

# Rename measurements, tags, and fields that pass through this filter.
# [[processors.rename]]

# # ReverseDNS does a reverse lookup on IP addresses to retrieve the DNS name
# # [processors.reverse_dns]
# # ## For optimal performance, you may want to limit which metrics are passed to this
# # ## processor. eg:
# # ## namepass = ["my_metric_*"]
#
# ## cache_ttl is how long the dns entries should stay cached for.
# ## generally longer is better, but if you expect a large number of diverse lookups
# ## you'll want to consider memory use.
# # cache_ttl = "24h"
#
# ## lookup_timeout is how long should you wait for a single dns request to repsond.
# ## this is also the maximum acceptable latency for a metric travelling through
# ## the reverse_dns processor. After lookup_timeout is exceeded, a metric will
# ## be passed on unaltered.
# ## multiple simultaneous resolution requests for the same IP will only make a
# ## single rDNS request, and they will all wait for the answer for this long.
lookup_timeout = "3s"
#
### max_parallel_lookups is the maximum number of dns requests to be in flight
### at the same time. Requesting hitting cached values do not count against this
### total, and neither do multiple requests for the same IP.
### It's probably best to keep this number fairly low.
max_parallel_lookups = 10
#
### ordered controls whether or not the metrics need to stay in the same order
### this plugin received them in. If false, this plugin will change the order
### with requests hitting cached results moving through immediately and not
### waiting on slower lookups. This may cause issues for you if you are
### depending on the order of metrics staying the same. If so, set this to true.
### keeping the metrics ordered may be slightly slower.
ordered = false
#
### get the ip from the field "source_ip", and put the result in the field "source_name"
field = "source_ip"
dest = "source_name"
#
### get the ip from the tag "destination_ip", and put the result in the tag
### "destination_name".
tag = "destination_ip"
dest = "destination_name"
#
### If you would prefer destination_name to be a field instead, you can use a
### processors.converter after this one, specifying the order attribute.
#
### Add the S2 Cell ID as a tag based on latitude and longitude fields
### The name of the lat and lon fields containing WGS-84 latitude and
### longitude in decimal degrees.
# lat_field = "lat"
# lon_field = "lon"
#
### New tag to create
tag_key = "s2_cell_id"
#
### Cell level (see https://s2geometry.io/resources/s2cell_statistics.html)
cell_level = 9
#
### Process metrics using a Starlark script
### The Starlark source can be set as a string in this configuration file, or
# by referencing a file containing the script. Only one source or script
# should be set at once.
#
# Source of the Starlark script.
# source = ''
# def apply(metric):
#   return metric
#
# File containing a Starlark script.
# script = "/usr/local/bin/myscript.star"
#
# The constants of the Starlark script.
# [processors.starlark.constants]
#   max_size = 10
#   threshold = 0.75
#   default_name = "Julia"
#   debug_mode = true

# Perform string processing on tags, fields, and measurements
# [processors.strings]
#   Convert a tag value to uppercase
#   [processors.strings.uppercase]
#   tag = "method"
#
# Convert a field value to lowercase and store in a new field
# [processors.strings.lowercase]
#   field = "uri_stem"
#   dest = "uri_stem_normalised"
#
# Convert a field value to titlecase
# [processors.strings.titlecase]
#   field = "status"
#
# Trim leading and trailing whitespace using the default cutset
# [processors.strings.trim]
#   field = "message"
#
# Trim leading characters in cutset
# [processors.strings.trim_left]
#   field = "message"
#   cutset = "t"
#
# Trim trailing characters in cutset
# [processors.strings.trim_right]
#   field = "message"
#   cutset = "rn"
## Trim the given prefix from the field

```yaml
# processors.strings.trim_prefix
# field = "my_value"
# prefix = "my_"
```

## Trim the given suffix from the field

```yaml
# processors.strings.trim_suffix
# field = "read_count"
# suffix = ".count"
```

## Replace all non-overlapping instances of old with new

```yaml
# processors.strings.replace
# measurement = "."
# old = ";"
# new = "_"
```

## Trims strings based on width

```yaml
# processors.strings.left
# field = "message"
# width = 10
```

## Decode a base64 encoded utf-8 string

```yaml
# processors.strings.base64decode
# field = "message"
```

## Sanitize a string to ensure it is a valid utf-8 string

```yaml
# processors.strings.valid_utf8
# field = "message"
# replacement = ""
```

## Restricts the number of tags that can pass through this filter and chooses which tags to preserve when over the limit.

```yaml
# processors.tag_limit
## Maximum number of tags to preserve
# limit = 10
```

## List of tags to preferentially preserve

```yaml
# keep = ["foo", "bar", "baz"]
```

## Uses a Go template to create a new tag

```yaml
# processors.template
## Tag to set with the output of the template.
# tag = "topic"
```
# Go template used to create the tag value. In order to ease TOML
# escaping requirements, you may wish to use single quotes around the
# template string.
# template = '{{ .Tag "hostname" }}.{{ .Tag "level" }}'

# Print all metrics that pass through this filter.
# [[processors.topk]]
# How many seconds between aggregations
# # period = 10
#
# How many top metrics to return
# # k = 10
#
# Over which tags should the aggregation be done. Globs can be specified, in
# which case any tag matching the glob will aggregated over. If set to an
# empty list is no aggregation over tags is done
# # group_by = ["*"]
#
# Over which fields are the top k are calculated
# # fields = ["value"]
#
# What aggregation to use. Options: sum, mean, min, max
# # aggregation = "mean"
#
# Instead of the top k largest metrics, return the bottom k lowest metrics
# # bottomk = false
#
# The plugin assigns each metric a GroupBy tag generated from its name and
# tags. If this setting is different than "" the plugin will add a
# tag (which name will be the value of this setting) to each metric with
# the value of the calculated GroupBy tag. Useful for debugging
# # add_groupby_tag = ""
#
# These settings provide a way to know the position of each metric in
# the top k. The 'add_rank_field' setting allows to specify for which
# fields the position is required. If the list is non empty, then a field
# will be added to each and every metric for each string present in this
# setting. This field will contain the ranking of the group that
# the metric belonged to when aggregated over that field.
# The name of the field will be set to the name of the aggregation field,
# suffixed with the string '_topk_rank'
# # add_rank_fields = []
#
# These settings provide a way to know what values the plugin is generating
# when aggregating metrics. The 'add_aggregate_field' setting allows to
# specify for which fields the final aggregation value is required. If the
# list is non empty, then a field will be added to each metric for
# ## each field present in this setting. This field will contain
# ## the computed aggregation for the group that the metric belonged to when
# ## aggregated over that field.
# ## The name of the field will be set to the name of the aggregation field,
# ## suffixed with the string '_topk_aggregate'
# # add_aggregate_fields = []

# # Rotate multi field metric into several single field metrics
# [[processors.unpivot]]
# # Tag to use for the name.
# tag_key = "name"
# # Field to use for the name of the value.
# value_key = "value"

# # Keep the aggregate basicstats of each metric passing through.
# [[aggregators.basicstats]]
# # The period on which to flush & clear the aggregator.
# period = "30s"
#
# # If true, the original metric will be dropped by the
# # aggregator and will not get sent to the output plugins.
# drop_original = false
#
# # Configures which basic stats to push as fields
# # stats = ["count", "min", "max", "mean", "stdev", "s2", "sum"]

# # Calculates a derivative for every field.
# [[aggregators.derivative]]
# # The period in which to flush the aggregator.
# period = "30s"
# #
# # If true, the original metric will be dropped by the
# # aggregator and will not get sent to the output plugins.
# drop_original = false
# #
# # This aggregator will estimate a derivative for each field, which is
# # contained in both the first and last metric of the aggregation interval.
# # Without further configuration the derivative will be calculated with
# # respect to the time difference between these two measurements in seconds.
# # The formula applied is for every field:
<<<

```python

##
## derivative = value_last - value_first
time_difference_in_seconds

## The resulting derivative will be named *fieldname_rate*. The suffix
## "_rate" can be configured by the *suffix* parameter. When using a
derivation variable you can include its name for more clarity.
suffix = "_rate"

## As an abstraction the derivative can be calculated not only by the time
difference but by the difference of a field, which is contained in the
measurement. This field is assumed to be monotonously increasing. This
feature is used by specifying a *variable*.

Make sure the specified variable is not filtered and exists in the metrics
passed to this aggregator!

variable = ""

## When using a field as the derivation parameter the name of that field will
be used for the resulting derivative, e.g. *fieldname_by_parameter*.

## Note, that the calculation is based on the actual timestamp of the
measurement. When there is only one measurement during that period, the
measurement will be rolled over to the next period. The maximum number of
such roll-overs can be configured with a default of 10.

max_roll_over = 10

## Report the final metric of a series
[[aggregators.final]]
The period on which to flush & clear the aggregator.
period = "30s"

If true, the original metric will be dropped by the
aggregator and will not get sent to the output plugins.
drop_original = false

The time that a series is not updated until considering it final.
series_timeout = "5m"

## Create aggregate histograms.
[[aggregators.histogram]]
The period in which to flush the aggregator.
period = "30s"

If true, the original metric will be dropped by the
aggregator and will not get sent to the output plugins.
```

<<<
# drop_original = false
#
# ## If true, the histogram will be reset on flush instead
# ## of accumulating the results.
# reset = false
#
# ## Whether bucket values should be accumulated. If set to false, "gt" tag will be added.
# cumulative = true
#
# ## Example config that aggregates all fields of the metric.
# # [[aggregators.histogram.config]]
# # ## Right borders of buckets (with +Inf implicitly added).
# # buckets = [0.0, 15.6, 34.5, 49.1, 71.5, 80.5, 94.5, 100.0]
# # ## The name of metric.
# # measurement_name = "cpu"
#
# ## Example config that aggregates only specific fields of the metric.
# # [[aggregators.histogram.config]]
# # ## Right borders of buckets (with +Inf implicitly added).
# # buckets = [0.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0]
# # ## The name of metric.
# # measurement_name = "diskio"
# # ## The concrete fields of metric
# # fields = ["io_time", "read_time", "write_time"]
#
# ## Merge metrics into multifield metrics by series key
# [[aggregators.merge]]
# ## If true, the original metric will be dropped by the
# ## aggregator and will not get sent to the output plugins.
# drop_original = true
#
# ## Keep the aggregate min/max of each metric passing through.
# [[aggregators.minmax]]
# ## General Aggregator Arguments:
# ## The period on which to flush & clear the aggregator.
# period = "30s"
# ## If true, the original metric will be dropped by the
# ## aggregator and will not get sent to the output plugins.
# drop_original = false
#
# ## Keep the aggregate quantiles of each metric passing through.
# [[aggregators.quantile]]
# ## General Aggregator Arguments:
# ## The period on which to flush & clear the aggregator.
# period = "30s"
#
# ### If true, the original metric will be dropped by the
# ### aggregator and will not get sent to the output plugins.
# drop_original = false
#
# ### Quantiles to output in the range [0,1]
# quantiles = [0.25, 0.5, 0.75]
#
# ### Type of aggregation algorithm
# ### Supported are:
# ### "t-digest" -- approximation using centroids, can cope with large number of samples
# ### "exact R7" -- exact computation also used by Excel or NumPy (Hyndman & Fan 1996 R7)
# ### "exact R8" -- exact computation (Hyndman & Fan 1996 R8)
# ### NOTE: Do not use "exact" algorithms with large number of samples
# ### to not impair performance or memory consumption!
# algorithm = "t-digest"
#
# ### Compression for approximation (t-digest). The value needs to be
# ### greater or equal to 1.0. Smaller values will result in more
# ### performance but less accuracy.
# compression = 100.0

# # Aggregate metrics using a Starlark script
# [[aggregators.star]]
# ### The Starlark source can be set as a string in this configuration file, or
# ### by referencing a file containing the script. Only one source or script
# ### should be set at once.
# ###
# ### Source of the Starlark script.
# source = ""
# state = { }
#
# def add(metric):
#   state["last"] = metric
#
# def push():
#   return state.get("last")
#
# def reset():
#   state.clear()
# ""
#
# # ### File containing a Starlark script.
# script = "/usr/local/bin/myscript.star"
#
# # ### The constants of the Starlark script.
# [aggregators.starlark.constants]
# max_size = 10
# threshold = 0.75
# default_name = "Julia"
# debug_mode = true

# Count the occurrence of values in fields.
# [[aggregators.valuecounter]]
# General Aggregator Arguments:
# The period on which to flush & clear the aggregator.
# period = "30s"
# If true, the original metric will be dropped by the aggregator and will not get sent to the output plugins.
# drop_original = false
# The fields for which the values will be counted
# fields = []

# Read metrics about cpu usage
[[inputs.cpu]]
## Whether to report per-cpu stats or not
percpu = true
## Whether to report total system cpu stats or not
totalcpu = true
## If true, collect raw CPU time metrics
collect_cpu_time = false
## If true, compute and report the sum of all non-idle CPU states
report_active = false

# Read metrics about disk usage by mount point
[[inputs.disk]]
## By default stats will be gathered for all mount points.
## Set mount_points will restrict the stats to only the specified mount points.
# mount_points = ["/"]

## Ignore mount points by filesystem type.
ignore_fs = ["tmpfs", "devtmpfs", "devfs", "iso9660", "overlay", "aufs", "squashfs"]

# Read metrics about disk IO by device
[[inputs.diskio]]
## By default, telegraf will gather stats for all devices including disk partitions.
## Setting devices will restrict the stats to the specified devices.
# devices = ['"sda", "sdb", "vd**"]
## Uncomment the following line if you need disk serial numbers.
# skip_serial_number = false

## On systems which support it, device metadata can be added in the form of tags.
## Currently only Linux is supported via udev properties. You can view available properties for a device by running:
## 'udevadm info -q property -n /dev/sda'
## Note: Most, but not all, udev properties can be accessed this way. Properties that are currently inaccessible include DEVTYPE, DEVNAME, and DEVPATH.
# device_tags = ['"ID_FS_TYPE", "ID_FS_USAGE"]

## Using the same metadata source as device_tags, you can also customize the name of the device via templates.
## The 'name_templates' parameter is a list of templates to try and apply to the device. The template may contain variables in the form of 'SPROPERTY' or '$PROPERTY'. The first template which does not contain any variables not present for the device is used as the device name tag.
## The typical use case is for LVM volumes, to get the VG/LV name instead of the near-meaningless DM-0 name.
# name_templates = ['"$ID_FS_LABEL","$DM_VG_NAME/$DM_LV_NAME"]

## Get kernel statistics from /proc/stat
[[inputs.kernel]]
# no configuration

## Read metrics about memory usage
[[inputs.mem]]
# no configuration

## Get the number of processes and group them by status
[[inputs.processes]]
# no configuration

## Read metrics about swap memory usage
[[inputs.swap]]
# no configuration

## Read metrics about system load & uptime
[[inputs.system]]

## Uncomment to remove deprecated metrics.
# fielddrop = ['uptime_format']

## Gather ActiveMQ metrics
# [[inputs.activemq]]
# ## ActiveMQ WebConsole URL
# url = "http://127.0.0.1:8161"
#
# ## Required ActiveMQ Endpoint
# ## deprecated in 1.11; use the url option
# # server = "127.0.0.1"
# # port = 8161
#
# ## Credentials for basic HTTP authentication
# # username = "admin"
# # password = "admin"
#
# ## Required ActiveMQ webadmin root path
# # webadmin = "admin"
#
# ## Maximum time to receive response.
# # response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Read stats from aerospike server(s)
# [[inputs.aerospike]]
# ## Aerospike servers to connect to (with port)
# ## This plugin will query all namespaces the aerospike
# ## server has configured and get stats for them.
# servers = ["localhost:3000"]
#
# # username = "telegraf"
# # password = "pa$$word"
#
# ## Optional TLS Config
# # enable_tls = false
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # If false, skip chain & host verification
# insecure_skip_verify = true

# # Feature Options
# # Add namespace variable to limit the namespaces executed on
# # Leave blank to do all
# disable_query_namespaces = true # default false
# namespaces = ["namespace1", "namespace2"]

# # Enable set level telemetry
# query_sets = true # default: false
# # Add namespace set combinations to limit sets executed on
# # Leave blank to do all sets
# sets = ["namespace1/set1", "namespace1/set2", "namespace3"]

# # Histograms
# # enable_ttl_histogram = true # default: false
# # enable_object_size_linear_histogram = true # default: false

# # by default, aerospike produces a 100 bucket histogram
# this is not great for most graphing tools, this will allow
# the ability to squash this to a smaller number of buckets
# To have a balanced histogram, the number of buckets chosen
# should divide evenly into 100.
# num_histogram_buckets = 100 # default: 10

## Query statistics from AMD Graphics cards using rocm-smi binary
[[inputs.amd_rocm_smi]]
## Optional: path to rocm-smi binary, defaults to $PATH via exec.LookPath
# bin_path = "/opt/rocm/bin/rocm-smi"

## Optional: timeout for GPU polling
# timeout = "5s"

## Read Apache status information (mod_status)
[[inputs.apache]]
## An array of URLs to gather from, must be directed at the machine
## readable version of the mod_status page including the auto query string.
# Default is "http://localhost/server-status?auto".
# urls = ["http://localhost/server-status?auto"]

# # Credentials for basic HTTP authentication.
# username = "myuser"
# password = "mypassword"

# # Maximum time to receive response.
# # response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Monitor APC UPSes connected to apcupsd
#
# # A list of running apcupsd server to connect to.
# # If not provided will default to tcp://127.0.0.1:3551
# servers = ["tcp://127.0.0.1:3551"]
#
# ## Timeout for dialing server.
# # timeout = "5s"

## Gather metrics from Apache Aurora schedulers
#
# ## Schedulers are the base addresses of your Aurora Schedulers
# schedulers = ["http://127.0.0.1:8081"]
#
# ## Set of role types to collect metrics from.
# ##
# ## The scheduler roles are checked each interval by contacting the
# ## scheduler nodes; zookeeper is not contacted.
# # roles = ["leader", "follower"]
#
# ## Timeout is the max time for total network operations.
# # timeout = "5s"
#
# ## Username and password are sent using HTTP Basic Auth.
# # username = "username"
# # password = "pa$$word"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Gather Azure Storage Queue metrics
#
# [inputs.azure_storage_queue]
## Required Azure Storage Account name
account_name = "mystorageaccount"
#
## Required Azure Storage Account access key
account_key = "storageaccountaccesskey"
#
## Set to false to disable peeking age of oldest message (executes faster)
peek_oldest_message_age = true

## Read metrics of bcache from stats_total and dirty_data
[[inputs.bcache]]
## Bcache sets path
## If not specified, then default is:
bcachePath = "/sys/fs/bcache"
#
## By default, Telegraf gather stats for all bcache devices
## Setting devices will restrict the stats to the specified
## bcache devices.
bcacheDevs = ["bcache0"]

## Collects Beanstalkd server and tubes stats
[[inputs.beanstalkd]]
## Server to collect data from
server = "localhost:11300"
#
## List of tubes to gather stats about.
## If no tubes specified then data gathered for each tube on server reported by list-tubes command
tubes = ["notifications"]

## Read metrics exposed by Beat
[[inputs.beat]]
## An URL from which to read Beat-formatted JSON
## Default is "http://127.0.0.1:5066".
url = "http://127.0.0.1:5066"
#
## Enable collection of the listed stats
## An empty list means collect all. Available options are currently
## "beat", "libbeat", "system" and "filebeat".
include = ["beat", "libbeat", "filebeat"]
#
## HTTP method
method = "GET"
#
## Optional HTTP headers
headers = {"X-Special-Header" = "Special-Value"}
# # Override HTTP "Host" header
# # host_header = "logstash.example.com"
#
# # Timeout for HTTP requests
# # timeout = "5s"
#
# # Optional HTTP Basic Auth credentials
# # username = "username"
# # password = "pa$$word"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # Read BIND nameserver XML statistics
# [[[inputs.bind]]]
# # An array of BIND XML statistics URI to gather stats.
# # Default is "http://localhost:8053/xml/v3".
# # urls = ["http://localhost:8053/xml/v3"]
# # gather_memory_contexts = false
# # gather_views = false
#
# # Timeout for http requests made by bind nameserver
# # timeout = "4s"

# # Collect bond interface status, slaves statuses and failures count
# [[[inputs.bond]]]
# # Sets 'proc' directory path
# # If not specified, then default is /proc
# # host_proc = "/proc"
#
# # By default, telegraf gather stats for all bond interfaces
# # Setting interfaces will restrict the stats to the specified
# # bond interfaces.
# # bond_interfaces = ["bond0"]

# # Collect Kafka topics and consumers status from Burrow HTTP API.
# [[[inputs.burrow]]]
# # Burrow API endpoints in format "schema://host:port".
# # Default is "http://localhost:8000".
# servers = ["http://localhost:8000"]
# # Override Burrow API prefix.
# # Useful when Burrow is behind reverse-proxy.
# api_prefix = "/v3/kafka"
#
# # Maximum time to receive response.
# response_timeout = "5s"
#
# # Limit per-server concurrent connections.
# # Useful in case of large number of topics or consumer groups.
# concurrent_connections = 20
#
# # Filter clusters, default is no filtering.
# # Values can be specified as glob patterns.
# clusters_include = []
# clusters_exclude = []
#
# # Filter consumer groups, default is no filtering.
# # Values can be specified as glob patterns.
# groups_include = []
# groups_exclude = []
#
# # Filter topics, default is no filtering.
# # Values can be specified as glob patterns.
# topics_include = []
# topics_exclude = []
#
# # Credentials for basic HTTP authentication.
# username = ""
# password = ""
#
# # Optional SSL config
# ssl_ca = "/etc/telegraf/ca.pem"
# ssl_cert = "/etc/telegraf/cert.pem"
# ssl_key = "/etc/telegraf/key.pem"
# insecure_skip_verify = false

# # Collects performance metrics from the MON, OSD, MDS and RGW nodes in a Ceph storage cluster.
# [[inputs.ceph]]
# # This is the recommended interval to poll. Too frequent and you will lose
# # data points due to timeouts during rebalancing and recovery
# interval = '1m'
#
# # All configuration values are optional, defaults are shown below
#
# # location of ceph binary
# ceph_binary = "/usr/bin/ceph"
# directory in which to look for socket files
# socket_dir = "/var/run/ceph"
#
# prefix of MON and OSD socket files, used to determine socket type
# mon_prefix = "ceph-mon"
# osd_prefix = "ceph-osd"
# mds_prefix = "ceph-mds"
# rgw_prefix = "ceph-client"
#
# suffix used to identify socket files
# socket_suffix = "asok"
#
# Ceph user to authenticate as, ceph will search for the corresponding keyring
# e.g. client.admin.keyring in /etc/ceph, or the explicit path defined in the
# client section of ceph.conf for example:
#
# [client.telegraf]
# keyring = /etc/ceph/client.telegraf.keyring
#
# Consult the ceph documentation for more detail on keyring generation.
# ceph_user = "client.admin"
#
# Ceph configuration to use to locate the cluster
# ceph_config = "/etc/ceph/ceph.conf"
#
# Whether to gather statistics via the admin socket
# gather_admin_socket_stats = true
#
# Whether to gather statistics via ceph commands, requires ceph_user and ceph_config
# to be specified
# gather_cluster_stats = false
#
# Read specific statistics per cgroup
# [inputs.cgroup]
# Directories in which to look for files, globs are supported.
# Consider restricting paths to the set of cgroups you really
# want to monitor if you have a large number of cgroups, to avoid
# any cardinality issues.
# paths = [
#   "/sys/fs/cgroup/memory",
#   "/sys/fs/cgroup/memory/child1",
#   "/sys/fs/cgroup/memory/child2/*",
# ]
# cgroup stat fields, as file names, globs are supported.
# these file names are appended to each path from above.
# files = ["memory.*usage*", "memory.limit_in_bytes"]
## Get standard chrony metrics, requires chronyc executable.
# [[inputs.chrony]]
## If true, chronyc tries to perform a DNS lookup for the time server.
# # dns_lookup = false

## Pull Metric Statistics from Amazon CloudWatch
# [[inputs.cloudwatch]]
### Amazon Region
# region = "us-east-1"
#
### Amazon Credentials
### Credentials are loaded in the following order
### 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
### 2) Assumed credentials via STS if role_arn is specified
### 3) explicit credentials from 'access_key' and 'secret_key'
### 4) shared profile from 'profile'
### 5) environment variables
### 6) shared credentials file
### 7) EC2 Instance Profile
# # access_key = ""
# # secret_key = ""
# # token = ""
# # role_arn = ""
# # web_identity_token_file = ""
# # role_session_name = ""
# # profile = ""
# # shared_credential_file = ""
#
### Endpoint to make request against, the correct endpoint is automatically
determined and this option should only be set if you wish to override the
default.
# # ex: endpoint_url = "http://localhost:8000"
# # endpoint_url = ""
#
### Set http_proxy (telegraf uses the system wide proxy settings if it's is not set)
# # http_proxy_url = "http://localhost:8888"
#
### The minimum period for Cloudwatch metrics is 1 minute (60s). However not all
### metrics are made available to the 1 minute period. Some are collected at
### 3 minute, 5 minute, or larger intervals. See https://aws.amazon.com/cloudwatch/faqs/#monitoring.
### Note that if a period is configured that is smaller than the minimum for a
### particular metric, that metric will not be returned by the Cloudwatch API
### and will not be collected by Telegraf.
#
### Requested CloudWatch aggregation Period (required - must be a multiple of 60s)
# period = "5m"
#
# ## Collection Delay (required - must account for metrics availability via CloudWatch API)
# delay = "5m"
#
# ## Recommended: use metric 'interval' that is a multiple of 'period' to avoid gaps or overlap in pulled data
# interval = "5m"
#
# ## Recommended if "delay" and "period" are both within 3 hours of request time. Invalid values will be ignored.
# ## Recently Active feature will only poll for CloudWatch ListMetrics values that occurred within the last 3 Hours.
# ## If enabled, it will reduce total API usage of the CloudWatch ListMetrics API and require less memory to retain.
# ## Do not enable if "period" or "delay" is longer than 3 hours, as it will not return data more than 3 hours old.
# ## See https://docs.aws.amazon.com/AmazonCloudWatch/latest/APIReference/API_ListMetrics.html
# ## recently_active = "PT3H"
#
# ## Configure the TTL for the internal cache of metrics.
# cache_ttl = "1h"
#
# ## Metric Statistic Namespaces (required)
# namespaces = ["AWS/ELB"]
# ## A single metric statistic namespace that will be appended to namespaces on startup
# namespace = "AWS/ELB"
#
# ## Maximum requests per second. Note that the global default AWS rate limit is 50 reqs/sec, so if you define multiple namespaces, these should add up to a maximum of 50.
# ## See http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/cloudwatch_limits.html
# rate_limit = 25
#
# ## Timeout for http requests made by the cloudwatch client.
# timeout = "5s"
#
# ## Namespace-wide statistic filters. These allow fewer queries to be made to
# cloudwatch.
# statistic_include = [ "average", "sum", "minimum", "maximum", sample_count" ]
# statistic_exclude = []
#
# ## Metrics to Pull
# ## Defaults to all Metrics in Namespace if nothing is provided
# ## Refreshes Namespace available metrics every 1h
# # [[inputs.cloudwatch.metrics]]
# # names = ["Latency", "RequestCount"]
# #
# ## Statistic filters for Metric. These allow for retrieving specific
# ## statistics for an individual metric.
# # statistic_include = [ "average", "sum", "minimum", "maximum", sample_count" ]
# # statistic_exclude = []
# #
# # ## Dimension filters for Metric. All dimensions defined for the metric names
# # must be specified in order to retrieve the metric statistics.
# # ## 'value' has wildcard / 'glob' matching support such as 'p-*'.
# # [inputs.cloudwatch.metrics.dimensions]
# # name = "LoadBalancerName"
# # value = "p-example"

# # Collects conntrack stats from the configured directories and files.
# [inputs.conntrack]
# ### The following defaults would work with multiple versions of conntrack.
# ### Note the nf_ and ip_ filename prefixes are mutually exclusive across
# ### kernel versions, as are the directory locations.
# #
# ### Superset of filenames to look for within the conntrack dirs.
# ### Missing files will be ignored.
# files = ["ip_conntrack_count", "ip_conntrack_max",
#         "nf_conntrack_count", "nf_conntrack_max"]
# #
# ### Directories to search within for the conntrack files above.
# ### Missing directories will be ignored.
# dirs = ["/proc/sys/net/ipv4/netfilter", "/proc/sys/net/netfilter"]

# # Gather health check statuses from services registered in Consul
# [inputs.consul]
# ### Consul server address
# # address = "localhost:8500"
# #
# ### URI scheme for the Consul server, one of "http", "https"
# # scheme = "http"
# #
# ### Metric version controls the mapping from Consul metrics into
# ### Telegraf metrics.
# #
# ### example: metric_version = 1; deprecated in 1.15
# # metric_version = 2; recommended version
# # metric_version = 1
# #
# ### ACL token used in every request
# # token = ""
# #
# ### HTTP Basic Authentication username and password.
# # username = ""
# # password = ""
# Data center to query the health checks from datacenter = ""

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = true

# Consul checks' tag splitting
# When tags are formatted like "key:value" with ":" as a delimiter then
# they will be split and reported as proper key:value in Telegraf
# tag_delimiter = ":"

## Read per-node and per-bucket metrics from Couchbase
[[inputs.couchbase]]
# specify servers via a url matching:
# [protocol://][password]@address[:port]
# e.g.
# http://couchbase-0.example.com/
# http://admin:secret@couchbase-0.example.com:8091/
# If no servers are specified, then localhost is used as the host.
# If no protocol is specified, HTTP is used.
# If no port is specified, 8091 is used.
servers = ["http://localhost:8091"]

# Filter bucket fields to include only here.
# bucket_stats_included = ["quota_percent_used", "ops_per_sec", "disk_fetches", "item_count", "disk_used", "data_used", "mem_used"]

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification (defaults to false)
# If set to false, tls_cert and tls_key are required
# insecure_skip_verify = false

## Read CouchDB Stats from one or more servers
[[inputs.couchdb]]
# Works with CouchDB stats endpoints out of the box
# Multiple Hosts from which to read CouchDB stats:
# hosts = ["http://localhost:8086/_stats"]
# Use HTTP Basic Authentication.
# basic_username = "telegraf"
# basic_password = "p@ssw0rd"

## Fetch metrics from a CSGO SRCDS
[[inputs.csgo]]
# Specify servers using the following format:
servers = [
  ["ip1:port1", "rcon_password1"],
  ["ip2:port2", "rcon_password2"],
]

## If no servers are specified, no data will be collected
servers = []

## Input plugin for DC/OS metrics
[[inputs.dcos]]
# The DC/OS cluster URL.
cluster_url = "https://dcos-ee-master-1"

# The ID of the service account.
service_account_id = "telegraf"

# The private key file for the service account.
service_account_private_key = "/etc/telegraf/telegraf-sa-key.pem"

# Path containing login token. If set, will read on every gather.
token_file = "/home/dcos/.dcos/token"

# In all filter options if both include and exclude are empty all items
# will be collected. Arrays may contain glob patterns.

# Node IDs to collect metrics from. If a node is excluded, no metrics will
# be collected for its containers or apps.
node_include = []
node_exclude = []

# Container IDs to collect container metrics from.
container_include = []
container_exclude = []

# Container IDs to collect app metrics from.
app_include = []
app_exclude = []

# Maximum concurrent connections to the cluster.
max_connections = 10

# Maximum time to receive a response from cluster.
# response_timeout = "20s"
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# If false, skip chain & host verification
# insecure_skip_verify = true
#
# Recommended filtering to reduce series cardinality.
# [inputs.dcos.tagdrop]
# path = ["/var/lib/mesos/slave/slaves/*"]

# Read metrics from one or many disque servers
# [inputs.disque]
# An array of URI to gather stats about. Specify an ip or hostname
# with optional port and password.
# ie disque://localhost, disque://10.10.3.33:18832, 10.0.0.1:10000, etc.
# If no servers are specified, then localhost is used as the host.
# servers = ["localhost"]

# Provide a native collection for dmsetup based statistics for dm-cache
# [inputs.dmcache]
# Whether to report per-device stats or not
# per_device = true

# Query given DNS server and gives statistics
# [inputs.dns_query]
# servers to query
# servers = ["8.8.8.8"]
#
# Network is the network protocol name.
# network = "udp"
#
# Domains or subdomains to query.
# domains = [".""]
#
# Query record type.
# Possible values: A, AAAA, CNAME, MX, NS, PTR, TXT, SOA, SPF, SRV.
# record_type = "A"
#
# Dns server port.
# port = 53
#
# Query timeout in seconds.
### Read metrics about docker containers

#### [[inputs.docker]]

#### Docker Endpoint

#### To use TCP, set endpoint = "tcp://[ip]:[port]"

#### To use environment variables (ie, docker-machine), set endpoint = "ENV"

**endpoint = "unix:///var/run/docker.sock"**

#### Set to true to collect Swarm metrics(desired_replicas, running_replicas)

**gather_services = false**

#### Only collect metrics for these containers, collect all if empty

**container_names = []**

#### Set the source tag for the metrics to the container ID hostname, eg first 12 chars

**source_tag = false**

#### Containers to include and exclude. Globs accepted.

#### Note that an empty array for both will include all containers

**container_name_include = []**

**container_name_exclude = []**

#### Container states to include and exclude. Globs accepted.

#### When empty only containers in the "running" state will be captured.

**container_state_include = ["created", "restarting", "running", "removing", "paused", "exited", "dead"]**

**container_state_exclude = ["created", "restarting", "running", "removing", "paused", "exited", "dead"]**

#### Timeout for docker list, info, and stats commands

**timeout = "5s"**

#### Whether to report for each container per-device blkio (8:0, 8:1...), network (eth0, eth1, ...) and cpu (cpu0, cpu1, ...) stats or not.

#### Usage of this setting is discouraged since it will be deprecated in favor of 'perdevice_include'.

#### Default value is 'true' for backwards compatibility, please set it to 'false' so that 'perdevice_include' setting

#### is honored.

**perdevice = true**

#### Specifies for which classes a per-device metric should be issued

#### Possible values are 'cpu' (cpu0, cpu1, ...), 'blkio' (8:0, 8:1, ...) and 'network' (eth0, eth1, ...)

#### Please note that this setting has no effect if 'perdevice' is set to 'true'

**perdevice_include = ["cpu"]**

# # timeout = 2
# # # Whether to report for each container total blkio and network stats or not.
# # # Usage of this setting is discouraged since it will be deprecated in favor of 'total_include'.
# # # Default value is 'false' for backwards compatibility, please set it to 'true' so that 'total_include' setting
# # # is honored.
# total = false
#
# # # Specifies for which classes a total metric should be issued. Total is an aggregated of the 'perdevice' values.
# # # Possible values are 'cpu', 'blkio' and 'network'
# # # Total 'cpu' is reported directly by Docker daemon, and 'network' and 'blkio' totals are aggregated by this
# # # plugin.
# # # Please note that this setting has no effect if 'total' is set to 'false'
# # total_include = ['"cpu", "blkio", "network"]
#
# # # Which environment variables should we use as a tag
# # tag_env = ['"JAVA_HOME", "HEAP_SIZE"]
#
# # docker labels to include and exclude as tags.  Globs accepted.
# # Note that an empty array for both will include all labels as tags
# docker_label_include = []
# docker_label_exclude = []
#
# # # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# # Read statistics from one or many dovecot servers
# [[inputs.dovecot]]
# # # specify dovecot servers via an address:port list
# # # e.g.
# # # localhost:24242
# # # If no servers are specified, then localhost is used as the host.
# # servers = ['"localhost:24242"']
# # # Type is one of "user", "domain", "ip", or "global"
# # type = "global"
# # # Wildcard matches like "*.com". An empty string "" is same as "*"
# # # If type = "ip" filters should be <IP/network>
# # filters = ['""']
#
# # Reads metrics from DPDK applications using v2 telemetry interface.
# [[inputs.dpdk]]
# Path to DPDK telemetry socket. This shall point to v2 version of DPDK telemetry interface.
# socket_path = "/var/run/dpdk/rte/dpdk_telemetry.v2"
#
# Duration that defines how long the connected socket client will wait for a response before terminating connection.
# This includes both writing to and reading from socket. Since it's local socket access
# to a fast packet processing application, the timeout should be sufficient for most users.
# Setting the value to 0 disables the timeout (not recommended)
# socket_access_timeout = "200ms"
#
# Enables telemetry data collection for selected device types.
# Adding "ethdev" enables collection of telemetry from DPDK NICs (stats, xstats, link_status).
# Adding "rawdev" enables collection of telemetry from DPDK Raw Devices (xstats).
# device_types = ["ethdev"]
#
# List of custom, application-specific telemetry commands to query
# The list of available commands depend on the application deployed. Applications can register their own commands
# via telemetry library API http://doc.dpdk.org/guides/prog_guide/telemetry_lib.html#registering-commands
# For e.g. L3 Forwarding with Power Management Sample Application this could be:
# additional_commands = ["/l3fwd-power/stats"]
# additional_commands = []
#
# Allows turning off collecting data for individual "ethdev" commands.
# Remove "/ethdev/link_status" from list to start getting link status metrics.
# [inputs.dpdk.ethdev]
# exclude_commands = ["/ethdev/link_status"]
#
# When running multiple instances of the plugin it's recommended to add a unique tag to each instance to identify
# metrics exposed by an instance of DPDK application. This is useful when multiple DPDK apps run on a single host.
# [inputs.dpdk.tags]
# dpdk_instance = "my-fwd-app"

# Read metrics about docker containers from Fargate/ECS v2, v3 meta endpoints.
[inputs.ecs]
# ECS metadata url.
# Metadata v2 API is used if set explicitly. Otherwise, v3 metadata endpoint API is used if available.
# endpoint_url = ""
#
# Containers to include and exclude. Globs accepted.
# Note that an empty array for both will include all containers
# container_name_include = []
# container_name_exclude = []
#
## Container states to include and exclude. Globs accepted.
## When empty only containers in the "RUNNING" state will be captured.
## Possible values are "NONE", "PULLED", "CREATED", "RUNNING",
## "RESOURCES_PROVISIONED", "STOPPED".
# container_status_include = []
# container_status_exclude = []

##.ecs labels to include and exclude as tags. Globs accepted.
## Note that an empty array for both will include all labels as tags
# ecs_label_include = ["com.amazonaws.ecs.*"]
# ecs_label_exclude = []

## Timeout for queries.
# timeout = "5s"

## Read stats from one or more Elasticsearch servers or clusters
[[inputs.elasticsearch]]
## specify a list of one or more Elasticsearch servers
## you can add username and password to your url to use basic authentication:
# servers = ["http://user:pass@localhost:9200"]
# servers = ["http://localhost:9200"]

## Timeout for HTTP requests to the elastic search server(s)
# http_timeout = "5s"

## When local is true (the default), the node will read only its own stats.
## Set local to false when you want to read the node stats from all nodes
## of the cluster.
# local = true

## Set cluster_health to true when you want to also obtain cluster health stats
# cluster_health = false

## Adjust cluster_health_level when you want to also obtain detailed health stats
## The options are
## - indices (default)
## - cluster
# cluster_health_level = "indices"

## Set cluster_stats to true when you want to also obtain cluster stats.
# cluster_stats = false

## Only gather cluster_stats from the master node. To work this require local = true
# cluster_stats_only_from_master = true

## Indices to collect; can be one or more indices names or _all
## Use of wildcards is allowed. Use a wildcard at the end to retrieve index names that end with a changing value,
like a date.

# indices_include = ["_all"]
#
# ### One of "shards", "cluster", "indices"  
# indices_level = "shards"
#
# ### node_stats is a list of sub-stats that you want to have gathered. Valid options  
# ### are "indices", "os", "process", "jvm", "thread_pool", "fs", "transport", "http",  
# ### "breaker". Per default, all stats are gathered.
# # node_stats = ["jvm", "http"]
#
# ### HTTP Basic Authentication username and password.
# # username = ""
# # password = ""
#
# ### Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ### Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ### Sets the number of most recent indices to return for indices that are configured with a date-stamped suffix.
# ### Each 'indices_include' entry ending with a wildcard (*) or glob matching pattern will group together all
# indices that match it, and sort them
# ### by the date or number after the wildcard. Metrics then are gathered for only the 'num_most_recent_indices'
# amount of most recent indices.
# # num_most_recent_indices = 0

## Derive metrics from aggregating Elasticsearch query results
# [inputs.elasticsearch_query]
# ### The full HTTP endpoint URL for your Elasticsearch instance
# ### Multiple urls can be specified as part of the same cluster,
# ### this means that only ONE of the urls will be written to each interval.
# urls = [ "http://node1.es.example.com:9200" ] # required.
#
# ### Elasticsearch client timeout, defaults to "5s".
# # timeout = "5s"
#
# ### Set to true to ask Elasticsearch a list of all cluster nodes,
# ### thus it is not necessary to list all nodes in the urls config option
# # enable_sniffer = false
#
# ### Set the interval to check if the Elasticsearch nodes are available
# ### This option is only used if enable_sniffer is also set (0s to disable it)
# # health_check_interval = "10s"
## HTTP basic authentication details (eg. when using x-pack)
- username = "telegraf"
- password = "mypassword"

## Optional TLS Config
- tls_ca = "/etc/telegraf/ca.pem"
- tls_cert = "/etc/telegraf/cert.pem"
- tls_key = "/etc/telegraf/key.pem"
- Use TLS but skip chain & host verification
- insecure_skip_verify = false

[inputs.elasticsearch_query.aggregation]
- measurement name for the results of the aggregation query
  - measurement_name = "measurement"

- Elasticsearch indexes to query (accept wildcards).
  - index = "index-*"

- The date/time field in the Elasticsearch index (mandatory).
  - date_field = "@timestamp"

- If the field used for the date/time field in Elasticsearch is also using
  - a custom date/time format it may be required to provide the format to
  - correctly parse the field.

- If using one of the built in elasticsearch formats this is not required.
  - date_field_custom_format = ""

- Time window to query (eg. "1m" to query documents from last minute).
  - query_period = "1m"

- Lucene query to filter results
  - filter_query = "*"

- Fields to aggregate values (must be numeric fields)
  - metric_fields = ["metric"]

- Aggregation function to use on the metric fields
  - metric_function = "avg"

- Fields to be used as tags
  - tags = ["field.keyword", "field2.keyword"]

- Set to true to not ignore documents when the tag(s) above are missing
## Returns ethtool statistics for given interfaces

```
[[inputs.ethtool]]
```

## List of interfaces to pull metrics for

```
# interface_include = ["eth0"]
```

## List of interfaces to ignore when pulling metrics.

```
# interface_exclude = ["eth1"]
```

## Some drivers declare statistics with extra whitespace, different spacing, and mix cases. This list, when enabled, can be used to clean the keys.

### Here are the current possible normalizations:

#### * snakecase: converts fooBarBaz to foo_bar_baz
#### * trim: removes leading and trailing whitespace
#### * lower: changes all capitalized letters to lowercase
#### * underscore: replaces spaces with underscores

```
# normalize_keys = ["snakecase", "trim", "lower", "underscore"]
```

## Read metrics from one or more commands that can output to stdout

```
[[inputs.exec]]
```

## Commands array

```
# commands = [
#   "/tmp/test.sh",
#   "/usr/bin/mycollector --foo=bar",
#   "/tmp/collect_*.sh"
# ]
```

## Timeout for each command to complete.

```
# timeout = "5s"
```

## measurement name suffix (for separating different commands)

```
# name_suffix = "_mycollector"
```

## Data format to consume.

### Each data format has its own unique set of configuration options, read more about them here:

```
# https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
```

```
# data_format = "influx"
```

## Read metrics from fail2ban.

---

**Open Source Used In BGP TE Controller Version 4.3.0 14113**
# [inputs.fail2ban]
# ## Use sudo to run fail2ban-client
# use_sudo = false

# # Read devices value(s) from a Fibaro controller
# [inputs.fibaro]
# ## Required Fibaro controller address/hostname.
# ## Note: at the time of writing this plugin, Fibaro only implemented http - no https available
# url = "http://<controller>:80"
#
# ## Required credentials to access the API (http://<controller/api/<component>)
# username = "<username>"
# password = "<password>"
#
# ## Amount of time allowed to complete the HTTP request
# timeout = "5s"

# # Parse a complete file each interval
# [inputs.file]
# ## Files to parse each interval. Accept standard unix glob matching rules,
# ## as well as ** to match recursive files and directories.
# files = ["/tmp/metrics.out"]
#
# ## Name a tag containing the name of the file the data was parsed from. Leave empty
# ## to disable. Cautious when file name variation is high, this can increase the cardinality
# ## significantly. Read more about cardinality here:
# ## https://docs.influxdata.com/influxdb/cloud/reference/glossary/#series-cardinality
# file_tag = ""
#
# ## Character encoding to use when interpreting the file contents. Invalid
# ## characters are replaced using the unicode replacement character. When set
# ## to the empty string the data is not decoded to text.
# ex: character_encoding = "utf-8"
# character_encoding = "utf-16le"
# character_encoding = "utf-16be"
# character_encoding = ""
# character_encoding = ""
#
# ## The data format to be read from files
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
## Count files in a directory

```yaml
# [inputs.filecount]
#  ## Directory to gather stats about.
#  ## This accept standard unit glob matching rules, but with the addition of
#  ##  ** as a "super asterisk". ie:
#  ##  /var/log/**    -> recursively find all directories in /var/log and count files in each directories
#  ##  /var/log/*/*   -> find all directories with a parent dir in /var/log and count files in each directories
#  ##  /var/log       -> count all files in /var/log and all of its subdirectories
#  directories = ["/var/cache/apt/archives"]
#
#  ## Only count files that match the name pattern. Defaults to "*".
#  name = "*.deb"
#
#  ## Count files in subdirectories. Defaults to true.
#  recursive = false
#
#  ## Only count regular files. Defaults to true.
#  regular_only = true
#
#  ## Follow all symlinks while walking the directory tree. Defaults to false.
#  follow_symlinks = false
#
#  ## Only count files that are at least this size. If size is
#  ##  a negative number, only count files that are smaller than the
#  ##  absolute value of size. Acceptable units are B, KiB, MiB, KB, ...
#  ##  Without quotes and units, interpreted as size in bytes.
#  size = "0B"
#
#  ## Only count files that have not been touched for at least this
#  ## duration. If mtime is negative, only count files that have been
#  ## touched in this duration. Defaults to "0s".
#  mtime = "0s"
```

## Read stats about given file(s)

```yaml
# [inputs.filestat]
#  ## Files to gather stats about.
#  ## These accept standard unix glob matching rules, but with the addition of
#  ##  ** as a "super asterisk". ie:
#  ##  "/var/log/**.log"  -> recursively find all .log files in /var/log
#  ##  "/var/log/*/*.log" -> find all .log files with a parent dir in /var/log
#  ##  "/var/log/apache.log" -> just tail the apache log file
#  directories = ["/var/cache/apt/archives"]
```
# ## See https://github.com/gobwas/glob for more examples
# ##
# files = ["/var/log/**.log"]
#
# ## If true, read the entire file and calculate an md5 checksum.
# md5 = false

## Read real time temps from fireboard.io servers
## [inputs.fireboard]
## Specify auth token for your account
# auth_token = "invalidAuthToken"
## You can override the fireboard server URL if necessary
# url = https://fireboard.io/api/v1/devices.json
## You can set a different http_timeout if you need to
## You should set a string using an number and time indicator
## for example "12s" for 12 seconds.
# http_timeout = "4s"

## Read metrics exposed by fluentd in_monitor plugin
## [inputs.fluentd]
## This plugin reads information exposed by fluentd (using /api/plugins.json endpoint).
##
## Endpoint:
## - only one URI is allowed
## - https is not supported
# endpoint = "http://localhost:24220/api/plugins.json"
#
## Define which plugins have to be excluded (based on "type" field - e.g. monitor_agent)
# exclude = [  
#   "monitor_agent",  
#   "dummy",  
# ]

## Gather repository information from GitHub hosted repositories.
## [inputs.github]
## List of repositories to monitor.
# repositories = [  
#   "influxdata/telegraf",  
#   "influxdata/influxdb"  
# ]
##
## Github API access token. Unauthenticated requests are limited to 60 per hour.
# access_token = ""
## Github API enterprise url. Github Enterprise accounts must specify their base url.
```toml
# enterprise_base_url = ""
#
# Timeout for HTTP requests.
# http_timeout = "5s"
#
# List of additional fields to query.
# NOTE: Getting those fields might involve issuing additional API-calls, so please
# make sure you do not exceed the rate-limit of GitHub.
#
# Available fields are:
# - pull-requests-- number of open and closed pull requests (2 API-calls per repository)
# additional_fields = []

# Read flattened metrics from one or more GrayLog HTTP endpoints
[[inputs.graylog]]
# API endpoint, currently supported API:
#
# - multiple (e.g. http://<host>:9000/api/system/metrics/multiple)
# - namespace (e.g. http://<host>:9000/api/system/metrics/namespace/{namespace})
#
# For namespace endpoint, the metrics array will be ignored for that call.
# Endpoint can contain namespace and multiple type calls.
#
# Please check http://[graylog-server-ip]:9000/api/api-browser for full list
# of endpoints
servers = [
  "http://[graylog-server-ip]:9000/api/system/metrics/multiple",
]

# Metrics list
# List of metrics can be found on Graylog webservice documentation.
# Or by hitting the web service api at:
# http://[graylog-host]:9000/api/system/metrics
metrics = [
  "jvm.cl.loaded",
  "jvm.memory.pools.Metaspace.committed"
]

# Username and password
username = ""
password = ""

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
```

# insecure_skip_verify = false

## Read metrics of haproxy, via socket or csv stats page
[[inputs.haproxy]]
### An array of address to gather stats about. Specify an ip on hostname
### with optional port. ie localhost, 10.10.3.33:1936, etc.
### Make sure you specify the complete path to the stats endpoint
### including the protocol, ie http://10.10.3.33:1936/haproxy?stats
### If no servers are specified, then default to 127.0.0.1:1936/haproxy?stats
### servers = ["http://myhaproxy.com:1936/haproxy?stats"]
### Credentials for basic HTTP authentication
### username = "admin"
### password = "admin"
### You can also use local socket with standard wildcard globbing.
### Server address not starting with 'http' will be treated as a possible
### socket, so both examples below are valid.
### servers = ["socket:/run/haproxy/admin.sock", "/run/haproxy/*.sock"]
### By default, some of the fields are renamed from what haproxy calls them.
### Setting this option to true results in the plugin keeping the original
### field names.
### keep_field_names = false
### Optional TLS Config
### tls_ca = "/etc/telegraf/ca.pem"
### tls_cert = "/etc/telegraf/cert.pem"
### tls_key = "/etc/telegraf/key.pem"
### Use TLS but skip chain & host verification
### insecure_skip_verify = false

## Monitor disks' temperatures using hddtemp
[[inputs.hddtemp]]
### By default, telegraf gathers temps data from all disks detected by the
### hddtemp.
### Only collect temps from the selected disks.
### A * as the device name will return the temperature values of all disks.
### address = "127.0.0.1:7634"
### devices = ["sda", "]*"]
Read formatted metrics from one or more HTTP endpoints

## One or more URLs from which to read formatted metrics
```
urls = [
  "http://localhost/metrics"
]
```

## HTTP method
```
method = "GET"
```

## Optional HTTP headers
```
headers = {"X-Special-Header" = "Special-Value"}
```

## Optional file with Bearer token
```
bearer_token = "/path/to/file"
```

## Optional HTTP Basic Auth Credentials
```
username = "username"
password = "password"
```

## HTTP entity-body to send with POST/PUT requests.
```
body = ""
```

## HTTP Content-Encoding for write request body, can be set to "gzip" to
## compress body or "identity" to apply no encoding.
```
content_encoding = "identity"
```

## HTTP Proxy support
```
http_proxy_url = ""
```

## OAuth2 Client Credentials Grant
```
client_id = "clientid"
client_secret = "secret"
token_url = "https://identityprovider/oauth2/v1/token"
scopes = ["urn:opc:idm:__myscopes__"]
```

## Optional TLS Config
```
ts_ca = "/etc/telegraf/ca.pem"
ts_cert = "/etc/telegraf/cert.pem"
ts_key = "/etc/telegraf/key.pem"
```

## Use TLS but skip chain & host verification
```
insecure_skip_verify = false
```

## Optional Cookie authentication
```
cookie_auth_url = "https://localhost/authMe"
cookie_auth_method = "POST"
cookie_auth_username = "username"
# # cookie_auth_password = "pa$$word"
# # cookie_auth_body = '{ "username": "user", "password": "pa$$word", "authenticate": "me" }'
# ## cookie_auth_renewal not set or set to "0" will auth once and never renew the cookie
# # cookie_auth_renewal = "5m"
#
# ## Amount of time allowed to complete the HTTP request
# # timeout = "5s"
#
# ## List of success status codes
# # success_status_codes = [200]
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"

# # HTTP/HTTPS request given an address a method and a timeout
# [[inputs.http_response]]
# ### Deprecated in 1.12, use `urls`
# ### Server address (default http://localhost)
# # address = "http://localhost"
#
# ### List of urls to query.
# # urls = ["http://localhost"]
#
# ### Set http_proxy (telegraf uses the system wide proxy settings if it's is not set)
# # http_proxy = "http://localhost:8888"
#
# ### Set response_timeout (default 5 seconds)
# # response_timeout = "5s"
#
# ### HTTP Request Method
# # method = "GET"
#
# ### Whether to follow redirects from the server (defaults to false)
# # follow_redirects = false
#
# ### Optional file with Bearer token
# ### file content is added as an Authorization header
# # bearer_token = "/path/to/file"
#
# ### Optional HTTP Basic Auth Credentials
# # username = "username"
# # password = "pa$$word"
#
# ### Optional HTTP Request Body
# body = ""
# {'fake': 'data'}
# ""

# Optional name of the field that will contain the body of the response.
# By default it is set to an empty String indicating that the body's content won't be added
# response_body_field = ""

# Maximum allowed HTTP response body size in bytes.
# 0 means to use the default of 32MiB.
# If the response body size exceeds this limit a "body_read_error" will be raised
# response_body_max_size = "32MiB"

# Optional substring or regex match in body of the response (case sensitive)
# response_string_match = "\"service_status\": \"up\""
# response_string_match = "ok"
# response_string_match = "\..*\_status\": \?\"up\"

# Expected response status code.
# The status code of the response is compared to this value. If they match, the field
# "response_status_code_match" will be 1, otherwise it will be 0. If the
# expected status code is 0, the check is disabled and the field won't be added.
# response_status_code = 0

# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# HTTP Request Headers (all values must be strings)
# [inputs.http_response.headers]
# Host = "github.com"

# Optional setting to map response http headers into tags
# If the http header is not present on the request, no corresponding tag will be added
# If multiple instances of the http header are present, only the first value will be used
# http_header_tags = ["HTTP_HEADER" = "TAG_NAME"]

# Interface to use when dialing an address
# interface = "eth0"

# Read flattened metrics from one or more JSON HTTP endpoints
# [[inputs.httpjson]]
# DEPRECATED: The 'httpjson' plugin is deprecated in version 1.6.0, use 'inputs.http' instead.
# NOTE This plugin only reads numerical measurements, strings and booleans
## Name for the service being polled. Will be appended to the name of the measurement e.g. httpjson_webserver_stats
## Deprecated (1.3.0): Use name_override, name_suffix, name_prefix instead.
name = "webserver_stats"

## URL of each server in the service's cluster
servers = [
  "http://localhost:9999/stats/",
  "http://localhost:9998/stats/",
]

## Set response_timeout (default 5 seconds)
response_timeout = "5s"

## HTTP method to use: GET or POST (case-sensitive)
method = "GET"

## List of tag names to extract from top-level of JSON server response
tag_keys = [
  "my_tag_1",
  "my_tag_2"
]

## Optional TLS Config
tls_ca = "/etc/telegraf/ca.pem"
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"

## Use TLS but skip chain & host verification
insecure_skip_verify = false

## HTTP parameters (all values must be strings). For "GET" requests, data will be included in the query. For "POST" requests, data will be included in the request body as "x-www-form-urlencoded".
[inputs.httpjson.parameters]
event_type = "cpu_spike"
threshold = "0.75"

## HTTP Headers (all values must be strings)
[inputs.httpjson.headers]
X-Auth-Token = "my-xauth-token"
apiVersion = "v1"

## Gather Icinga2 status
[inputs.icinga2]
## Required Icinga2 server address
# # server = "https://localhost:5665"
#
# ## Required Icinga2 object type ("services" or "hosts")
# # object_type = "services"
#
# # ## Credentials for basic HTTP authentication
# # username = "admin"
# # password = "admin"
#
# # ## Maximum time to receive response.
# # response_timeout = "5s"
#
# # ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # ## Use TLS but skip chain & host verification
# # insecure_skip_verify = true
#
#
# # Gets counters from all InfiniBand cards and ports installed
# # [[inputs.infiniband]]
# # no configuration
#
# # Read InfluxDB-formatted JSON metrics from one or more HTTP endpoints
# # [[inputs.influxdb]]
# ## Works with InfluxDB debug endpoints out of the box,
# ## but other services can use this format too.
# ## See the influxdb plugin's README for more details.
# # ## Multiple URLs from which to read InfluxDB-formatted JSON
# # Default is "http://localhost:8086/debug/vars".
# # urls = [
#   "http://localhost:8086/debug/vars"
# ]
#
# # ## Username and password to send using HTTP Basic Authentication.
# # username = ""
# # password = ""
#
# # ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
```
# # http request & header timeout
# timeout = "5s"

## Intel PowerStat plugin enables monitoring of platform metrics (power, TDP) and Core metrics like temperature,
# power and utilization.
# [[inputs.intel_powerstat]]
# ## All global metrics are always collected by Intel PowerStat plugin.
# ## User can choose which per-CPU metrics are monitored by the plugin in cpu_metrics array.
# ## Empty array means no per-CPU specific metrics will be collected by the plugin - in this case only platform
# ## telemetry will be exposed by Intel PowerStat plugin.
# ## Supported options:
# ## "cpu_frequency", "cpu_busy_frequency", "cpu_temperatue", "cpu_c1_state_residency",
# "cpu_c6_state_residency", "cpu_busy_cycles"
# # cpu_metrics = []

## Collect statistics about itself
# [[inputs.internal]]
# ## If true, collect telegraf memory stats.
# # collect_memstats = true

## Monitors internet speed using speedtest.net service
# [[inputs.internet_speed]]
# ## Sets if runs file download test
# ## Default: false
# # enable_file_download = false

## This plugin gathers interrupts data from /proc/interrupts and /proc/softirqs.
# [[inputs.interrupts]]
# ## When set to true, cpu metrics are tagged with the cpu. Otherwise cpu is
# ## stored as a field.
# ## The default is false for backwards compatibility, and will be changed to
# ## true in a future version. It is recommended to set to true on new
# ## deployments.
# # cpu_as_tag = false
# # To filter which IRQs to collect, make use of tagpass / tagdrop, i.e.
# # [[inputs.interrupts.tagdrop]]
# # irq = [ "NET_RX", "TASKLET" ]

## Read metrics from the bare metal servers via IPMI
# [[inputs.ipmi_sensor]]
```
# # optionally specify the path to the ipmitool executable
# # path = "/usr/bin/ipmitool"
#
# # Setting 'use_sudo' to true will make use of sudo to run ipmitool.
# # Sudo must be configured to allow the telegraf user to run ipmitool
# # without a password.
# # use_sudo = false
#
# # optionally force session privilege level. Can be CALLBACK, USER, OPERATOR, ADMINISTRATOR
# # privilege = "ADMINISTRATOR"
#
# # optionally specify one or more servers via a url matching
# # [username[:password]@[][protocol][address])
# # e.g.
# # root:passwd@lan(127.0.0.1)
#
# # if no servers are specified, local machine sensor stats will be queried
#
# # servers = ["USERID:PASSW0RD@lan(192.168.1.1)"
#
# # Recommended: use metric 'interval' that is a multiple of 'timeout' to avoid
# # gaps or overlap in pulled data
# # interval = "30s"
#
# # Timeout for the ipmitool command to complete
# # timeout = "20s"
#
# # Schema Version: (Optional, defaults to version 1)
# # metric_version = 2
#
# # Optionally provide the hex key for the IMPI connection.
# # hex_key = ""
#
# # If ipmitool should use a cache
# # for me ipmitool runs about 2 to 10 times faster with cache enabled on HP G10 servers (when using
# # ubuntu20.04)
# # the cache file may not work well for you if some sensors come up late
# # use_cache = false
#
# # Path to the ipmitools cache file (defaults to OS temp dir)
# # The provided path must exist and must be writable
# # cache_path = ""
#
# # Gather packets and bytes counters from Linux ipsets
# [[inputs.ipset]]
# # By default, we only show sets which have already matched at least 1 packet.
# # set include_unmatched_sets = true to gather them all.
# include_unmatched_sets = false
# ## Adjust your sudo settings appropriately if using this option ("sudo ipset save")
# use_sudo = false
# ## The default timeout of 1s for ipset execution can be overridden here:
# # timeout = "1s"

## Gather packets and bytes throughput from iptables
# [[inputs.iptables]]
# ## iptables require root access on most systems.
# ## Setting 'use_sudo' to true will make use of sudo to run iptables.
# ## Users must configure sudo to allow telegraf user to run iptables with no password.
# ## iptables can be restricted to only list command "iptables -nvL".
# use_sudo = false
# ## Setting 'use_lock' to true runs iptables with the "-w" option.
# ## Adjust your sudo settings appropriately if using this option ("iptables -w 5 -nvL")
# use_lock = false
# ## Define an alternate executable, such as "ip6tables". Default is "iptables".
# # binary = "ip6tables"
# ## defines the table to monitor:
# table = "filter"
# ## defines the chains to monitor.
# ## NOTE: iptables rules without a comment will not be monitored.
# ## Read the plugin documentation for more information.
# chains = [ "INPUT" ]

## Collect virtual and real server stats from Linux IPVS
# [[inputs.ipvs]]
# # no configuration

## Read jobs and cluster metrics from Jenkins instances
# [[inputs.jenkins]]
# ## The Jenkins URL in the format "schema://host:port"
# url = "http://my-jenkins-instance:8080"
# # username = "admin"
# # password = "admin"
# # Set response_timeout
# response_timeout = "5s"
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use SSL but skip chain & host verification
# # insecure_skip_verify = false
# Optional Max Job Build Age filter
# Default 1 hour, ignore builds older than max_build_age
# max_build_age = "1h"
#
# Optional Sub Job Depth filter
# Jenkins can have unlimited layer of sub jobs
# This config will limit the layers of pulling, default value 0 means
# unlimited pulling until no more sub jobs
# max_subjob_depth = 0
#
# Optional Sub Job Per Layer
# In workflow-multibranch-plugin, each branch will be created as a sub job.
# This config will limit to call only the lasted branches in each layer,
# empty will use default value 10
# max_subjob_per_layer = 10
#
# Jobs to include or exclude from gathering
# When using both lists, job_exclude has priority.
# Wildcards are supported: [ "jobA/*", "jobB/subjob1/*" ]
# job_include = [ "*" ]
# job_exclude = [ ]
#
# Nodes to include or exclude from gathering
# When using both lists, node_exclude has priority.
# node_include = [ "*" ]
# node_exclude = [ ]
#
# Worker pool for jenkins plugin only
# Empty this field will use default value 5
# max_connections = 5

# Read JMX metrics through Jolokia
# [inputs.jolokia]
# DEPRECATED: The 'jolokia' plugin is deprecated in version 1.5.0, use 'inputs.jolokia2' instead.
# DEPRECATED: the jolokia plugin has been deprecated in favor of the
# jolokia2 plugin
# see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/jolokia2
#
# This is the context root used to compose the jolokia url
# NOTE that Jolokia requires a trailing slash at the end of the context root
# NOTE that your jolokia security policy must allow for POST requests.
# context = "/jolokia/
#
# This specifies the mode used
# mode = "proxy"
When in proxy mode this section is used to specify further
proxy address configurations.
Remember to change host address to fit your environment.

## [inputs.jolokia.proxy]

- **host** = "127.0.0.1"
- **port** = "8080"

## Optional http timeouts

- **response_header_timeout**, if non-zero, specifies the amount of time to wait
  for a server's response headers after fully writing the request.
- **response_header_timeout** = "3s"

## client_timeout specifies a time limit for requests made by this client.
Includes connection time, any redirects, and reading the response body.
- **client_timeout** = "4s"

## Attribute delimiter

- **delimiter** = "_"

## List of servers exposing jolokia read service

- **[[inputs.jolokia.servers]]
  - **name** = "as-server-01"
  - **host** = "127.0.0.1"
  - **port** = "8080"
  - **username** = "myuser"
  - **password** = "mypassword"

## List of metrics collected on above servers

- **[[inputs.jolokia.metrics]]
  - **name** = "heap_memory_usage"
  - **mbean** = "java.lang:type=Memory"
  - **attribute** = "HeapMemoryUsage"

- **[[inputs.jolokia.metrics]]
  - **name** = "thread_count"
  - **mbean** = "java.lang:type=Threading"
  - **attribute** = "TotalStartedThreadCount,ThreadCount,DaemonThreadCount,PeakThreadCount"

- **[[inputs.jolokia.metrics]]
  - **name** = "number of class loaded/unloaded counts metrics"
# [inputs.jolokia.metrics]
# name = "class_count"
# mbean = "java.lang:type=ClassLoading"
# attribute = "LoadedClassCount,UnloadedClassCount,TotalLoadedClassCount"

## Read JMX metrics from a Jolokia REST agent endpoint
# [inputs.jolokia2_agent]
# # default_tag_prefix = ""
# # default_field_prefix = ""
# # default_field_separator = "."
# # Add agents URLs to query
# urls = ["http://localhost:8080/jolokia"]
# # username = ""
# # password = ""
# # response_timeout = "5s"
# # Optional TLS config
# # tls_ca = "/var/private/ca.pem"
# # tls_cert = "/var/private/client.pem"
# # tls_key = "/var/private/client-key.pem"
# # insecure_skip_verify = false
# # Add metrics to read
# [inputs.jolokia2_agent.metric]
# name = "java_runtime"
# mbean = "java.lang:type=Runtime"
# paths = ["Uptime"]

## Read JMX metrics from a Jolokia REST proxy endpoint
# [inputs.jolokia2_proxy]
# # default_tag_prefix = ""
# # default_field_prefix = ""
# # default_field_separator = "."
# # Proxy agent
# url = "http://localhost:8080/jolokia"
# # username = ""
# # password = ""
# # response_timeout = "5s"
# # Optional TLS config
# # tls_ca = "/var/private/ca.pem"
# # tls_cert = "/var/private/client.pem"
# # tls_key = "/var/private/client-key.pem"
# # insecure_skip_verify = false
# Add proxy targets to query
# default_target_username = ""
# default_target_password = ""
[[inputs.jolokia2_proxy.target]]
url = "service:jmx:rmi:///jndi/rmi://targethost:9999/jmxrmi"
# username = ""
# password = ""

# Add metrics to read
[[inputs.jolokia2_proxy.metric]]
name = "java_runtime"
# mbean = "java.lang:type=Runtime"
paths = ["Uptime"]

# Read Kapacitor-formatted JSON metrics from one or more HTTP endpoints
[[inputs.kapacitor]]
## Multiple URLs from which to read Kapacitor-formatted JSON
## Default is "http://localhost:9092/kapacitor/v1/debug/vars".
urls = ["http://localhost:9092/kapacitor/v1/debug/vars"
]
## Time limit for http requests
timeout = "5s"

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
insecure_skip_verify = false

# Get kernel statistics from /proc/vmstat
[[inputs.kernel_vmstat]]
# no configuration

# Read status information from one or more Kibana servers
[[inputs.kibana]]
## Specify a list of one or more Kibana servers
servers = ["http://localhost:5601"]
## Timeout for HTTP requests
timeout = "5s"
## HTTP Basic Auth credentials
# username = "username"
# password = "pa$$word"

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Read metrics from the Kubernetes api
[[inputs.kube_inventory]]
## URL for the Kubernetes API
# url = "https://127.0.0.1"

## Namespace to use. Set to "" to use all namespaces.
# namespace = "default"

## Use bearer token for authorization. ('bearer_token' takes priority)
## If both of these are empty, we'll use the default serviceaccount:
## at: /run/secrets/kubernetes.io/serviceaccount/token
# bearer_token = "/path/to/bearer/token"
## OR
# bearer_token_string = "abc_123"

## Set response_timeout (default 5 seconds)
# response_timeout = "5s"

## Optional Resources to exclude from gathering
## Leave them with blank with try to gather everything available.
## Values can be - "daemonsets", deployments", "endpoints", "ingress", "nodes",
## "persistentvolumes", "persistentvolumeclaims", "pods", "services", "statefulsets"
# resource_exclude = [ "deployments", "nodes", "statefulsets" ]

## Optional Resources to include when gathering
## Overrides resource_exclude if both set.
# resource_include = [ "deployments", "nodes", "statefulsets" ]

## selectors to include and exclude as tags. Globs accepted.
## Note that an empty array for both will include all selectors as tags
## selector_exclude overrides selector_include if both set.
# selector_include = []
# selector_exclude = ["*"]

## Optional TLS Config
# tls_ca = "/path/to/cafile"
## # tls_cert = "/path/to/certfile"
## # tls_key = "/path/to/keyfile"
## # tls_server_name = "kubernetes.example.com"
## ## Use TLS but skip chain & host verification
## # insecure_skip_verify = false

## # Read metrics from the kubernetes kubelet api
# [[inputs.kubernetes]]
## ## URL for the kubelet
# url = "http://127.0.0.1:10255"
#
## ## Use bearer token for authorization. ('bearer_token' takes priority)
## ## If both of these are empty, we'll use the default service account:
## ## at: /run/secrets/kubernetes.io/serviceaccount/token
## # bearer_token = "/path/to/bearer/token"
## ## OR
## # bearer_token_string = "abc_123"
#
## ## Pod labels to be added as tags. An empty array for both include and
## ## exclude will include all labels.
## # label_include = []
## # label_exclude = ["*"]
#
## ## Set response_timeout (default 5 seconds)
## # response_timeout = "5s"
#
## ## Optional TLS Config
## # tls_ca = /path/to/cafile
## # tls_cert = /path/to/certfile
## # tls_key = /path/to/keyfile
## ## Use TLS but skip chain & host verification
## # insecure_skip_verify = false

## # Read metrics from a LeoFS Server via SNMP
# [[inputs.leofs]]
## ## An array of URLs of the form:
## ##   host [ ":" port]
## servers = ["127.0.0.1:4020"]

## # Provides Linux sysctl fs metrics
# [[inputs.linux_sysctl_fs]]
## # no configuration

## # Read metrics exposed by Logstash
# [[inputs.logstash]]
#   ## The URL of the exposed Logstash API endpoint.
#   url = "http://127.0.0.1:9600"
#
#   ## Use Logstash 5 single pipeline API, set to true when monitoring
#   ## Logstash 5.
#   # single_pipeline = false
#
#   ## Enable optional collection components. Can contain
#   ## "pipelines", "process", and "jvm".
#   # collect = ["pipelines", "process", "jvm"]
#
#   ## Timeout for HTTP requests.
#   # timeout = "5s"
#
#   ## Optional HTTP Basic Auth credentials.
#   # username = "username"
#   # password = "pa$$word"
#
#   ## Optional TLS Config.
#   # tls_ca = "/etc/telegraf/ca.pem"
#   # tls_cert = "/etc/telegraf/cert.pem"
#   # tls_key = "/etc/telegraf/key.pem"
#
#   ## Use TLS but skip chain & host verification.
#   # insecure_skip_verify = false
#
#   ## Optional HTTP headers.
#   # [inputs.logstash.headers]
#   #   "X-Special-Header" = "Special-Value"
#
#   ## Read metrics from local Lustre service on OST, MDS
#   [[inputs.lustre2]]
#   ## An array of /proc globs to search for Lustre stats
#   ## If not specified, the default will work on Lustre 2.5.x
#   ##
#   # ost_procfiles = [
#   #   "/proc/fs/lustre/obdfilter/*/stats",
#   #   "/proc/fs/lustre/osd-ldiskfs/*/stats",
#   #   "/proc/fs/lustre/obdfilter/*/job_stats",
#   # ]
#   # mds_procfiles = [
#   #   "/proc/fs/lustre/mdt/*/md_stats",
#   #   "/proc/fs/lustre/mdt/*/job_stats",
#   # ]
# # Read metrics about LVM physical volumes, volume groups, logical volumes.
# [[inputs.lvm]]
# ## Use sudo to run LVM commands
# use_sudo = false

# # Gathers metrics from the /3.0/reports MailChimp API
# [[inputs.mailchimp]]
# ## MailChimp API key
# api_key = "" # required
# ## Reports for campaigns sent more than days_old ago will not be collected.
# ## 0 means collect all.
# days_old = 0
# ## Campaign ID to get, if empty gets all campaigns, this option overrides days_old
# # campaign_id = ""

# # Retrieves information on a specific host in a MarkLogic Cluster
# [[inputs.marklogic]]
# ## Base URL of the MarkLogic HTTP Server.
# url = "http://localhost:8002"
# # hosts = ["hostname1", "hostname2"]
# # Using HTTP Basic Authentication. Management API requires 'manage-user' role privileges
# # password = "mypassword"
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # Read metrics from one or many mcrouter servers
# [[inputs.mcrouter]]
# ## An array of address to gather stats about. Specify an ip or hostname
# # with port. ie tcp://localhost:11211, tcp://10.0.0.1:11211, etc.
# servers = ["tcp://localhost:11211", "unix:///var/run/mcrouter.sock"]
# # Timeout for metric collections from all servers. Minimum timeout is "1s".
# # timeout = "5s"
## Get md array statistics from /proc/mdstat
```bash
# [[inputs.mdstat]]
# ### Sets file path
# ### If not specified, then default is /proc/mdstat
# file_name = "/proc/mdstat"
```

## Read metrics from one or many memcached servers
```bash
# [[inputs.memcached]]
# ### An array of address to gather stats about. Specify an ip on hostname
# ### with optional port. ie localhost, 10.0.0.1:11211, etc.
# servers = ["localhost:11211"]
# # unix_sockets = ["/var/run/memcached.sock"]
```

## Telegraf plugin for gathering metrics from N Mesos masters
```bash
# [[inputs.mesos]]
# ### Timeout, in ms.
# timeout = 100
#
# ### A list of Mesos masters.
# masters = ["http://localhost:5050"]
#
# ### Master metrics groups to be collected, by default, all enabled.
# master_collections = ["resources", "master", "system", "agents", "frameworks", "framework_offers", "tasks", "messages", "evqueue", "registrar", "allocator"]
#
# ### A list of Mesos slaves, default is []
# slaves = []
#
# ### Slave metrics groups to be collected, by default, all enabled.
# slave_collections = ["resources", "agent", "system", "executors", "tasks"]
```
# "messages",
# ]
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Collects scores from a Minecraft server's scoreboard using the RCON protocol
 [[inputs.minecraft]]
  # Address of the Minecraft server.
  server = "localhost"
  # Server RCON Port.
  port = "25575"
  # Server RCON Password.
  password = ""
  # Uncomment to remove deprecated metric components.
  tagdrop = ["server"]

# Retrieve data from MODBUS slave devices
 [[inputs.modbus]]
  # Connection Configuration
  #
  # The plugin supports connections to PLCs via MODBUS/TCP, RTU over TCP, ASCII over TCP or
  # via serial line communication in binary (RTU) or readable (ASCII) encoding
  #
  # Device name
  name = "Device"
  # Slave ID - addresses a MODBUS device on the bus
  # Range: 0 - 255 [0 = broadcast; 248 - 255 = reserved]
  slave_id = 1
  # Timeout for each request
  # timeout = "1s"
  # Maximum number of retries and the time to wait between retries
  # when a slave-device is busy.
  # busy_retries = 0
  # busy_retries_wait = "100ms"
# # TCP - connect via Modbus/TCP
# controller = "tcp://localhost:502"
#
# ### Serial (RS485; RS232)
# controller = "file:///dev/ttyUSB0"
# baud_rate = 9600
# data_bits = 8
# parity = "N"
# stop_bits = 1
# transmission_mode = "RTU"
#
# ### Trace the connection to the modbus device as debug messages
# Note: You have to enable telegraf's debug mode to see those messages!
# debug_connection = false
#
# ### For Modbus over TCP you can choose between "TCP", "RTUoverTCP" and "ASCIIoverTCP"
# default behaviour is "TCP" if the controller is TCP
# For Serial you can choose between "RTU" and "ASCII"
# transmission_mode = "RTU"
#
# ### Measurements
#
#
# ### Digital Variables, Discrete Inputs and Coils
# measurement - the (optional) measurement name, defaults to "modbus"
# name - the variable name
# address - variable address
#
# discrete_inputs = [
#   { name = "start", address = [0]},
#   { name = "stop", address = [1]},
#   { name = "reset", address = [2]},
#   { name = "emergency_stop", address = [3]},
# ]
#
# coils = [
#   { name = "motor1_run", address = [0]},
#   { name = "motor1_jog", address = [1]},
#   { name = "motor1_stop", address = [2]},
# ]
#
# ### Analog Variables, Input Registers and Holding Registers
# measurement - the (optional) measurement name, defaults to "modbus"
# name - the variable name
# byte_order - the ordering of bytes
# |---AB, ABCD - Big Endian
# |---BA, DCBA - Little Endian
# |---BADC - Mid-Big Endian
# |---CDAB - Mid-Little Endian
# holding_registers = [
#     { name = "power_factor", byte_order = "AB", data_type = "FIXED", scale=0.01, address = [8]},
#     { name = "voltage", byte_order = "AB", data_type = "FIXED", scale=0.1, address = [0]},
#     { name = "energy", byte_order = "ABCD", data_type = "FIXED", scale=0.001, address = [5,6]},
#     { name = "current", byte_order = "ABCD", data_type = "FIXED", scale=0.001, address = [1,2]},
#     { name = "frequency", byte_order = "AB", data_type = "UFIXED", scale=0.1, address = [7]},
#     { name = "power", byte_order = "ABCD", data_type = "UFIXED", scale=0.1, address = [3,4]},
# ]
#
# input_registers = [
#     { name = "tank_level", byte_order = "AB", data_type = "INT16", scale=1.0, address = [0]},
#     { name = "tank_ph", byte_order = "AB", data_type = "INT16", scale=1.0, address = [1]},
#     { name = "pump1_speed", byte_order = "ABCD", data_type = "INT32", scale=1.0, address = [3,4]},
# ]
#
## Enable workarounds required by some devices to work correctly
## [inputs.modbus.workarounds]
## Pause between read requests sent to the device. This might be necessary for (slow) serial devices.
## pause_between_requests = "0ms"
## Close the connection after every gather cycle. Usually the plugin closes the connection after a certain idle-timeout, however, if you query a device with limited simultaneous connectivity (e.g. serial devices) from multiple instances you might want to only stay connected during gather and disconnect afterwards.
## close_connection_after_gather = false
#
## Read metrics from one or many MongoDB servers
## [inputs.mongodb]
## An array of URLs of the form:
##   "mongodb://" [user ":" pass "@" ] host [ ":" port]
## For example:
##   mongodb://user:auth_key@10.10.3.30:27017,
##   mongodb://10.10.3.33:18832,
## servers = ["mongodb://127.0.0.1:27017?connect=direct"]
##
## When true, collect cluster status
## Note that the query that counts jumbo chunks triggers a COLLSCAN, which may have an impact on performance.
## gather_cluster_status = true
##
## When true, collect per database stats
## gather_perdb_stats = false
##
## When true, collect per collection stats
# # gather_col_stats = false
#
# # When true, collect usage statistics for each collection
# # (insert, update, queries, remove, getmore, commands etc...).
# # gather_top_stat = false
#
# # List of db where collections stats are collected
# # If empty, all db are concerned
# # col_stats_dbs = ["local"]
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # Read metrics and status information about processes managed by Monit
# [[inputs.monit]]
# # Monit HTTPD address
# # address = "http://127.0.0.1:2812"
#
# # Username and Password for Monit
# # username = ""
# # password = ""
#
# # Amount of time allowed to complete the HTTP request
# # timeout = "5s"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # Aggregates the contents of multiple files into a single point
# [[inputs.multifile]]
# # Base directory where telegraf will look for files.
# # Omit this option to use absolute paths.
# # base_dir = "/sys/bus/i2c/devices/1-0076/iio:device0"
#
# # If true, Telegraf discard all data when a single file can't be read.
# # Else, Telegraf omits the field generated from this file.
# # fail_early = true
# Files to parse each interval.
# [[inputs.multifile.file]]
# file = "in_pressure_input"
# dest = "pressure"
# conversion = "float"
# [[inputs.multifile.file]]
# file = "in_temp_input"
# dest = "temperature"
# conversion = "float(3)"
# [[inputs.multifile.file]]
# file = "in_humidityrelative_input"
# dest = "humidityrelative"
# conversion = "float(3)"

# Read metrics from one or many mysql servers
# [[inputs.mysql]]
# ## specify servers via a url matching:
# ## [username[:password]@[protocol[(address)]]/?tls=[true|false|skip-verify|custom]]
# ## see https://github.com/go-sql-driver/mysql#dsn-data-source-name
# ## e.g.
# ## servers = ["user:passwd@tcp(127.0.0.1:3306)/?tls=false"]
# ## servers = ["user@tcp(127.0.0.1:3306)/?tls=false"]
# #
# ## If no servers are specified, then localhost is used as the host.
# servers = ["tcp(127.0.0.1:3306)/"]
#
# ## Selects the metric output format.
# ##
# ## This option exists to maintain backwards compatibility, if you have
# ## existing metrics do not set or change this value until you are ready to
# ## migrate to the new format.
# ##
# ## If you do not have existing metrics from this plugin set to the latest
# ## version.
# ##
# ## Telegraf >=1.6: metric_version = 2
# ## <1.6: metric_version = 1 (or unset)
# metric_version = 2
#
# ## if the list is empty, then metrics are gathered from all database tables
# # table_schema_databases = []
#
# ## gather metrics from INFORMATION_SCHEMA.TABLES for databases provided above list
# # gather_table_schema = false
#
# ## gather thread state counts from INFORMATION_SCHEMA.PROCESSLIST
# # gather_process_list = false
# # gather user statistics from INFORMATION_SCHEMA.USER_STATISTICS
# # gather_user_statistics = false
#
# # gather auto_increment columns and max values from information schema
# # gather_info_schema_auto_inc = false
#
# # gather metrics from INFORMATION_SCHEMA.INNODB_METRICS
# # gather_innodb_metrics = false
#
# # gather metrics from SHOW SLAVE STATUS command output
# # gather_slave_status = false
#
# # gather metrics from all channels from SHOW SLAVE STATUS command output
# # gather_all_slave_channels = false
#
# # use MariaDB dialect for all channels SHOW SLAVE STATUS
# # mariadb_dialect = false
#
# # gather metrics from SHOW BINARY LOGS command output
# # gather_binary_logs = false
#
# # gather metrics from PERFORMANCE_SCHEMA.GLOBAL_VARIABLES
# # gather_global_variables = true
#
# # gather metrics from PERFORMANCE_SCHEMA.TABLE_IO_WAITS_SUMMARY_BY_TABLE
# # gather_table_io_waits = false
#
# # gather metrics from PERFORMANCE_SCHEMA.TABLE_LOCK_WAITS
# # gather_table_lock_waits = false
#
# # gather metrics from PERFORMANCE_SCHEMA.TABLE_IO_WAITS_SUMMARY_BY_INDEX_USAGE
# # gather_index_io_waits = false
#
# # gather metrics from PERFORMANCE_SCHEMA.EVENT_WAITS
# # gather_event_waits = false
#
# # gather metrics from PERFORMANCE_SCHEMA.FILE_SUMMARY_BY_EVENT_NAME
# # gather_file_events_stats = false
#
# # gather metrics from PERFORMANCE_SCHEMA.EVENTS_STATEMENTS_SUMMARY_BY_DIGEST
# # gather_perf_events_statements = false
#
# # the limits for metrics form perf_events_statements
# # perf_events_statements_digest_text_limit = 120
# # perf_events_statements_limit = 250
# # perf_events_statements_time_limit = 86400
# #
## Telegraf configuration

```yaml
# Telegraf configuration

# # gather metrics from
PERFORMANCE_SCHEMA.EVENTS_STATEMENTS_SUMMARY_BY_ACCOUNT_BY_EVENT_NAME
# # gather_perf_sum_per_acc_per_event = false
#
# # list of events to be gathered for gather_perf_sum_per_acc_per_event
# # in case of empty list all events will be gathered
# # perf_summary_events = []
#
# # Some queries we may want to run less often (such as SHOW GLOBAL VARIABLES)
# # example: interval_slow = "30m"
# # interval_slow = ""
#
# # Optional TLS Config (will be used if tls=custom parameter specified in server uri)
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# # Provides metrics about the state of a NATS server
# [[inputs.nats]]
# # The address of the monitoring endpoint of the NATS server
# # server = "http://localhost:8222"
#
# # Maximum time to receive response
# # response_timeout = "5s"

# # Neptune Apex data collector
# [[inputs.neptune_apex]]
# # The Neptune Apex plugin reads the publicly available status.xml data from a local Apex.
# # Measurements will be logged under "apex".
#
# # The base URL of the local Apex(es). If you specify more than one server, they will
# # be differentiated by the "source" tag.
# servers = [  
#   "http://apex.local",  
# ]
#
# # The response_timeout specifies how long to wait for a reply from the Apex.
# # response_timeout = "5s"

# # Read metrics about network interface usage
# [[inputs.net]]
# # By default, telegraf gathers stats from any up interface (excluding loopback)
# # Setting interfaces will tell it to gather these explicit interfaces,
```

---

*Open Source Used In BGP TE Controller Version 4.3.0 14142*
# # regardless of status.
# #
# # interfaces = ["eth0"]
##
# # On linux systems telegraf also collects protocol stats.
# # Setting ignore_protocol_stats to true will skip reporting of protocol metrics.
##
# # ignore_protocol_stats = false
##

## Collect response time of a TCP or UDP connection
[[inputs.net_response]]
## Protocol, must be "tcp" or "udp"
## NOTE: because the "udp" protocol does not respond to requests, it requires
## a send/expect string pair (see below).
protocol = "tcp"
## Server address (default localhost)
address = "localhost:80"
#
## Set timeout
# timeout = "1s"
#
## Set read timeout (only used if expecting a response)
# read_timeout = "1s"
#
## The following options are required for UDP checks. For TCP, they are
## optional. The plugin will send the given string to the server and then
## expect to receive the given 'expect' string back.
## string sent to the server
# send = "ssh"
## expected string in answer
# expect = "ssh"
#
## Uncomment to remove deprecated fields
# fielddrop = ["result_type", "string_found"]

## Read TCP metrics such as established, time wait and sockets counts.
[[inputs.netstat]]
## no configuration

## Read per-mount NFS client metrics from /proc/self/mountstats
[[inputs.nfsclient]]
## Read more low-level metrics (optional, defaults to false)
# fullstat = false
#
### List of mounts to explicitly include or exclude (optional)
#
### The pattern (Go regexp) is matched against the mount point (not the
### device being mounted). If include_mounts is set, all mounts are ignored
### unless present in the list. If a mount is listed in both include_mounts
### and exclude_mounts, it is excluded. Go regexp patterns can be used.
#
```yaml
# include_mounts = []
# exclude_mounts = []
```

### List of operations to include or exclude from collecting. This applies
### only when fullstat=true. Syntax is similar to {include,exclude}_mounts:
### the default is to collect everything; when include_operations is set, only
### those OPs are collected; when exclude_operations is set, all are collected
### except those listed. If include and exclude are set, the OP is excluded.
### See /proc/self/mountstats for a list of valid operations; note that
### NFSv3 and NFSv4 have different lists. While it is not possible to
### have different include/exclude lists for NFSv3/4, unused elements
### in the list should be okay. It is possible to have different lists
### for different mountpoints: use multiple [input.nfsclient] stanzas,
### with their own lists. See "include_mounts" above, and be careful of
### duplicate metrics.
#
```yaml
# include_operations = []
# exclude_operations = []
```

---

### Read Nginx's basic status information (ngx_http_stub_status_module)
```
[[inputs.nginx]]
```

### An array of Nginx stub_status URI to gather stats.
- urls = ["http://localhost/server_status"]

### Optional TLS Config
- tls_ca = "/etc/telegraf/ca.pem"
- tls_cert = "/etc/telegraf/cert.cer"
- tls_key = "/etc/telegraf/key.key"

### Use TLS but skip chain & host verification
- insecure_skip_verify = false

### HTTP response timeout (default: 5s)
- response_timeout = "5s"

---

### Read Nginx Plus' full status information (ngx_http_status_module)
```
[[inputs.nginx_plus]]
```

### An array of ngx_http_status_module or status URI to gather stats.
- urls = ["http://localhost/status"]

### HTTP response timeout (default: 5s)
- response_timeout = "5s"
## Optional TLS Config

```python
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
```

## Read Nginx Plus Api documentation

```python
# [[inputs.nginx_plus_api]]
# ## An array of API URI to gather stats.
# urls = ["http://localhost/api"]
#
# ## Nginx API version, default: 3
# # api_version = 3
#
# ## HTTP response timeout (default: 5s)
# # response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # # insecure_skip_verify = false
```

## Read Nginx virtual host traffic status module information (nginx-module-sts)

```python
# [[inputs.nginx_sts]]
# ## An array of ngx_http_status_module or status URI to gather stats.
# urls = ["http://localhost/status"]
#
# ## HTTP response timeout (default: 5s)
# # response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # # insecure_skip_verify = false
```

## Read nginx_upstream_check module status information

(https://github.com/yaoweibin/nginx_upstream_check_module)

```python
# [[inputs.nginx_upstream_check]]
# ## An URL where Nginx Upstream check module is enabled
# ## It should be set to return a JSON formatted response
```
# url = "http://127.0.0.1/status?format=json"
#
# ## HTTP method
# # method = "GET"
#
# ## Optional HTTP headers
# # headers = {"X-Special-Header" = "Special-Value"}
#
# ## Override HTTP "Host" header
# # host_header = "check.example.com"
#
# ## Timeout for HTTP requests
# # timeout = "5s"
#
# ## Optional HTTP Basic Auth credentials
# # username = "username"
# # password = "pa$$word"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# ## Read Nginx virtual host traffic status module information (nginx-module-vts)
# [[inputs.nginx_vts]]
# ## An array of ngx_http_status_module or status URI to gather stats.
# # urls = ["http://localhost/status"]
#
# ## HTTP response timeout (default: 5s)
# # response_timeout = "5s"
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false

# ## A plugin to collect stats from the NSD authoritative DNS name server
# [[inputs.nsd]]
# ## Address of server to connect to, optionally :port. Defaults to the
# # address in the nsd config file.
# # server = "127.0.0.1:8953"
# # If running as a restricted user you can prepend sudo for additional access:
# use_sudo = false
#
# # The default location of the nsd-control binary can be overridden with:
# binary = "/usr/sbin/nsd-control"
#
# # The default location of the nsd config file can be overridden with:
# config_file = "/etc/nsd/nsd.conf"
#
# # The default timeout of 1s can be overridden with:
# timeout = "1s"

## Read NSQ topic and channel statistics.
[[inputs.nsq]]
 # # An array of NSQD HTTP API endpoints
# endpoints = ["http://localhost:4151"]
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Collect kernel snmp counters and network interface statistics
[[inputs.nstat]]
 # # file paths for proc files. If empty default paths will be used:
# # /proc/net/netstat, /proc/net/snmp, /proc/net/snmp6
# # These can also be overridden with env variables, see README.
# proc_net_netstat = "/proc/net/netstat"
# proc_net_snmp = "/proc/net/snmp"
# proc_net_snmp6 = "/proc/net/snmp6"
# # dump metrics with 0 values too
# dump_zeros = true

## Get standard NTP query metrics, requires ntpq executable.
[[inputs.ntpq]]
 # # If false, set the -n ntpq flag. Can reduce metric gather time.
# dns_lookup = true

## Pulls statistics from nvidia GPUs attached to the host
[[inputs.nvidia_smi]]
 # # Optional: path to nvidia-smi binary, defaults "/usr/bin/nvidia-smi"
# # We will first try to locate the nvidia-smi binary with the explicitly specified value (or default value),
## Retrieve data from OPCUA devices

### Metric name

- `name = "opcua"`

### OPC UA Endpoint URL

- `endpoint = "opc.tcp://localhost:4840"`

### Maximum time allowed to establish a connect to the endpoint.

- `connect_timeout = "10s"`

### Maximum time allowed for a request over the established connection.

- `request_timeout = "5s"`

### Security policy, one of "None", "Basic128Rsa15", "Basic256", "Basic256Sha256", or "auto"

- `security_policy = "auto"`

### Security mode, one of "None", "Sign", "SignAndEncrypt", or "auto"

- `security_mode = "auto"`

### Path to cert.pem. Required when security mode or policy isn't "None".

- `certificate = "/etc/telegraf/cert.pem"`

### Path to private key.pem. Required when security mode or policy isn't "None".

- `private_key = "/etc/telegraf/key.pem"`

### Authentication Method, one of "Certificate", "UserName", or "Anonymous". To authenticate using a specific ID, select 'Certificate' or 'UserName'

- `auth_method = "Anonymous"`

### Username. Required for auth_method = "UserName"

- `username = ""`

### Password. Required for auth_method = "UserName"

- `password = ""`

### Option to select the metric timestamp to use. Valid options are:
# Node ID configuration

## name
- field name to use in the output

## namespace
- OPC UA namespace of the node (integer value 0 thru 3)

## identifier_type
- OPC UA ID type (s=string, i=numeric, g=guid, b=opaque)

## identifier
- OPC UA ID (tag as shown in opcua browser)

### Example:
```
{name="ProductUri", namespace="0", identifier_type="i", identifier="2262"}
```

### Node Group

Sets defaults for OPC UA namespace and ID type so they aren't required in every node. A group can also have a metric name that overrides the main plugin metric name.

### Multiple node groups are allowed

```
[[inputs.opcua.group]]
```

### Group Metric name. Overrides the top level name. If unset, the top level name is used.

```
# name =
```

### Group default namespace. If a node in the group doesn't set its namespace, this is used.

```
# namespace =
```

### Group default identifier type. If a node in the group doesn't set its namespace, this is used.

```
# identifier_type =
```

### Node ID Configuration. Array of nodes with the same settings as above.

```
# nodes = [
#  {name="", namespace="", identifier_type="", identifier=""},
#  {name="", namespace="", identifier_type="", identifier=""},
#]
```

# OpenLDAP cn=Monitor plugin

```
[[inputs.openldap]]
```

### host
- localhost

### port
- 389
# ldaps, starttls, or no encryption. default is an empty string, disabling all encryption.
# note that port will likely need to be changed to 636 for ldaps
# valid options: "" | "starttls" | "ldaps"
# tls = ""
#
# skip peer certificate verification. Default is false.
# insecure_skip_verify = false
#
# Path to PEM-encoded Root certificate to use to verify server certificate
# tls_ca = "/etc/ssl/certs.pem"
#
# dn/password to bind with. If bind_dn is empty, an anonymous bind is performed.
# bind_dn = ""
# bind_password = ""
#
# Reverse metric names so they sort more naturally. Recommended.
# This defaults to false if unset, but is set to true when generating a new config
# reverse_metric_names = true

## Get standard NTP query metrics from OpenNTPD.
[
inputs.openntpd]

## Run ntpctl binary with sudo.
# use_sudo = false
#
## Location of the ntpctl binary.
# binary = "/usr/sbin/ntpctl"
#
## Maximum time the ntpctl binary is allowed to run.
# timeout = "5ms"

## A plugin to collect stats from Opensmtpd - a validating, recursive, and caching DNS resolver
[
inputs.opensmtpd]

## If running as a restricted user you can prepend sudo for additional access:
# use_sudo = false
#
## The default location of the smtpctl binary can be overridden with:
# binary = "/usr/sbin/smtpctl"
#
## The default timeout of 1000ms can be overridden with (in milliseconds):
# timeout = 1000

## Collects performance metrics from OpenStack services
[
inputs.openstack]

## The recommended interval to poll is '30m'
# The identity endpoint to authenticate against and get the service catalog from.
# authentication_endpoint = "https://my.openstack.cloud:5000"
#
# The domain to authenticate against when using a V3 identity endpoint.
# domain = "default"
#
# The project to authenticate as.
# project = "admin"
#
# User authentication credentials. Must have admin rights.
# username = "admin"
# password = "password"
#
# Available services are:
# "agents", "aggregates", "flavors", "hypervisors", "networks", "nova_services",
# "ports", "projects", "servers", "services", "stacks", "storage_pools", "subnets", "volumes"
# enabled_services = ["services", "projects", "hypervisors", "flavors", "networks", "volumes"]
#
# Collect Server Diagnostics
# server_diagnostics = false
#
# output secrets (such as adminPass(for server) and UserID(for volume)).
# output_secrets = false
#
# Amount of time allowed to complete the HTTP(s) request.
# timeout = "5s"
#
# HTTP Proxy support
# http_proxy_url = ""
#
# Optional TLS Config
# tls_ca = /path/to/cafile
# tls_cert = /path/to/certfile
# tls_key = /path/to/keyfile
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# Options for tags received from Openstack
# tag_prefix = "openstack_tag_"
# tag_value = "true"
#
# Timestamp format for timestamp data recived from Openstack.
# If false format is unix nanoseconds.
# human_readable_timestamps = false
#
# Measure Openstack call duration
# measure_openstack_requests = false
## Read current weather and forecasts data from openweathermap.org

```
[[inputs.openweathermap]]
```

### OpenWeatherMap API key.
```
# app_id = "xxxxxxxxxxxxxxxxxxxxxxxxxxxxx"
```

### City ID's to collect weather data from.
```
# city_id = ["5391959"]
```

```
# lang = "en"
```

### APIs to fetch; can contain "weather" or "forecast".
```
# fetch = ["weather", "forecast"]
```

### OpenWeatherMap base URL
```
# base_url = "https://api.openweathermap.org/
```

### Timeout for HTTP response.
```
# response_timeout = "5s"
```

### Preferred unit system for temperature and wind speed. Can be one of "metric", "imperial", or "standard".
```
# units = "metric"
```

### Query interval; OpenWeatherMap updates their weather data every 10 minutes.
```
# interval = "10m"
```

## Read metrics of passenger using passenger-status

```
[[inputs.passenger]]
```

### Path of passenger-status.
```
## Path of passenger-status.
##
## Plugin gather metric via parsing XML output of passenger-status
##
## More information about the tool:
##
## More information about the tool:
##
## If no path is specified, then the plugin simply execute passenger-status
##
## command = "passenger-status -v --show=xml"

## Gather counters from PF
```
[[inputs.pf]]
```
# PF require root access on most systems.
# Setting 'use_sudo' to true will make use of sudo to run pfctl.
# Users must configure sudo to allow telegraf user to run pfctl with no password.
# pfctl can be restricted to only list command "pfctl -s info".
# use_sudo = false

## Read metrics of phpfpm, via HTTP status page or socket
[[inputs.phpfpm]]
## An array of addresses to gather stats about. Specify an ip or hostname
## with optional port and path
## Plugin can be configured in three modes (either can be used):
## - http: the URL must start with http:// or https://, ie:
##   "http://localhost/status"
## - unixsocket: path to fpm socket, ie:
##   "/var/run/php5-fpm.sock"
## or using a custom fpm status path:
##   "/var/run/php5-fpm.sock:fpm-custom-status-path"
## - fcgi: the URL must start with fcgi:// or cgi://, and port must be present, ie:
##   "fcgi://10.0.0.12:9000/status"
##   "cgi://10.0.10.12:9001/status"
## Example of multiple gathering from local socket and remote host
## urls = ["http://192.168.1.20/status", "/tmp/fpm.sock"]
## Duration allowed to complete HTTP requests.
## timeout = "5s"
## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
## insecure_skip_verify = false

## Ping given url(s) and return statistics
[[inputs.ping]]
## Hosts to send ping packets to.
## urls = ["example.org"]
## Method used for sending pings, can be either "exec" or "native". When set
to "exec" the systems ping command will be executed. When set to "native"
# the plugin will send pings directly.
#
# While the default is "exec" for backwards compatibility, new deployments are encouraged to use the "native" method for improved compatibility and performance.
# method = "exec"
#
# Number of ping packets to send per interval. Corresponds to the "-c"
# option of the ping command.
# count = 1
#
# Time to wait between sending ping packets in seconds. Operates like the 
# "-i" option of the ping command.
# ping_interval = 1.0
#
# If set, the time to wait for a ping response in seconds. Operates like 
# the "-W" option of the ping command.
# timeout = 1.0
#
# If set, the total ping deadline, in seconds. Operates like the -w option 
# of the ping command.
# deadline = 10
#
# Interface or source address to send ping from. Operates like the -I or -S 
# option of the ping command.
# interface = ""
#
# Percentiles to calculate. This only works with the native method.
# percentiles = [50, 95, 99]
#
# Specify the ping executable binary.
# binary = "ping"
#
# Arguments for ping command. When arguments is not empty, the command from 
# the binary option will be used and other options (ping_interval, timeout, 
# etc) will be ignored.
# arguments = ["-c", "3"]
#
# Use only IPv6 addresses when resolving a hostname.
# ipv6 = false
#
# Number of data bytes to be sent. Corresponds to the 
# "-s" option of the ping command. This only works with the native method.
# size = 56

# Measure postfix queue statistics
# [inputs.postfix]
## Postfix queue directory. If not provided, telegraf will try to use
## 'postconf -h queue_directory' to determine it.
## queue_directory = "/var/spool/postfix"

## Read metrics from one or many PowerDNS servers
[[inputs.powerdns]]
# An array of sockets to gather stats about.
# Specify a path to unix socket.
unix_sockets = ["/var/run/pdns.controlsocket"]

## Read metrics from one or many PowerDNS Recursor servers
[[inputs.powerdns_recursor]]
# Path to the Recursor control socket.
# Directory to create receive socket. This default is likely not writable,
# please reference the full plugin documentation for a recommended setup.
# socket_dir = "/var/run/"
# Socket permissions for the receive socket.
# socket_mode = "0666"

## Monitor process cpu and memory usage
[[inputs.procstat]]
# PID file to monitor process
# pid_file = "/var/run/nginx.pid"
# executable name (ie, pgrep <exe>)
# exe = "nginx"
# pattern as argument for pgrep (ie, pgrep -f <pattern>)
# pattern = "nginx"
# user as argument for pgrep (ie, pgrep -u <user>)
# user = "nginx"
# Systemd unit name, supports globs when include_systemd_children is set to true
# systemd_unit = "nginx.service"
# include_systemd_children = false
# CGroup name or path, supports globs
# cgroup = "systemd/system.slice/nginx.service"
# Windows service name
# win_service = ""
# override for process_name
# This is optional; default is sourced from /proc/<pid>/status
# process_name = "bar"
# Field name prefix
# # prefix = ""
#
# ## When true add the full cmdline as a tag.
# # cmdline_tag = false
#
# ## Mode to use when calculating CPU usage. Can be one of 'solaris' or 'irix'.
# # mode = "irix"
#
# ## Add the PID as a tag instead of as a field. When collecting multiple
# ## processes with otherwise matching tags this setting should be enabled to
# ## ensure each process has a unique identity.
# ## Enabling this option may result in a large number of series, especially
# ## when processes have a short lifetime.
# # pid_tag = false
#
# ## Method to use when finding process IDs. Can be one of 'pgrep', or
# ## 'native'. The pgrep finder calls the pgrep executable in the PATH while
# ## the native finder performs the search directly in a manner dependent on the
# ## platform. Default is 'pgrep'
# # pid_finder = "pgrep"

## Provides metrics from Proxmox nodes (Proxmox Virtual Environment > 6.2).
# [[inputs.proxmox]]
# ## API connection configuration. The API token was introduced in Proxmox v6.2. Required permissions for user
# and token: PVEAuditor role on /.
# # base_url = "https://localhost:8006/api2/json"
# # api_token = "USER@REALM!TOKENID=UUID"
# ## Node name, defaults to OS hostname
# # node_name = ""
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## HTTP response timeout (default: 5s)
# # response_timeout = "5s"

## Reads last_run_summary.yaml file and converts to measurements
# [[inputs.puppetagent]]
# ## Location of puppet last run summary file
# # location = "/var/lib/puppet/state/last_run_summary.yaml"
# # Reads metrics from RabbitMQ servers via the Management Plugin
# [[inputs.rabbitmq]]
# # Management Plugin url. (default: http://localhost:15672)
# # url = "http://localhost:15672"
# # Tag added to rabbitmq_overview series; deprecated: use tags
# # name = "rmq-server-1"
# # Credentials
# # username = "guest"
# # password = "guest"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # Optional request timeouts
# ##
# # ResponseHeaderTimeout, if non-zero, specifies the amount of time to wait
# # for a server's response headers after fully writing the request.
# # header_timeout = "3s"
# ##
# # client_timeout specifies a time limit for requests made by this client.
# # includes connection time, any redirects, and reading the response body.
# # client_timeout = "4s"
#
# # A list of nodes to gather as the rabbitmq_node measurement. If not
# # specified, metrics for all nodes are gathered.
# # nodes = ["rabbit@node1", "rabbit@node2"]
#
# # A list of queues to gather as the rabbitmq_queue measurement. If not
# # specified, metrics for all queues are gathered.
# # queues = ["telegraf"]
#
# # A list of exchanges to gather as the rabbitmq_exchange measurement. If not
# # specified, metrics for all exchanges are gathered.
# # exchanges = ["telegraf"]
#
# # Metrics to include and exclude. Globs accepted.
# # Note that an empty array for both will include all metrics
# # Currently the following metrics are supported: "exchange", "federation", "node", "overview", "queue"
# # metric_include = []
# # metric_exclude = []
#
# # Queues to include and exclude. Globs accepted.
# # Note that an empty array for both will include all queues
# queue_name_include = []
# queue_name_exclude = []
#
# ## Federation upstreams include and exclude when gathering the rabbitmq_federation measurement.
# ## If neither are specified, metrics for all federation upstreams are gathered.
# ## Federation link metrics will only be gathered for queues and exchanges
# ## whose non-federation metrics will be collected (e.g a queue excluded
# ## by the 'queue_name_exclude' option will also be excluded from federation).
# ## Globs accepted.
# # federation_upstream_include = ["dataCentre-*"]
# # federation_upstream_exclude = []

## Read raindrops stats (raindrops - real-time stats for preforking Rack servers)
[[inputs.raindrops]]
# ## An array of raindrops middleware URI to gather stats.
# urls = ["http://localhost:8080/_raindrops"]

## Reads metrics from RavenDB servers via the Monitoring Endpoints
[[inputs.ravendb]]
# ## Node URL and port that RavenDB is listening on
# url = "https://localhost:8080"
#
# ## RavenDB X509 client certificate setup
# # tls_cert = "/etc/telegraf/raven.crt"
# # tls_key = "/etc/telegraf/raven.key"
#
# ## Optional request timeout
# ###
# # ## Timeout, specifies the amount of time to wait
# # for a server's response headers after fully writing the request and
# # time limit for requests made by this client
# # timeout = "5s"
#
# ## List of statistics which are collected
# # At least one is required
# # Allowed values: server, databases, indexes, collections
# #
# # stats_include = ["server", "databases", "indexes", "collections"]
#
# ## List of db where database stats are collected
# # If empty, all db are concerned
# # db_stats_dbs = []
#
# ## List of db where index status are collected
# # If empty, all indexes from all db are concerned
# # index_stats_dbs = []
## List of db where collection status are collected
## If empty, all collections from all db are concerned
# collection_stats_dbs = []

# Read CPU, Fans, Powersupply and Voltage metrics of hardware server through redfish APIs
[[inputs.redfish]]
# Server url
# address = "https://127.0.0.1:5000"
#
# Username, Password for hardware server
# username = "root"
# password = "password123456"
#
# ComputerSystemId
# computer_system_id="2M220100SL"
#
# Amount of time allowed to complete the HTTP request
# timeout = "5s"
#
# Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# insecure_skip_verify = false

# Read metrics from one or many redis servers
[[inputs.redis]]
# specify servers via a url matching:
# [protocol://[:password]@address[:port]]
# e.g.
# tcp://localhost:6379
# tcp://password@192.168.99.100
# unix://var/run/redis.sock
#
# If no servers are specified, then localhost is used as the host.
# If no port is specified, 6379 is used
# servers = ["tcp://localhost:6379"]
#
# Optional. Specify redis commands to retrieve values
# [[inputs.redis.commands]]
# The command to run where each argument is a separate element
# command = ["get", "sample-key"]
# The field to store the result in
# field = "sample-key-value"
# # # The type of the result
# # # Can be "string", "integer", or "float"
# # type = "string"
#
# # specify server password
# # password = "s#cr@t%"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = true

# # Read metrics from one or many RethinkDB servers
# [[inputs.rethinkdb]]
# # An array of URI to gather stats about. Specify an ip or hostname
# # with optional port add password, ie,
# # rethinkdb://user:auth_key@10.10.3.30:28105,
# # rethinkdb://10.10.3.33:18832,
# # 10.0.0.1:10000, etc.
# # servers = ["127.0.0.1:28015"]
# #
# # If you use actual rethinkdb of > 2.3.0 with username/password authorization,
# # protocol have to be named "rethinkdb2" - it will use 1.0 H.
# # servers = ["rethinkdb2://username:password@127.0.0.1:28015"]
# #
# # If you use older versions of rethinkdb (<2.2) with auth_key, protocol
# # have to be named "rethinkdb".
# # servers = ["rethinkdb://username:auth_key@127.0.0.1:28015"]

# # Read metrics one or many Riak servers
# [[inputs.riak]]
# # Specify a list of one or more riak http servers
# # servers = ["http://localhost:8098"]

# # Read API usage and limits for a Salesforce organisation
# [[inputs.salesforce]]
# # specify your credentials
# #
# # username = "your_username"
# # password = "your_password"
# #
# # (optional) security token
# # security_token = "your_security_token"
# #
# # (optional) environment type (sandbox or production)
# # default is: production
# #
# # environment = "production"
# #
# # (optional) API version (default: "39.0")
# #
# # version = "39.0"

# # Monitor sensors, requires lm-sensors package
# [[inputs.sensors]]
# # Remove numbers from field names.
# # If true, a field name like 'temp1_input' will be changed to 'temp_input'.
# # remove_numbers = true
#
# # Timeout is the maximum amount of time that the sensors command can run.
# # timeout = "5s"

# # Read metrics from storage devices supporting S.M.A.R.T.
# [[inputs.smart]]
# # Optionally specify the path to the smartctl executable
# # path_smartctl = "/usr/bin/smartctl"
#
# # Optionally specify the path to the nvme-cli executable
# # path_nvme = "/usr/bin/nvme"
#
# # Optionally specify if vendor specific attributes should be propagated for NVMe disk case
# # ["auto-on"] - automatically find and enable additional vendor specific disk info
# # ["vendor1", "vendor2", ...] - e.g. "Intel" enable additional Intel specific disk info
# # enable_extensions = ["auto-on"]
#
# # On most platforms used cli utilities requires root access.
# # Setting 'use_sudo' to true will make use of sudo to run smartctl or nvme-cli.
# # Sudo must be configured to allow the telegraf user to run smartctl or nvme-cli
# # without a password.
# # use_sudo = false
#
# # Skip checking disks in this power mode. Defaults to
# # "standby" to not wake up disks that have stopped rotating.
# # See --nocheck in the man pages for smartctl.
# # smartctl version 5.41 and 5.42 have faulty detection of
# # power mode and might require changing this value to
# # "never" depending on your disks.
# # nocheck = "standby"
# Gather all returned S.M.A.R.T. attribute metrics and the detailed
# information from each drive into the 'smart_attribute' measurement.
# attributes = false
#
# Optionally specify devices to exclude from reporting if disks auto-discovery is performed.
# excludes = [ "/dev/pass6" ]
#
# Optionally specify devices and device type, if unset
# a scan (smartctl --scan and smartctl --scan -d nvme) for S.M.A.R.T. devices will be done
# and all found will be included except for the excluded in excludes.
# devices = [ "/dev/ada0 -d atacam", "/dev/nvme0"
#
# Timeout for the cli command to complete.
# timeout = "30s"
#
# Optionally call smartctl and nvme-cli with a specific concurrency policy.
# By default, smartctl and nvme-cli are called in separate threads (goroutines) to gather disk attributes.
# Some devices (e.g. disks in RAID arrays) may have access limitations that require sequential reading of
# SMART data - one individual array drive at the time. In such case please set this configuration option
# to "sequential" to get readings for all drives.
# valid options: concurrent, sequential
# read_method = "concurrent"
#
# Retrieves SNMP values from remote agents
# [inputs.snmp]
# Agent addresses to retrieve values from.
# format: agents = ["<scheme://><hostname>:<port>"]
# scheme: optional, either udp, udp4, udp6, tcp, tcp4, tcp6.
# default is udp
# port: optional
# example: agents = ["udp://127.0.0.1:161"]
# agents = ["tcp://127.0.0.1:161"]
# agents = ["udp4://v4only-snmp-agent"]
# agents = ["udp://127.0.0.1:161"]
#
# Timeout for each request.
# timeout = "5s"
#
# SNMP version; can be 1, 2, or 3.
# version = 2
#
# Path to mib files
# path = ["/usr/share/snmp/mibs"]
#
# Agent host tag; the tag used to reference the source host
# agent_host_tag = "agent_host"
## SNMP community string.
# community = "public"
#
## Number of retries to attempt.
# retries = 3
#
## The GETBULK max-repetitions parameter.
# max_repetitions = 10
#
## SNMPv3 authentication and encryption options.
#
## Security Name.
# sec_name = "myuser"
#
## Authentication protocol; one of "MD5", "SHA", "SHA224", "SHA256", "SHA384", "SHA512" or "".
# auth_protocol = "MD5"
#
## Authentication password.
# auth_password = "pass"
#
## Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".
# sec_level = "authNoPriv"
#
## Context Name.
# context_name = ""
#
## Privacy protocol used for encrypted messages; one of "DES", "AES" or "".
# priv_protocol = ""
#
## Privacy password used for encrypted messages.
# priv_password = ""

## Add fields and tables defining the variables you wish to collect. This example collects the system uptime and interface variables. Reference the full plugin documentation for configuration details.

## DEPRECATED! PLEASE USE inputs.snmp INSTEAD.
# [[inputs.snmp_legacy]]
#
## DEPRECATED: The 'snmp_legacy' plugin is deprecated in version 1.0.0, use 'inputs.snmp' instead.
#
## Use 'oids.txt' file to translate oids to names
#
## To generate 'oids.txt' you need to run:
# snmptranslate -m all -Tz -On | sed -e 's/"//g' > /tmp/oids.txt
# Or if you have an other MIB folder with custom MIBs
# snmptranslate -M /mycustommibfolder -Tz -On -m all | sed -e 's/"//g' > oids.txt
# snmptranslate_file = "/tmp/oids.txt"
#
[[inputs.snmp.host]]
# address = "192.168.2.2:161"
#
## SNMP community
# community = "public" # default public
#
## SNMP version (1, 2 or 3)
# version = 2 # default 2
# version = 3 # default 2
#
## SNMP response timeout
# timeout = 2.0 # default 2.0
# # SNMP request retries
# retries = 2 # default 2
# # Which get/bulk do you want to collect for this host
# collect = ["mybulk", "sysservices", "sysdescr"]
# # Simple list of OIDs to get, in addition to "collect"
# get_oids = []
#
# [[inputs.snmp.host]]
# address = "192.168.2.3:161"
# community = "public"
# version = 2
# timeout = 2.0
# retries = 2
# collect = ["mybulk"]
# get_oids = [
#    "ifNumber",
#    ".1.3.6.1.2.1.1.3.0",
#]
#
# [[inputs.snmp.get]]
# name = "ifnumber"
# oid = "ifNumber"
#
# [[inputs.snmp.get]]
# name = "interface_speed"
# oid = "ifSpeed"
# instance = "0"
#
# [[inputs.snmp.get]]
# name = "sysuptime"
# oid = ".1.3.6.1.2.1.1.3.0"
# unit = "second"
#
# [[inputs.snmp.bulk]]
# name = "mybulk"
# max_repetition = 127
# oid = ".1.3.6.1.2.1.1.1"
#
# [[inputs.snmp.bulk]]
# name = "ifoutoctets"
# max_repetition = 127
# oid = "ifOutOctets"
#
# [[inputs.snmp.host]]
# address = "192.168.2.13:161"
# #address = "127.0.0.1:161"
# community = "public"
# version = 2
# timeout = 2.0
# retries = 2
# collect = ["mybulk", "sysservices", "sysdescr", "systype"]
# [[inputs.snmp.host.table]]
# name = "iftable3"
# include_instances = ["enp5s0", "eth1"]
#
# # SNMP TABLEs
# # table without mapping neither subtables
# [[inputs.snmp.table]]
# name = "iftable1"
# oid = ".1.3.6.1.2.1.31.1.1.1"
#
# # table without mapping but with subtables
# [[inputs.snmp.table]]
# name = "iftable2"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# sub_tables = [".1.3.6.1.2.1.2.2.1.13"]
#
# # table with mapping but without subtables
# [[inputs.snmp.table]]
# name = "iftable3"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# # if empty. get all instances
# mapping_table = ".1.3.6.1.2.1.31.1.1.1.1"
# # if empty, get all subtables
#
# # table with both mapping and subtables
# [[inputs.snmp.table]]
# name = "iftable4"
# oid = ".1.3.6.1.2.1.31.1.1.1"
# # if empty get all instances
# mapping_table = ".1.3.6.1.2.1.31.1.1.1.1"
# # if empty get all subtables
# # sub_tables could be not "real subtables"
# sub_tables=[".1.3.6.1.2.1.2.2.1.13", "bytes_recv", "bytes_send"]

## Read stats from one or more Solr servers or cores
# [[inputs.solr]]
# ## specify a list of one or more Solr servers
# servers = ["http://localhost:8983"]
#
# ## specify a list of one or more Solr cores (default - all)
# # cores = ["main"]

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## Optional HTTP Basic Auth Credentials

# username = "username"
# password = "pa$$word"

## Gather timeseries from Google Cloud Platform v3 monitoring API

# [[inputs.stackdriver]]
# ## GCP Project
# project = "erudite-bloom-151019"
#
# ## Include timeseries that start with the given metric type.
# metric_type_prefix_include = [
#   "compute.googleapis.com/",
# ]
#
# ## Exclude timeseries that start with the given metric type.
# metric_type_prefix_exclude = []
#
# ## Many metrics are updated once per minute; it is recommended to override
# ## the agent level interval with a value of 1m or greater.
# interval = "1m"
#
# ## Maximum number of API calls to make per second. The quota for accounts
# ## varies, it can be viewed on the API dashboard:
# ##   https://cloud.google.com/monitoring/quotas#quotas_and_limits
# rate_limit = 14
#
# ## The delay and window options control the number of points selected on
# ## each gather. When set, metrics are gathered between:
# ## start: now() - delay - window
# ## end:   now() - delay
# delay = "10m"
#
# ## If unset, the window will start at 1m and be updated dynamically to span
# ## the time between calls (approximately the length of the plugin interval).
# window = "10m"
#
# ## TTL for cached list of metric types. This is the maximum amount of time
# ## it may take to discover new metrics.
# cache_ttl = "1h"
#
# ## If true, raw bucket counts are collected for distribution value types.
# ## For a more lightweight collection, you may wish to disable and use
# ## distribution_aggregation_aligners instead.
# gather_raw_distribution_buckets = true
# # Aggregate functions to be used for metrics whose value type is # distribution. These aggregate values are recorded in in addition to raw # bucket counts; if they are enabled.
# #
# # For a list of aligner strings see:
# # https://cloud.google.com/monitoring/api/v3/rpc/google.monitoring.v3#aligner
# # distribution_aggregation_aligners = [
# # "ALIGN_PERCENTILE_99",
# # "ALIGN_PERCENTILE_95",
# # "ALIGN_PERCENTILE_50",
# # ]
# #
# # Filters can be added to reduce the number of time series matched. All # functions are supported: starts_with, ends_with, has_substring, and # one_of. Only the '=' operator is supported.
# #
# # The logical operators when combining filters are defined statically using # the following values:
# # filter ::= <resource_labels> {AND <metric_labels>}
# # resource_labels ::= <resource_labels> {OR <resource_label}]
# # metric_labels ::= <metric_labels> {OR <metric_label}]
# #
# # For more details, see https://cloud.google.com/monitoring/api/v3/filters
# #
# # Resource labels refine the time series selection with the following expression:
# # resource.labels.<key> = <value>
# # [[inputs.stackdriver.filter.resource_labels]]
# # key = "instance_name"
# # value = 'starts_with("localhost")'
# #
# # Metric labels refine the time series selection with the following expression:
# # metric.labels.<key> = <value>
# # [[inputs.stackdriver.filter.metric_labels]]
# # key = "device_name"
# # value = 'one_of("sda", "sdb")'

# Get synproxy counter statistics from procfs
# [[inputs.synproxy]]
# # no configuration

# # Sysstat metrics collector
# [[inputs.sysstat]]
# # Path to the sadc command.
# #
# # Common Defaults:
# # Debian/Ubuntu: /usr/lib/sysstat/sadc
## Architecture
/usr/lib/sa/sadc

## RHEL/CentOS
/usr/lib64/sa/sadc

### `sadc_path = "/usr/lib/sa/sadc"` # required

### Path to the sadf command, if it is not in PATH

### `sadf_path = "/usr/bin/sadf"`

### Activities is a list of activities, that are passed as argument to the sadc collector utility (e.g: DISK, SNMP etc...)

### The more activities that are added, the more data is collected.

### `activities = ["DISK"]`

### Group metrics to measurements.

### If group is false each metric will be prefixed with a description and represents itself a measurement.

### If Group is true, corresponding metrics are grouped to a single measurement.

### Options for the sadf command. The values on the left represent the sadf options and the values on the right their description (which are used for grouping and prefixing metrics).

### Run 'sar -h' or 'man sar' to find out the supported options for your sysstat version.

### `inputs.sysstat.options`

- `-C = "cpu"
- `-B = "paging"
- `-P ALL" = "per_cpu"
- `-q = "queue"
- `-R = "mem"
- `-r = "mem_util"
- `-S = "swap_util"
- `-u = "cpu_util"
- `-v = "inode"
- `-W = "swap"
- `-w = "task"

### Device tags can be used to add additional tags for devices.

### For example the configuration below adds a tag vg with value rootvg for all metrics with sda devices.

### `[[inputs.sysstat.device_tags.sda]]`
# vg = "rootvg"

## Gather systemd units state
# [[inputs.systemd_units]]
# Set timeout for systemctl execution
# timeout = "1s"
# #
# Filter for a specific unit type, default is "service", other possible
# values are "socket", "target", "device", "mount", "automount", "swap", "timer", "path", "slice" and "scope ":
# unittype = "service"
# #
# Filter for a specific pattern, default is "" (i.e. all), other possible
# values are valid pattern for systemctl, e.g. "a*" for all units with
# names starting with "a"
# pattern = ""
# # pattern = "telegraf* influxdb*"
# # pattern = "a*"

## Reads metrics from a Teamspeak 3 Server via ServerQuery
# [[inputs.teamspeak]]
# Server address for Teamspeak 3 ServerQuery
# server = "127.0.0.1:10011"
# Username for ServerQuery
# username = "serverqueryuser"
# Password for ServerQuery
# password = "secret"
# Array of virtual servers
# virtual_servers = [1]

## Read metrics about temperature
# [[inputs.temp]]
# # no configuration

## Read Tengine's basic status information (ngx_http_reqstat_module)
# [[inputs.tengine]]
# An array of Tengine reqstat module URI to gather stats.
# urls = ["http://127.0.0.1/us"]
#
# HTTP response timeout (default: 5s)
# response_timeout = "5s"
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.cer"
# # tls_key = "/etc/telegraf/key.key"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Gather metrics from the Tomcat server status page.
[[inputs.tomcat]]
# URL of the Tomcat server status
# url = "http://127.0.0.1:8080/manager/status/all?XML=true"
#
## HTTP Basic Auth Credentials
# username = "tomcat"
# password = "s3cret"
#
## Request timeout
# timeout = "5s"
#
## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false

## Inserts sine and cosine waves for demonstration purposes
[[inputs.trig]]
# Set the amplitude
# amplitude = 10.0

## Read Twemproxy stats data
[[inputs.twemproxy]]
# Twemproxy stats address and port (no scheme)
# addr = "localhost:22222"
# Monitor pool name
# pools = ["redis_pool", "mc_pool"]

## A plugin to collect stats from the Unbound DNS resolver
[[inputs.unbound]]
# Address of server to connect to, read from unbound conf default, optionally ':port'
# Will lookup IP if given a hostname
# server = "127.0.0.1:8953"
#
# If running as a restricted user you can prepend sudo for additional access:
# use_sudo = false
### The default location of the unbound-control binary can be overridden with:
### binary = "/usr/sbin/unbound-control"

### The default location of the unbound config file can be overridden with:
### config_file = "/etc/unbound/unbound.conf"

### The default timeout of 1s can be overridden with:
### timeout = "1s"

### When set to true, thread metrics are tagged with the thread id.
### thread_as_tag = false

### Read uWSGI metrics.
### [[inputs.uwsgi]]
### List with urls of uWSGI Stats servers. URL must match pattern:
### scheme://address[:port]
### For example:
### timeout = "5s"

### A plugin to collect stats from Varnish HTTP Cache
### [[inputs.varnish]]
### If running as a restricted user you can prepend sudo for additional access:
### use_sudo = false
### The default location of the varnishstat binary can be overridden with:
### binary = "/usr/bin/varnishstat"
### By default, telegraf gather stats for 3 metric points.
### Setting stats will override the defaults shown below.
### Glob matching can be used, ie, stats = ["MAIN.*"]
### stats may also be set to ["*"], which will collect all stats
### stats = ["MAIN.cache_hit", "MAIN.cache_miss", "MAIN.uptime"]
### Optional name for the varnish instance (or working directory) to query
### Usually append after -n in varnish cli
### instance_name = instanceName
### Timeout for varnishstat command

```
# timeout = "1s"
```

### Collect Wireguard server interface and peer statistics

```
# [[inputs.wireguard]]
# Optional list of Wireguard device/interface names to query.
# If omitted, all Wireguard interfaces are queried.
# devices = ["wg0"]
```

### Monitor wifi signal strength and quality

```
# [[inputs.wireless]]
# Sets 'proc' directory path
# If not specified, then default is /proc
# host_proc = "?proc"
```

### Reads metrics from a SSL certificate

```
# [[inputs.x509_cert]]
# List certificate sources
# Prefix your entry with 'file://' if you intend to use relative paths
# sources = ["tcp://example.org:443", "https://influxdata.com:443",
#           "udp://127.0.0.1:4433", "/etc/ssl/certs/ssl-cert-snakeoil.pem",
#           "/etc/https/.*.mydomain.org.pem", "file://path/to/*.pem"]
# Timeout for SSL connection
# timeout = "5s"
```

### Pass a different name into the TLS request (Server Name Indication)

```
# example: server_name = "myhost.example.org"
# server_name = ""
```

### Optional TLS Config

```
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
```

### Read metrics of ZFS from arcstats, zfetchstats, vdev_cache_stats, pools and datasets

```
# [[inputs.zfs]]
# ZFS kstat path. Ignored on FreeBSD
# If not specified, then default is:
# kstatPath = "/proc/spl/kstat/zfs"
```

### By default, telegraf gather all zfs stats

```
# If not specified, then default is:
```
# kstatMetrics = ["arcstats", "zfitchstats", "vdev_cache_stats"]
# For Linux, the default is:
# kstatMetrics = ["abdstats", "arcstats", "dnodestats", "dbuf_cachestats",
# "dmu_tx", "fm", "vdev_mirror_stats", "zfitchstats", "zil"]
# By default, don't gather zpool stats
# poolMetrics = false
# By default, don't gather zdataset stats
# datasetMetrics = false

## Reads 'mntr' stats from one or many zookeeper servers
[[inputs.zookeeper]]
## An array of address to gather stats about. Specify an ip or hostname
## with port. ie localhost:2181, 10.0.0.1:2181, etc.
## If no servers are specified, then localhost is used as the host.
## If no port is specified, 2181 is used
servers = [":2181"]

## Timeout for metric collections from all servers. Minimum timeout is "1s".
## timeout = "5s"

## Optional TLS Config
## enable_tls = true
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## If false, skip chain & host verification
## insecure_skip_verify = true

# SERVICE INPUT PLUGINS

## Pull Metric Statistics from Aliyun CMS
[[inputs.aliyuncms]]
## Aliyun Credentials
## Credentials are loaded in the following order
## 1) Ram RoleArn credential
## 2) AccessKey STS token credential
## 3) AccessKey credential
## 4) Ecs Ram Role credential
## 5) RSA keypair credential
## 6) Environment variables credential
## 7) Instance metadata credential

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```yaml
# # access_key_id = ""
# # access_key_secret = ""
# # access_key_sts_token = ""
# # role_arn = ""
# # role_session_name = ""
# # private_key = ""
# # public_key_id = ""
# # role_name = ""
#
# ## Specify the ali cloud region list to be queried for metrics and objects discovery
# ## If not set, all supported regions (see below) would be covered, it can provide a significant load on API, so the recommendation here
# ## is to limit the list as much as possible. Allowed values: https://www.alibabacloud.com/help/zh/doc-detail/40654.htm
# ## Default supported regions are:
# ## 21 items: cn-qingdao,cn-beijing,cn-zhangjiakou,cn-huhehaote,cn-hangzhou,cn-shanghai,cn-shenzhen,
# ##    cn-heyan,cn-chengdu,cn-hongkong,ap-southeast-1,ap-southeast-2,ap-southeast-3,ap-southeast-5,
# ##    ap-south-1,ap-northeast-1,us-west-1,us-east-1,eu-central-1,eu-west-1,me-east-1
# ##
# ## From discovery perspective it set the scope for object discovery, the discovered info can be used to enrich
# ## the metrics with objects attributes/tags. Discovery is supported not for all projects (if not supported, then
# ## it will be reported on the start - for example for 'acs_cdn' project:
# ## 'E! [inputs.aliyuncms] Discovery tool is not activated: no discovery support for project "acs_cdn"' )
# ## Currently, discovery supported for the following projects:
# ## - acs_ecs_dashboard
# ## - acs_rds_dashboard
# ## - acs_slb_dashboard
# ## - acs_vpc_eip
# ## regions = ["cn-hongkong"]
# #
# # The minimum period for AliyunCMS metrics is 1 minute (60s). However not all
# # metrics are made available to the 1 minute period. Some are collected at
# # 3 5 minute, 5 minute, or larger intervals.
# # See: https://help.aliyun.com/document_detail/51936.html?spm=a2c4g.11186623.2.18.2bc1750eeOw1Pv
# # Note that if a period is configured that is smaller than the minimum for a
# # particular metric, that metric will not be returned by the Aliyun OpenAPI
# # and will not be collected by Telegraf.
# #
# ## Requested AliyunCMS aggregation Period (required - must be a multiple of 60s)
# period = "5m"
# #
# ## Collection Delay (required - must account for metrics availability via AliyunCMS API)
# delay = "1m"
# #
# ## Recommended: use metric 'interval' that is a multiple of 'period' to avoid
# ## gaps or overlap in pulled data
# interval = "5m"
# ```
# Metric Statistic Project (required)
# project = "acs_slb_dashboard"

# Maximum requests per second, default value is 200
# ratelimit = 200

# How often the discovery API call executed (default 1m)
# discovery_interval = "1m"

# Metrics to Pull (Required)
# [inputs.aliyuncms.metrics]
# Metrics names to be requested,
# described here (per project):
https://help.aliyun.com/document_detail/28619.html?spm=a2c4g.11186623.6.690.1938ad41wg8QSq
# names = ["InstanceActiveConnection", "InstanceNewConnection"]

# Dimension filters for Metric (these are optional).
# This allows to get additional metric dimension. If dimension is not specified it can be returned or
# the data can be aggregated - it depends on particular metric, you can find details here:
https://help.aliyun.com/document_detail/28619.html?spm=a2c4g.11186623.6.690.1938ad41wg8QSq
# dimensions = '{"instanceId": "p-example"}'

# Or you can specify several dimensions at once:
# dimensions = ["instanceId": "p-example"],{"instanceId": "q-example"]

# Enrichment tags, can be added from discovery (if supported)
# Notation is <measurement_tag_name>:<JMES query path (https://jmespath.org/tutorial.html)>
# To figure out which fields are available, consult the Describe<ObjectType> API per project.
# For example, for SLB: https://api.aliyun.com/#/?product=Slb&version=2014-05-15&api=DescribeLoadBalancers&params={ }&tab=MOCK&lang=GO
# tag_query_path = [
#     "address:Address",
#     "name:LoadBalancerName",
#     "cluster_owner:Tags.Tag[?TagKey=='cs.cluster.name'].TagValue | [0]"
# ]
# The following tags added by default: regionId (if discovery enabled), userId, instanceId.

# Allow metrics without discovery data, if discovery is enabled. If set to true, then metric without discovery
# data would be emitted, otherwise dropped. This can be of help, in case debugging dimension filters, or partial
# coverage
# of discovery scope vs monitoring scope
# allow_dps_without_discovery = false
## AMQP consumer plugin

### [inputs.amqp_consumer]

#### Broker to consume from.

- **url** = "amqp://localhost:5672/influxdb"

#### Brokers to consume from. If multiple brokers are specified a random broker will be selected anytime a connection is established. This can be helpful for load balancing when not using a dedicated load balancer.

- **brokers** = ["amqp://localhost:5672/influxdb"]

#### Authentication credentials for the PLAIN auth_method.

- **username** = ""
- **password** = ""

#### Name of the exchange to declare. If unset, no exchange will be declared.

- **exchange** = "telegraf"

#### Exchange type; common types are "direct", "fanout", "topic", "header", "x-consistent-hash".

- **exchange_type** = "topic"

#### If true, exchange will be passively declared.

- **exchange_passive** = false

#### Exchange durability can be either "transient" or "durable".

- **exchange_durability** = "durable"

#### Additional exchange arguments.

- **exchange_arguments** = { }

#### AMQP queue name.

- **queue** = "telegraf"

#### AMQP queue durability can be "transient" or "durable".

- **queue_durability** = "durable"

#### If true, queue will be passively declared.

- **queue_passive** = false

#### A binding between the exchange and queue using this binding key is created. If unset, no binding is created.

- **binding_key** = "#"

#### Maximum number of messages server should give to the worker.

- **prefetch_count** = 50

#### Maximum messages to read from the broker that have not been written by an
# # output. For best throughput set based on the number of metrics within
# # each message and the size of the output's metric_batch_size.
# #
# # For example, if each message from the queue contains 10 metrics and the
# # output metric_batch_size is 1000, setting this to 100 will ensure that a
# # full batch is collected and the write is triggered immediately without
# # waiting until the next flush_interval.
# # max_undelivered_messages = 1000
#
# # Auth method. PLAIN and EXTERNAL are supported
# # Using EXTERNAL requires enabling the rabbitmq_auth_mechanism_ssl plugin as
# # described here: https://www.rabbitmq.com/plugins.html
# # auth_method = "PLAIN"
#
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# # Content encoding for message payloads, can be set to "gzip" to or
# # "identity" to apply no encoding.
# # content_encoding = "identity"
#
# # Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"

# # Read Cassandra metrics through Jolokia
# [[inputs.cassandra]]
# # DEPRECATED: The 'cassandra' plugin is deprecated in version 1.7.0, use 'inputs.jolokia2' with the
# # 'cassandra.conf' example configuration instead.
# # DEPRECATED: The cassandra plugin has been deprecated. Please use the
# # jolokia2 plugin instead.
# #
# # see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/jolokia2
# # context = "/jolokia/read"
# # List of cassandra servers exposing jolokia read service
# # servers = ["myuser:mypassword@10.10.10.1:8778","10.10.10.2:8778",".8778"]
# # List of metrics collected on above servers
# # Each metric consists of a jmx path.
# # This will collect all heap memory usage metrics from the jvm and
# # ReadLatency metrics for all keyspaces and tables.
```yaml
# "type=Table" in the query works with Cassandra 3.0. Older versions might need to use "type=ColumnFamily"
# metrics = [
  "java.lang:type=Memory/HeapMemoryUsage",
  "org.apache.cassandra.metrics:type=Table,keyspace=*,scope=*,name=ReadLatency"
# ]

## Cisco model-driven telemetry (MDT) input plugin for IOS XR, IOS XE and NX-OS platforms
# [[inputs.cisco_telemetry_mdt]]
# Telemetry transport can be "tcp" or "grpc". TLS is only supported when using the grpc transport.
# transport = "grpc"
# service_address = ":57000"
#
# Enable TLS; grpc transport only.
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# Enable TLS client authentication and define allowed CA certificates; grpc transport only.
# tls_allowed_cacerts = "/etc/telegraf/clientca.pem"
#
# Define (for certain nested telemetry measurements with embedded tags) which fields are tags
# embedded_tags = "[Cisco-IOS-XR-qos-ma-oper:qos/interface-table/interface/input/service-policy-names/service-policy-instance/statistics/class-stats/class-name]"
#
# Define aliases to map telemetry encoding paths to simple measurement names
# [inputs.cisco_telemetry_mdt.aliases]
# ifstats = "ietf-interfaces:interfaces-state/interface/statistics"
#
# Define Property Xformation, please refer README and https://pubhub.devnetcloud.com/media/dme-docs-9-3-3/docs/appendix/ for Model details.
# [inputs.cisco_telemetry_mdt.dmes]
# ModTs = "ignore"
# CreateTs = "ignore"

## Read metrics from one or many ClickHouse servers
# [[inputs.clickhouse]]
# Username for authorization on ClickHouse server
# example: username = "default"
# username = "default"
#
# Password for authorization on ClickHouse server
# example: password = "super_secret"
#}
```
HTTP(s) timeout while getting metrics values
---
# The timeout includes connection time, any redirects, and reading the response body.
# example: timeout = 1s
# timeout = 5s
---

List of servers for metrics scraping
---
# metrics scrape via HTTP(s) clickhouse interface
# https://clickhouse.tech/docs/en/interfaces/http/
# example: servers = ["http://127.0.0.1:8123","https://custom-server.mdb.yandexcloud.net"]
servers = ["http://127.0.0.1:8123"]
---

If "auto_discovery" is "true" plugin tries to connect to all servers available in the cluster
# with using same "user:password" described in "user" and "password" parameters
# and get this server hostname list from "system.clusters" table
# see
# https://clickhouse.tech/docs/en/operations/system_tables/#system-clusters
# https://clickhouse.tech/docs/en/operations/server_settings/settings/#server_settings_remote_servers
# https://clickhouse.tech/docs/en/operations/table_engines/distributed/
# example: auto_discovery = false
# auto_discovery = true
---

Filter cluster names in "system.clusters" when "auto_discovery" is "true"
# when this filter present then "WHERE cluster IN (...)" filter will apply
# please use only full cluster names here, regexp and glob filters is not allowed
# for "/etc/clickhouse-server/config.d/remote.xml"
# <yandex>
# <remote_servers>
# <my-own-cluster>
# <shard>
# <replica><host>clickhouse-ru-1.local</host><port>9000</port></replica>
# <replica><host>clickhouse-ru-2.local</host><port>9000</port></replica>
# </shard>
# <shard>
# <replica><host>clickhouse-eu-1.local</host><port>9000</port></replica>
# <replica><host>clickhouse-eu-2.local</host><port>9000</port></replica>
# </shard>
# </my-own-cluster>
# </remote_servers>
#</yandex>
# example: cluster_include = ["my-own-cluster"]
# cluster_include = []
---

Filter cluster names in "system.clusters" when "auto_discovery" is "true"
# when this filter present then "WHERE cluster NOT IN (...)" filter will apply
# example: cluster_exclude = ["my-internal-not-discovered-cluster"]
# cluster_exclude = []
#
## Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
# insecure_skip_verify = false

## Read metrics from Google PubSub
[[inputs.cloud_pubsub]]
## Required. Name of Google Cloud Platform (GCP) Project that owns
## the given PubSub subscription.
project = "my-project"

## Required. Name of PubSub subscription to ingest metrics from.
subscription = "my-subscription"

## Required. Data format to consume.
## Each data format has its own unique set of configuration options.
## Read more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
data_format = "influx"

## Optional. Filepath for GCP credentials JSON file to authorize calls to
## PubSub APIs. If not set explicitly, Telegraf will attempt to use
## Application Default Credentials, which is preferred.
# credentials_file = "path/to/my/creds.json"

## Optional. Number of seconds to wait before attempting to restart the
## PubSub subscription receiver after an unexpected error.
## If the streaming pull for a PubSub Subscription fails (receiver),
## the agent attempts to restart receiving messages after this many seconds.
# retry_delay_seconds = 5

## Optional. Maximum byte length of a message to consume.
## Larger messages are dropped with an error. If less than 0 or unspecified,
## treated as no limit.
# max_message_len = 1000000

## Optional. Maximum messages to read from PubSub that have not been written
to an output. Defaults to 1000.
## For best throughput set based on the number of metrics within
each message and the size of the output's metric_batch_size.
##
## For example, if each message contains 10 metrics and the output
## metric_batch_size is 1000, setting this to 100 will ensure that a
# full batch is collected and the write is triggered immediately without
# waiting until the next flush_interval.
# max_undelivered_messages = 1000
#
# The following are optional Subscription ReceiveSettings in PubSub.
# Read more about these values:
# https://godoc.org/cloud.google.com/go/pubsub#ReceiveSettings
#
# Optional. Maximum number of seconds for which a PubSub subscription
# should auto-extend the PubSub ACK deadline for each message. If less than
# 0, auto-extension is disabled.
# max_extension = 0
#
# Optional. Maximum number of unprocessed messages in PubSub
# (unacknowledged but not yet expired in PubSub).
# A value of 0 is treated as the default PubSub value.
# Negative values will be treated as unlimited.
# max_outstanding_messages = 0
#
# Optional. Maximum size in bytes of unprocessed messages in PubSub
# (unacknowledged but not yet expired in PubSub).
# A value of 0 is treated as the default PubSub value.
# Negative values will be treated as unlimited.
# max_outstanding_bytes = 0
#
# Optional. Max number of goroutines a PubSub Subscription receiver can spawn
# to pull messages from PubSub concurrently. This limit applies to each
# subscription separately and is treated as the PubSub default if less than
# 1. Note this setting does not limit the number of messages that can be
# processed concurrently (use “max_outstanding_messages” instead).
# max_receiver_go_routines = 0
#
# Optional. If true, Telegraf will attempt to base64 decode the
# PubSub message data before parsing
# base64_data = false

# Google Cloud Pub/Sub Push HTTP listener
# [[inputs.cloud_pubsub_push]]
# Address and port to host HTTP listener on
# service_address = ":8080"
#
# Application secret to verify messages originate from Cloud Pub/Sub
# token = ""
#
# Path to listen to.
# path = "/"
## Maximum duration before timing out read of the request
## read_timeout = "10s"

## Maximum duration before timing out write of the response. This should be set to a value
## large enough that you can send at least `metric_batch_size` number of messages within the
## duration.
## write_timeout = "10s"

## Maximum allowed http request body size in bytes.
## 0 means to use the default of 524,288,00 bytes (500 mebibytes)
## max_body_size = "500MB"

## Whether to add the pubsub metadata, such as message attributes and subscription as a tag.
## add_meta = false

## Optional. Maximum messages to read from PubSub that have not been written
## to an output. Defaults to 1000.
## For best throughput set based on the number of metrics within
## each message and the size of the output's metric_batch_size.
##
## For example, if each message contains 10 metrics and the output
## metric_batch_size is 1000, setting this to 100 will ensure that a
## full batch is collected and the write is triggered immediately without
## waiting until the next flush_interval.
## max_undelivered_messages = 1000

## Set one or more allowed client CA certificate file names to
## enable mutually authenticated TLS connections
## tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]

## Add service certificate and key
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"

## Data format to consume.
## Each data format has its own unique set of configuration options, read
## more about them here:
## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
## data_format = "influx"

## Ingests files in a directory and then moves them to a target directory.
## [[inputs.directory_monitor]]
## The directory to monitor and read files from.
## directory = ""
##
## The directory to move finished files to.
## finished_directory = ""
##
### The directory to move files to upon file error.
### If not provided, erroring files will stay in the monitored directory.
### `error_directory = ""`

### The amount of time a file is allowed to sit in the directory before it is picked up.
### This time can generally be low but if you choose to have a very large file written to the directory and it's potentially slow,
### set this higher so that the plugin will wait until the file is fully copied to the directory.
### `directory_duration_threshold = "50ms"

### A list of the only file names to monitor, if necessary. Supports regex. If left blank, all files are ingested.
### `files_to_monitor = ["^.*\.csv"]`

### A list of files to ignore, if necessary. Supports regex.
### `files_to_ignore = [".DS_Store"]`

### Maximum lines of the file to process that have not yet be written by the output. For best throughput set to the size of the output's metric_buffer_limit.
### Warning: setting this number higher than the output's metric_buffer_limit can cause dropped metrics.
### `max_buffered_metrics = 10000`

### The maximum amount of file paths to queue up for processing at once, before waiting until files are processed to find more files.
### Lowering this value will result in *slightly* less memory use, with a potential sacrifice in speed efficiency, if absolutely necessary.
### `file_queue_size = 100000`

### Name a tag containing the name of the file the data was parsed from. Leave empty to disable. Cautious when file name variation is high, this can increase the cardinality significantly. Read more about cardinality here:
### `file_tag = ""

### The dataformat to be read from the files.
### Each data format has its own unique set of configuration options, read more about them here:
### [DATA_FORMATS_INPUT.md](https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md)
### [NOTE: We currently only support parsing newline-delimited JSON](https://github.com/ndjson/ndjson-spec)
### `data_format = "influx"

### Read logging output from the Docker engine
### `[inputs.docker_log]`
### Docker Endpoint
### To use TCP, set endpoint = "tcp://[ip]:[port]"
### To use environment variables (ie, docker-machine), set endpoint = "ENV"
### `endpoint = "unix:///var/run/docker.sock"`
# # When true, container logs are read from the beginning; otherwise
# reading begins at the end of the log.
# from_beginning = false
#
# Timeout for Docker API calls.
# timeout = "5s"
#
# Containers to include and exclude. Globs accepted.
# Note that an empty array for both will include all containers
# container_name_include = []
# container_name_exclude = []
#
# Container states to include and exclude. Globs accepted.
# When empty only containers in the "running" state will be captured.
# container_state_include = []
# container_state_exclude = []
#
# docker labels to include and exclude as tags. Globs accepted.
# Note that an empty array for both will include all labels as tags
# docker_label_include = []
# docker_label_exclude = []
#
# Set the source tag for the metrics to the container ID hostname, eg first 12 chars
# source_tag = false
#
# Optional TLS Config
# tls_ca = "/etc/telegraf/ca.pem"
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
# Use TLS but skip chain & host verification
# insecure_skip_verify = false
#
# Azure Event Hubs service input plugin
# [inputs.eventhub_consumer]
# The default behavior is to create a new Event Hub client from environment variables.
# This requires one of the following sets of environment variables to be set:
# 
# 1) Expected Environment Variables:
#   - "EVENTHUB_CONNECTION_STRING"
#   
# 2) Expected Environment Variables:
#   - "EVENTHUB_NAMESPACE"
#   - "EVENTHUB_NAME"
#   - "EVENTHUB_KEY_NAME"
#   - "EVENTHUB_KEY_VALUE"
## 3) Expected Environment Variables:

- "EVENTHUB_NAMESPACE"
- "EVENTHUB_NAME"
- "AZURE_TENANT_ID"
- "AZURE_CLIENT_ID"
- "AZURE_CLIENT_SECRET"

 Uncommenting the option below will create an Event Hub client based solely on the connection string. This can either be the associated environment variable or hard coded directly.

 If this option is uncommented, environment variables will be ignored.

 Connection string should contain EventHubName (EntityPath)

 # connection_string = ""

 Set persistence directory to a valid folder to use a file persister instead of an in-memory persister

 # persistence_dir = ""

 Change the default consumer group

 # consumer_group = ""

 By default the event hub receives all messages present on the broker, alternative modes can be set below. The timestamp should be in https://github.com/toml-lang/toml#offset-date-time format (RFC 3339).

 # from_timestamp =
 # latest = true

 Set a custom prefetch count for the receiver(s)

 # prefetch_count = 1000

 Add an epoch to the receiver(s)

 # epoch = 0

 Change to set a custom user agent, "telegraf" is used by default

 # user_agent = "telegraf"

 To consume from a specific partition, set the partition_ids option. An empty array will result in receiving from all partitions.

 # partition_ids = ["0","1"]

 Max undelivered messages

 # max_undelivered_messages = 1000

 Set either option below to true to use a system property as timestamp.

 You have the choice between EnqueuedTime and IoTHubEnqueuedTime.

 It is recommended to use this setting when the data itself has no timestamp.

 # enqueued_time_as_ts = true
 # iot_hub_enqueued_time_as_ts = true

 Tags or fields to create from keys present in the application property bag.
# # # These could for example be set by message enrichments in Azure IoT Hub.
# # application_property_tags = []
# # application_property_fields = []
#
# # # Tag or field name to use for metadata
# # By default all metadata is disabled
# # sequence_number_field = "SequenceNumber"
# # enqueued_time_field = "EnqueuedTime"
# # offset_field = "Offset"
# # partition_id_tag = "PartitionID"
# # partition_key_tag = "PartitionKey"
# # iot_hub_device_connection_id_tag = "IoTHubDeviceConnectionID"
# # iot_hub_auth_generation_id_tag = "IoTHubAuthGenerationID"
# # iot_hub_connection_auth_method_tag = "IoTHubConnectionAuthMethod"
# # iot_hub_connection_module_id_tag = "IoTHubConnectionModuleID"
# # iot_hub_enqueued_time_field = "IoTHubEnqueuedTime"
#
# # # Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# # Run executable as long-running input plugin
# [inputs.execd]
# ## Program to run as daemon
# command = ["telegraf-smartctl", ":d", ":/dev/sda"
#
# # # Define how the process is signaled on each collection interval.
# # Valid values are:
# # "none" : Do not signal anything.
# # The process must output metrics by itself.
# # "STDIN" : Send a newline on STDIN.
# # "SIGHUP" : Send a HUP signal. Not available on Windows.
# # "SIGUSR1" : Send a USR1 signal. Not available on Windows.
# # "SIGUSR2" : Send a USR2 signal. Not available on Windows.
# signal = "none"
#
# # # Delay before the process is restarted after an unexpected termination
# restart_delay = "10s"
#
# # # Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
## gNMI telemetry input plugin
#
## Address and port of the gNMI GRPC server
# addresses = ["10.49.234.114:57777"]
#
## define credentials
# username = "cisco"
# password = "cisco"
#
## gNMI encoding requested (one of: "proto", "json", "json_ietf", "bytes")
# encoding = "proto"
#
## redial in case of failures after
# redial = "10s"
#
## enable client-side TLS and define CA to authenticate the device
# enable_tls = true
# tls_ca = "/etc/telegraf/ca.pem"
# insecure_skip_verify = true
#
## define client-side TLS certificate & key to authenticate to the device
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
## gNMI subscription prefix (optional, can usually be left empty)
## See: https://github.com/openconfig/reference/blob/master/rpc/gnmi/gnmi-specification.md#222-paths
## origin = ""
## prefix = ""
## target = ""
#
## Define additional aliases to map telemetry encoding paths to simple measurement names
##
## ifcounters = "openconfig:/interfaces/interface/state/counters"
#
## Name of the measurement that will be emitted
## name = "ifcounters"
#
## Origin and path of the subscription
## See: https://github.com/openconfig/reference/blob/master/rpc/gnmi/gnmi-specification.md#222-paths
##
## origin usually refers to a (YANG) data model implemented by the device
## and path to a specific substructure inside it that should be subscribed to (similar to an XPath)
## YANG models can be found e.g. here: https://github.com/YangModels/yang/tree/master/vendor/cisco/xr
## origin = "openconfig/interfaces"
## path = "/interfaces/interface/state/counters"
Subscription mode (one of: "target_defined", "sample", "on_change") and interval
subscription_mode = "sample"
sample_interval = "10s"

### Suppress redundant transmissions when measured values are unchanged
suppress_redundant = false

### If suppression is enabled, send updates at least every X seconds anyway
heartbeat_interval = "60s"

# Accept metrics over InfluxDB 1.x HTTP API
[[inputs.http_listener]]

### Address and port to host InfluxDB listener on
service_address = ":8186"

### maximum duration before timing out read of the request
read_timeout = "10s"

### maximum duration before timing out write of the response
write_timeout = "10s"

### Maximum allowed HTTP request body size in bytes.
max_body_size = "32MiB"

### Optional tag name used to store the database.
If the write has a database in the query string then it will be kept in this tag name.
This tag can be used in downstream outputs.
The default value of nothing means it will be off and the database will not be recorded.
database_tag = ""

### If set the retention policy specified in the write query will be added as
the value of this tag name.
retention_policy_tag = ""

### Set one or more allowed client CA certificate file names to
enable mutually authenticated TLS connections
tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]

### Add service certificate and key
tls_cert = "/etc/telegraf/cert.pem"
tls_key = "/etc/telegraf/key.pem"

### Optional username and password to accept for HTTP basic authentication.
You probably want to make sure you have TLS configured above for this.
basic_username = "foobar"
basic_password = "barfoo"
# Generic HTTP write listener
# [[inputs.http_listener_v2]]
# Address and port to host HTTP listener on
# service_address = ":8080"
#
# Path to listen to.
# This option is deprecated and only available for backward-compatibility. Please use paths instead.
# path = ""
#
# Paths to listen to.
# paths = ["/telegraf"]
#
# Save path as http_listener_v2_path tag if set to true
# path_tag = false
#
# HTTP methods to accept.
# methods = ["POST", "PUT"]
#
# Maximum duration before timing out read of the request
# read_timeout = "10s"
# Maximum duration before timing out write of the response
# write_timeout = "10s"
#
# Maximum allowed http request body size in bytes.
# 0 means to use the default of 524,288,000 bytes (500 mebibytes)
# max_body_size = "500MB"
#
# Part of the request to consume. Available options are "body" and "query".
# data_source = "body"
#
# Set one or more allowed client CA certificate file names to enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# Add service certificate and key
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# Optional username and password to accept for HTTP basic authentication.
# You probably want to make sure you have TLS configured above for this.
# basic_username = "foobar"
# basic_password = "barfoo"
#
# Optional setting to map http headers into tags
# If the http header is not present on the request, no corresponding tag will be added
# If multiple instances of the http header are present, only the first value will be used
# # http_header_tags = {"HTTP_HEADER" = "TAG_NAME"}
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# # Accept metrics over InfluxDB 1.x HTTP API
# [[inputs.influxdb_listener]]
# ## Address and port to host InfluxDB listener on
# service_address = ":8186"
#
# ## maximum duration before timing out read of the request
# read_timeout = "10s"
# ## maximum duration before timing out write of the response
# write_timeout = "10s"
#
# ## Maximum allowed HTTP request body size in bytes.
# ## 0 means to use the default of 32MiB.
# max_body_size = "32MiB"
#
# ## Optional tag name used to store the database.
# ## If the write has a database in the query string then it will be kept in this tag name.
# ## This tag can be used in downstream outputs.
# ## The default value of nothing means it will be off and the database will not be recorded.
# database_tag = ""
#
# ## If set the retention policy specified in the write query will be added as
# ## the value of this tag name.
# retention_policy_tag = ""
#
# ## Set one or more allowed client CA certificate file names to
# ## enable mutually authenticated TLS connections
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# ## Add service certificate and key
# tls_cert = "/etc/telegraf/cert.pem"
# tls_key = "/etc/telegraf/key.pem"
#
# ## Optional username and password to accept for HTTP basic authentication.
# You probably want to make sure you have TLS configured above for this.
# basic_username = "foobar"
# basic_password = "barfoo"

# # Accept metrics over InfluxDB 2.x HTTP API
# [inputs.influxdb_v2_listener]
# ## Address and port to host InfluxDB listener on
# ## (Double check the port. Could be 9999 if using OSS Beta)
# # service_address = ":8086"
#
# ## Maximum allowed HTTP request body size in bytes.
# ## 0 means to use the default of 32MiB.
# # max_body_size = "32MiB"
#
# ## Optional tag to determine the bucket.
# ## If the write has a bucket in the query string then it will be kept in this tag name.
# ## This tag can be used in downstream outputs.
# ## The default value of nothing means it will be off and the database will not be recorded.
# # bucket_tag = ""
#
# ## Set one or more allowed client CA certificate file names to
# ## enable mutually authenticated TLS connections
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
#
# ## Add service certificate and key
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# ## Optional token to accept for HTTP authentication.
# ## You probably want to make sure you have TLS configured above for this.
# # token = "some-long-shared-secret-token"

# Intel Performance Monitoring Unit plugin exposes Intel PMU metrics available through Linux Perf subsystem
# [[inputs.intel_pmu]]
# ## List of filesystem locations of JSON files that contain PMU event definitions.
# # event_definitions = ["/var/cache/pmu/GenuineIntel-6-55-4-core.json", "/var/cache/pmu/GenuineIntel-6-55-4-uncore.json"]
#
# ## List of core events measurement entities. There can be more than one core_events sections.
# [[inputs.intel_pmu.core_events]]
# ## List of events to be counted. Event names shall match names from event_definitions files.
# ## Single entry can contain name of the event (case insensitive) augmented with config options and perf modifiers.
# ## If absent, all core events from provided event_definitions are counted skipping unresolvable ones.
# # events = ["INST RETIRED.ANY", "CPU_CLK_UNHALTED.THREAD_ANY:config1=0x4043200000000k"]
#
# ## Limits the counting of events to core numbers specified.
# ## If absent, events are counted on all cores.
# ## Single "0", multiple "0,1,2" and range "0-2" notation is supported for each array element.
# ## example: cores = ["0,2", "4", "12-16"]
# # cores = ["0"]
## Indicator that plugin shall attempt to run core_events.events as a single perf group.
## If absent or set to false, each event is counted individually. Defaults to false.
## This limits the number of events that can be measured to a maximum of available hardware counters per core.
## Could vary depending on type of event, use of fixed counters.
`# perf_group = false`

## Optionally set a custom tag value that will be added to every measurement within this events group.
## Can be applied to any group of events, unrelated to perf_group setting.
`# events_tag = ""`

## List of uncore event measurement entities. There can be more than one uncore_events sections.
`[[inputs.intel_pmu.uncore_events]]`
## List of events to be counted. Event names shall match names from event_definitions files.
## Single entry can contain name of the event (case insensitive) augmented with config options and perf modifiers.
## If absent, all uncore events from provided event_definitions are counted skipping unresolvable ones.
`events = ["UNC_CHA_CLOCKTICKS", "UNC_CHA_TOR_OCCUPANCY.IA_MISS"]`

## Limits the counting of events to specified sockets.
## If absent, events are counted on all sockets.
## Single "0", multiple "0,1" and range "0-1" notation is supported for each array element.
## example: sockets = ["0-2"]
`sockets = ["0"]`

## Indicator that plugin shall provide an aggregated value for multiple units of same type distributed in an uncore.
## If absent or set to false, events for each unit are exposed as separate metric. Defaults to false.
`# aggregate_uncore_units = false`

## Optionally set a custom tag value that will be added to every measurement within this events group.
`# events_tag = ""`

### Intel Resource Director Technology plugin
`[[inputs.intel_rdt]]`
## Optionally set sampling interval to Nx100ms.
## This value is propagated to pqos tool. Interval format is defined by pqos itself.
## If not provided or provided 0, will be set to 10 = 10x100ms = 1s.
`# sampling_interval = "10"`

## Optionally specify the path to pqos executable.
## If not provided, auto discovery will be performed.
`# pqos_path = "/usr/local/bin/pqos"`

## Optionally specify if IPC and LLC_Misses metrics shouldn't be propagated.
## If not provided, default value is false.
`# shortened_metrics = false`
## Specify the list of groups of CPU core(s) to be provided as pqos input.
## Mandatory if processes aren’t set and forbidden if processes are specified.
## e.g. ["0-3", ",4,5,6"]
# cores = ["0-3"]
#
## Specify the list of processes for which Metrics will be collected.
## Mandatory if cores aren’t set and forbidden if cores are specified.
## e.g. ["qemu", ",pmd"]
# processes = ["process"]
#
## Specify if the pqos process should be called with sudo.
## Mandatory if the telegraf process does not run as root.
# use_sudo = false

## Read JTI OpenConfig Telemetry from listed sensors
[[inputs.jti_openconfig_telemetry]]
## List of device addresses to collect telemetry from
# servers = ["localhost:1883"]
#
## Authentication details. Username and password are must if device expects
## authentication. Client ID must be unique when connecting from multiple instances
# username = "user"
# password = "pass"
# client_id = "telegraf"
#
## Frequency to get data
# sample_frequency = "1000ms"
#
## Sensors to subscribe for
## A identifier for each sensor can be provided in path by separating with space
## Else sensor path will be used as identifier
## When identifier is used, we can provide a list of space separated sensors.
## A single subscription will be created with all these sensors and data will
## be saved to measurement with this identifier name
# sensors = [
#   "/interfaces/",
#   "collection /components/ /lldp",
# ]
#
## We allow specifying sensor group level reporting rate. To do this, specify the
## reporting rate in Duration at the beginning of sensor paths / collection
## name. For entries without reporting rate, we use configured sample frequency
# sensors = [
#   ",1000ms customReporting /interfaces /lldp",
#   "2000ms collection /components",
# "/interfaces",
#
#
## Optional TLS Config
## enable_tls = true
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
## insecure_skip_verify = false
#
## Delay between retry attempts of failed RPC calls or streams. Defaults to 1000ms.
## Failed streams/calls will not be retried if 0 is provided
## retry_delay = "1000ms"
#
## To treat all string values as tags, set this to true
## str_as_tags = false

## Read metrics from Kafka topics
[[inputs.kafka_consumer]]
## Kafka brokers.
brokers = ["localhost:9092"]
#
## Topics to consume.
topics = ["telegraf"]
#
## When set this tag will be added to all metrics with the topic as the value.
## topic_tag = 
#
## Optional Client id
## client_id = "Telegraf"
#
## Set the minimal supported Kafka version. Setting this enables the use of new
## Kafka features and APIs. Must be 0.10.2.0 or greater.
## ex: version = "1.1.0"
## version = 
#
## Optional TLS Config
## tls_ca = "/etc/telegraf/ca.pem"
## tls_cert = "/etc/telegraf/cert.pem"
## tls_key = "/etc/telegraf/key.pem"
## Use TLS but skip chain & host verification
## insecure_skip_verify = false
#
## SASL authentication credentials. These settings should typically be used
## with TLS encryption enabled
## sasl_username = "kafka"
# sasl_password = "secret"
#
# Optional SASL:
# one of: OAUTHBEARER, PLAIN, SCRAM-SHA-256, SCRAM-SHA-512, GSSAPI
# (defaults to PLAIN)
# sasl_mechanism = ""
#
# used if sasl_mechanism is GSSAPI (experimental)
# sasl_gssapi_service_name = ""
# One of: KRB5_USER_AUTH and KRB5_KEYTAB_AUTH
# sasl_gssapi_auth_type = "KRB5_USER_AUTH"
# sasl_gssapi_kerberos_config_path = "/"
# sasl_gssapi_realms = "realm"
# sasl_gssapi_key_tab_path = ""
# sasl_gssapi_disable_pafxfast = false
#
# used if sasl_mechanism is OAUTHBEARER (experimental)
# sasl_access_token = ""
#
# SASL protocol version. When connecting to Azure EventHub set to 0.
# sasl_version = 1
#
# Disable Kafka metadata full fetch
# metadata_full = false
#
# Name of the consumer group.
# consumer_group = "telegraf_metrics_consumers"
#
# Compression codec represents the various compression codecs recognized by
# Kafka in messages.
# 0 : None
# 1 : Gzip
# 2 : Snappy
# 3 : LZ4
# 4 : ZSTD
# compression_codec = 0
#
# Initial offset position; one of "oldest" or "newest".
# offset = "oldest"
#
# Consumer group partition assignment strategy; one of "range", "roundrobin" or "sticky".
# balance_strategy = "range"
#
# Maximum length of a message to consume, in bytes (default 0/unlimited);
# larger messages are dropped
# max_message_len = 1000000
#
# Maximum messages to read from the broker that have not been written by an
# ## output. For best throughput set based on the number of metrics within
# ## each message and the size of the output's metric_batch_size.
# ##
# ## For example, if each message from the queue contains 10 metrics and the
# ## output metric_batch_size is 1000, setting this to 100 will ensure that a
# ## full batch is collected and the write is triggered immediately without
# ## waiting until the next flush_interval.
# # max_undelivered_messages = 1000
#
# ## Maximum amount of time the consumer should take to process messages. If
# ## the debug log prints messages from sarama about 'abandoning subscription
# ## to [topic] because consuming was taking too long', increase this value to
# ## longer than the time taken by the output plugin(s).
# ##
# ## Note that the effective timeout could be between 'max_processing_time' and
# ## '2 * max_processing_time'.
# # max_processing_time = "100ms"
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"

# # Read metrics from Kafka topic(s)
# [[inputs.kafka_consumer_legacy]]
# ## DEPRECATED: The 'kafka_consumer_legacy' plugin is deprecated in version 1.4.0, use
# 'inputs.kafka_consumer' instead, NOTE: 'kafka_consumer' only supports Kafka v0.8+.
# ## topic(s) to consume
# topics = ["telegraf"]
#
# ## an array of Zookeeper connection strings
# zookeeper_peers = ["localhost:2181"]
#
# ## Zookeeper Chroot
# zookeeper_chroot = ""
#
# ## the name of the consumer group
# consumer_group = "telegraf_metrics_consumers"
#
# ## Offset (must be either "oldest" or "newest")
# offset = "oldest"
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# ## Maximum length of a message to consume, in bytes (default 0/unlimited);
# ## larger messages are dropped
# max_message_len = 65536

## Configuration for the AWS Kinesis input.
[[inputs.kinesis_consumer]]
# ## Amazon REGION of kinesis endpoint.
# region = "ap-southeast-2"
#
# ## Amazon Credentials
# ## Credentials are loaded in the following order
# ## 1) Web identity provider credentials via STS if role_arn and web_identity_token_file are specified
# ## 2) Assumed credentials via STS if role_arn is specified
# ## 3) explicit credentials from 'access_key' and 'secret_key'
# ## 4) shared profile from 'profile'
# ## 5) environment variables
# ## 6) shared credentials file
# ## 7) EC2 Instance Profile
# # access_key = ""
# # secret_key = ""
# # token = ""
# # role_arn = ""
# # web_identity_token_file = ""
# # role_session_name = ""
# # profile = ""
# # shared_credential_file = ""
#
# ## Endpoint to make request against, the correct endpoint is automatically
# ## determined and this option should only be set if you wish to override the
# ## default.
# # ex: endpoint_url = "http://localhost:8000"
# # endpoint_url = ""
#
# ## Kinesis StreamName must exist prior to starting telegraf.
# streamname = "StreamName"
#
# ## Shard iterator type (only 'TRIM_HORIZON' and 'LATEST' currently supported)
# # shard_iterator_type = "TRIM_HORIZON"
#
# ## Maximum messages to read from the broker that have not been written by an
# ## output. For best throughput set based on the number of metrics within
# ## each message and the size of the output's metric_batch_size.
# ##
# ## For example, if each message from the queue contains 10 metrics and the
# ## output metric_batch_size is 1000, setting this to 100 will ensure that a
# ## full batch is collected and the write is triggered immediately without
# ## waiting until the next flush_interval.
# # max_undelivered_messages = 1000
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# data_format = "influx"
#
# ### The content encoding of the data from kinesis
# ### If you are processing a cloudwatch logs kinesis stream then set this to "gzip"
# ### as AWS compresses cloudwatch log data before it is sent to kinesis (aws
# ### also base64 encodes the zip byte data before pushing to the stream. The base64 decoding
# ### is done automatically by the golang sdk, as data is read from kinesis)
# content_encoding = "identity"
#
# ## Optional
# ## Configuration for a dynamodb checkpoint
# [inputs.kinesis_consumer.checkpoint_dynamodb]
# app_name = "default"
# table_name = "default"

# ## Listener capable of handling KNX bus messages provided through a KNX-IP Interface.
# [inputs.knx_listener]
# ## Type of KNX-IP interface.
# ## Can be either "tunnel" or "router".
# service_type = "tunnel"
#
# ## Address of the KNX-IP interface.
# service_address = "localhost:3671"
#
# ## Measurement definition(s)
# [inputs.knx_listener.measurement]
# Name of the measurement
# name = "temperature"
# ## Datapoint-Type (DPT) of the KNX messages
# dpt = "9.001"
# ## List of Group-Addresses (GAs) assigned to the measurement
# addresses = ["5/5/1"]
#
# [inputs.knx_listener.measurement]
# name = "illumination"
# dpt = "9.004"
addresses = ["5/5/3"]

Read metrics off Arista LANZ, via socket
[[inputs.lanz]]
## URL to Arista LANZ endpoint
servers = [
  "tcp://127.0.0.1:50001"
]

Stream and parse log file(s).
[[inputs.logparser]]
### DEPRECATED: The 'logparser' plugin is deprecated in version 1.15.0, use 'inputs.tail' with 'grok' data format instead.
## Log files to parse.
### These accept standard unix glob matching rules, but with the addition of
### ** as a "super asterisk". ie:
### /var/log/**.log  -> recursively find all .log files in /var/log
### /var/log/*/*.log -> find all .log files with a parent dir in /var/log
### /var/log/apache.log -> only tail the apache log file
files = ["/var/log/apache/access.log"]

## Read files that currently exist from the beginning. Files that are created
## while telegraf is running (and that match the "files" globs) will always
## be read from the beginning.
from_beginning = false

## Method used to watch for file updates. Can be either "inotify" or "poll".
# watch_method = "inotify"

## Parse logstash-style "grok" patterns:
[[inputs.logparser.grok]]
### This is a list of patterns to check the given log file(s) for.
### Note that adding patterns here increases processing time. The most
### efficient configuration is to have one pattern per logparser.
### Other common built-in patterns are:
### % COMMON_LOG_FORMAT (plain apache & nginx access logs)
### % COMBINED_LOG_FORMAT (access logs + referrer & agent)
patterns = ["%{COMMON_LOG_FORMAT}"]

### Name of the outputted measurement name.
measurement = "apache_access_log"

### Full path(s) to custom pattern files.
custom_pattern_files = []

### Custom patterns can also be defined here. Put one pattern per line.
custom_patterns = ''

## Timezone allows you to provide an override for timestamps that
## don't already include an offset
## e.g. 04/06/2016 12:41:45 data one two 5.43µs
## Default: "" which renders UTC
## Options are as follows:
## 1. Local -- interpret based on machine localtime
## 2. "Canada/Eastern" -- Unix TZ values like those found in
## 3. UTC -- or blank/unspecified, will return timestamp in UTC
## timezone = "Canada/Eastern"

## When set to "disable", timestamp will not incremented if there is a
duplicate.
unique_timestamp = "auto"

## Read metrics from MQTT topic(s)
[[inputs.mqtt_consumer]]
## Broker URLs for the MQTT server or cluster. To connect to multiple
## clusters or standalone servers, use a separate plugin instance.
## example: servers = ["tcp://localhost:1883"]
## servers = ["ssl://localhost:1883"]
## servers = ["ws://localhost:1883"]
## servers = ["tcp://127.0.0.1:1883"]
## Topics that will be subscribed to.
## topics = [
## "telegraf/host01/cpu",
## "telegraf/+/mem",
## "sensors/#",
## ]
## topic_fields = "/_/_/temperature"
## The message topic will be stored in a tag specified by this value. If set
## to the empty string no topic tag will be created.
## topic_tag = "topic"
## QoS policy for messages
## 0 = at most once
## 1 = at least once
## 2 = exactly once
## When using a QoS of 1 or 2, you should enable persistent_session to allow
## resuming unacknowledged messages.
## qos = 0
## Connection timeout for initial connection in seconds
connection_timeout = "30s"
# # Maximum messages to read from the broker that have not been written by an
# # output. For best throughput set based on the number of metrics within
# # each message and the size of the output's metric_batch_size.
# #
# # For example, if each message from the queue contains 10 metrics and the
# # output metric_batch_size is 1000, setting this to 100 will ensure that a
# # full batch is collected and the write is triggered immediately without
# # waiting until the next flush_interval.
# # max_undelivered_messages = 1000
# # Persistent session disables clearing of the client session on connection.
# # In order for this option to work you must also set client_id to identify
# # the client. To receive messages that arrived while the client is offline,
# # also set the qos option to 1 or 2 and don't forget to also set the QoS when
# # publishing.
# # persistent_session = false
# # If unset, a random client ID will be generated.
# # client_id = ""
# # Username and password to connect MQTT server.
# # username = "telegraf"
# # password = "metricsmetricsmetricsmetrics"
# # Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# # Use TLS but skip chain & host verification
# # insecure_skip_verify = false
# # Data format to consume.
# # Each data format has its own unique set of configuration options, read
# # more about them here:
# # https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"
# # Enable extracting tag values from MQTT topics
# # _ denotes an ignored entry in the topic path
# # [[inputs.mqtt_consumer.topic_parsing]]
# # topic = ""
# # measurement = ""
# # tags = ""
# # fields = ""
# # [[inputs.mqtt_consumer.topic_parsing.types]
# #]
# # Read metrics from NATS subject(s)
# # [[inputs.nats_consumer]]
# # urls of NATS servers
# # servers = ["nats://localhost:4222"]
# # subject(s) to consume
# subjects = ["telegraf"]
#
# ## name a queue group
# queue_group = "telegraf_consumers"
#
# ## Optional credentials
# # username = ""
# # password = ""
#
# ## Optional NATS 2.0 and NATS NGS compatible user credentials
# # credentials = "/etc/telegraf/nats.creds"
#
# ## Use Transport Layer Security
# # secure = false
#
# ## Optional TLS Config
# # tls_ca = "/etc/telegraf/ca.pem"
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Use TLS but skip chain & host verification
# # insecure_skip_verify = false
#
# ## Sets the limits for pending msgs and bytes for each subscription
# ## These shouldn't need to be adjusted except in very high throughput scenarios
# # pending_message_limit = 65536
# # pending_bytes_limit = 67108864
#
# ## Maximum messages to read from the broker that have not been written by an
# ## output. For best throughput set based on the number of metrics within
# ## each message and the size of the output's metric_batch_size.
# ##
# ## For example, if each message from the queue contains 10 metrics and the
# ## output metric_batch_size is 100, setting this to 100 will ensure that a
# ## full batch is collected and the write is triggered immediately without
# ## waiting until the next flush_interval.
# # max_undelivered_messages = 1000
#
# ## Data format to consume.
# ## Each data format has its own unique set of configuration options, read
# ## more about them here:
# ## https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
# # data_format = "influx"

# # Read NSQ topic for metrics.
# [[inputs.nsq_consumer]]
# ## Server option still works but is deprecated, we just prepend it to the nsqd array.
# # server = "localhost:4150"
An array representing the NSQD TCP HTTP Endpoints

```
nsqd = ["localhost:4150"]
```

An array representing the NSQLookupd HTTP Endpoints

```
nsqlookupd = ["localhost:4161"]
```

```
topic = "telegraf"
channel = "consumer"
max_in_flight = 100
```

## Maximum messages to read from the broker that have not been written by an output. For best throughput set based on the number of metrics within each message and the size of the output's metric_batch_size.

```
# max_undelivered_messages = 1000
```

Data format to consume.

Each data format has its own unique set of configuration options, read more about them here:

```
data_format = "influx"
```

Receive OpenTelemetry traces, metrics, and logs over gRPC

```
[[inputs.opentelemetry]]
```

Override the default (0.0.0.0:4317) destination OpenTelemetry gRPC service address:port

```
# service_address = "0.0.0.0:4317"
```

Override the default (5s) new connection timeout

```
# timeout = "5s"
```

Override the default (prometheus-v1) metrics schema.

```
# metrics_schema = "prometheus-v1"
```

Optional TLS Config.

For advanced options: https://github.com/influxdata/telegraf/blob/v1.18.3/docs/TLS.md

```
# tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
```
# # Add service certificate and key.
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"

## Read metrics from one or many pgbouncer servers
[[inputs.pgbouncer]]
## specify address via a url matching:
## postgres://[pqgotest[:password]]@localhost[/dbname]/
## ?sslmode=[disable|verify-ca|verify-full]
## or a simple string:
## host=localhost user=pqgotest password=... sslmode=... dbname=app_production
##
## # All connection parameters are optional.
##
## address = "host=localhost user=pgbouncer sslmode=disable"

## Read metrics from one or many postgresql servers
[[inputs.postgresql]]
## specify address via a url matching:
## postgres://[pqgotest[:password]]@localhost[/dbname]/
## ?sslmode=[disable|verify-ca|verify-full]
## or a simple string:
## host=localhost user=pqgotest password=... sslmode=... dbname=app_production
##
## # All connection parameters are optional.
## #
## # Without the dbname parameter, the driver will default to a database
## with the same name as the user. This dbname is just for instantiating a
## connection with the server and doesn't restrict the databases we are trying
## to grab metrics for.
##
## address = "host=localhost user=postgres sslmode=disable"
## A custom name for the database that will be used as the "server" tag in the
## measurement output. If not specified, a default one generated from
## the connection address is used.
## outputaddress = "db01"
##
## # connection configuration.
## max_lifetime - specify the maximum lifetime of a connection.
## default is forever (0s)
## max_lifetime = "0s"
##
## A list of databases to explicitly ignore. If not specified, metrics for all
## databases are gathered. Do NOT use with the 'databases' option.
## ignored_databases = ["postgres", "template0", "template1"]
A list of databases to pull metrics about. If not specified, metrics for all databases are gathered. Do NOT use with the 'ignored_databases' option.

databases = ['app_production', 'testing']

Read metrics from one or many postgresql servers

databases = ['app_production', 'testing']

Detailed connection configuration:

- **address**: The address of the database server. Can be specified as a URL or a simple string.
- **dbname**: The name of the database to pull metrics from. If not specified, the driver will default to a database with the same name as the user.
- **max_lifetime**: The maximum lifetime of a connection. The default is forever (0s).

Example:

```
address = "host=localhost user=postgres sslmode=disable"

databases = ['app_production', 'testing']
```

Define the toml config where the sql queries are stored.

Example:

```
Example : the sqlquery : "SELECT * FROM pg_stat_database where datname" become
"SELECT * FROM pg_stat_database where datname IN ('postgres', 'pgbench')"
```

The optional "measurement" value can be used to override the default output measurement name ("postgresql").
The script option can be used to specify the .sql file path.
# If script and sqlquery options specified at the same time, sqlquery will be used
# the tagvalue field is used to define custom tags (separated by commas).
# the query is expected to return columns which match the names of the
# defined tags. The values in these columns must be of a string-type,
# a number-type or a blob-type.
#
# The timestamp field is used to override the data points timestamp value. By
default, all rows inserted with current time. By setting a timestamp column,
the row will be inserted with that column's value.
#
# Structure:
# 
# 
# sqlquery string
# version string
# withdbname boolean
# tagvalue string (comma separated)
# measurement string
# timestamp string
# 
# sqlquery="SELECT * FROM pg_stat_database"
# version=901
# withdbname=false
# tagvalue="" measurement=""
# sqlquery="SELECT * FROM pg_stat_bgwriter"
# version=901
# withdbname=false
# tagvalue="postgresql.stats"

# Read metrics from one or many Prometheus clients
# An array of urls to scrape metrics from.
# urls = ["http://localhost:9100/metrics"]
#
# Metric version controls the mapping from Prometheus metrics into
# Telegraf metrics. When using the prometheus_client output, use the same
# value in both plugins to ensure metrics are round-tripped without
# modification.
#
# example: metric_version = 1;
# metric_version = 2; recommended version
# metric_version = 1
#
## Url tag name (tag containing scrapped url. optional, default is "url")
# url_tag = "url"
#
## Whether the timestamp of the scraped metrics will be ignored.
## If set to true, the gather time will be used.
# ignore_timestamp = false
#
## An array of Kubernetes services to scrape metrics from.
# kubernetes_services = ["http://my-service-dns.my-namespace:9100/metrics"]
#
## Kubernetes config file to create client from.
# kube_config = "/path/to/kubernetes.config"
#
## Scrape Kubernetes pods for the following prometheus annotations:
## - prometheus.io/scrape: Enable scraping for this pod
## - prometheus.io/scheme: If the metrics endpoint is secured then you will need to
##   set this to 'https' & most likely set the tls config.
## - prometheus.io/path: If the metrics path is not /metrics, define it with this annotation.
## - prometheus.io/port: If port is not 9102 use this annotation
# monitor_kubernetes_pods = true
## Get the list of pods to scrape with either the scope of
## - cluster: the kubernetes watch api (default, no need to specify)
## - node: the local cadvisor api; for scalability. Note that the config node_ip or the environment variable
## NODE_IP must be set to the host IP.
# pod_scrape_scope = "cluster"
## Only for node scrape scope: node IP of the node that telegraf is running on.
## Either this config or the environment variable NODE_IP must be set.
# node_ip = "10.180.1.1"
## Only for node scrape scope: interval in seconds for how often to get updated pod list for scraping.
## Default is 60 seconds.
# pod_scrape_interval = 60
## Restricts Kubernetes monitoring to a single namespace
## ex: monitor_kubernetes_pods_namespace = "default"
# monitor_kubernetes_pods_namespace = ""
## label selector to target pods which have the label
## field selector to target pods
## eg. To scrape pods on a specific node
## kubernetes_field_selector = "spec.nodeName=$HOSTNAME"
#
## Scrape Services available in Consul Catalog
# [inputs.prometheus.consul]
## enabled = true
## agent = "http://localhost:8500"
## query_interval = "5m"
#
## [[inputs.prometheus.consul.query]]
## name = "a service name"
tag = "a service tag"
url = 'http://{{ if ne .ServiceAddress ""}}{{.ServiceAddress}}{{else}}{{.Address}}{{end}}:{{.ServicePort}}/{{with .ServiceMeta.metrics_path}}{{.}}{{else}}metrics{{end}}'
host = "{{.Node}}"

## Use bearer token for authorization. ('bearer_token' takes priority)
bearer_token = "/path/to/bearer/token"

## OR
bearer_token_string = "abc_123"

HTTP Basic Authentication username and password. ('bearer_token' and 'bearer_token_string' take priority)
username = ""
password = ""

## Specify timeout duration for slower prometheus clients (default is 3s)
response_timeout = "3s"

## Optional TLS Config
tls_ca = /path/to/cafile
tls_cert = /path/to/certfile
tls_key = /path/to/keyfile

## Use TLS but skip chain & host verification
insecure_skip_verify = false

## RAS plugin exposes counter metrics for Machine Check Errors provided by RASDaemon (sqlite3 output is required).

db_path = ""

## Riemann protobuf listener.

default is "tcp://:5555"

## service_address = "tcp://:8094"

# service_address = "tcp://127.0.0.1:http"
# service_address = "tcp4://:8094"
# service_address = "tcp6://:8094"
# service_address = "tcp6://[2001:db8::1]:8094"

## Maximum number of concurrent connections.
## 0 (default) is unlimited.
# # max_connections = 1024
# ## Read timeout.
# ## 0 (default) is unlimited.
# # read_timeout = "30s"
# ## Optional TLS configuration.
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
# ## Enables client authentication if set.
# # tls_allowed_cacerts = ["/etc/telegraf/clientca.pem"]
# ## Maximum socket buffer size (in bytes when no unit specified).
# # read_buffer_size = "64KiB"
# ## Period between keep alive probes.
# ## 0 disables keep alive probes.
# ## Defaults to the OS configuration.
# # keep_alive_period = "5m"

## SFlow V5 Protocol Listener
# [[inputs.sflow]]
# ## Address to listen for sFlow packets.
# ## example: service_address = "udp://:6343"
# ## service_address = "udp4://:6343"
# ## service_address = "udp6://:6343"
# service_address = "udp://:6343"
#
# ## Set the size of the operating system's receive buffer.
# ## example: read_buffer_size = "64KiB"
# # read_buffer_size = ""

## Receive SNMP traps
# [[inputs.snmp_trap]]
# ## Transport, local address, and port to listen on. Transport must
# ## be "udp://". Omit local address to listen on all interfaces.
# ## example: "udp://127.0.0.1:1234"
# ## Special permissions may be required to listen on a port less than
# ## 1024. See README.md for details
# ## Path to mib files
# # path = ["/usr/share/snmp/mibs"]
# ## Deprecated in 1.20.0; no longer running snmptranslate
# ## Timeout running snmptranslate command
# # timeout = "5s"
# ## Snmp version, defaults to 2c
## SNMPv3 authentication and encryption options.

### Security Name.

```conf
# sec_name = "myuser"
```

### Authentication protocol; one of "MD5", "SHA" or "".

```conf
# auth_protocol = "MD5"
```

### Authentication password.

```conf
# auth_password = "pass"
```

### Security Level; one of "noAuthNoPriv", "authNoPriv", or "authPriv".

```conf
# sec_level = "authNoPriv"
```

### Privacy protocol used for encrypted messages; one of "DES", "AES", "AES192", "AES192C", "AES256", "AES256C" or "".

```conf
# priv_protocol = ""
```

### Privacy password used for encrypted messages.

```conf
# priv_password = ""
```

## Generic socket listener capable of handling multiple socket types.

```conf
# [[inputs.socket_listener]]
```

### URL to listen on

```conf
# service_address = "tcp://:8094"
# service_address = "tcp://127.0.0.1:http"
# service_address = "tcp4://:8094"
# service_address = "tcp6://:8094"
# service_address = "tcp6://[2001:db8::1]:8094"
# service_address = "udp://:8094"
# service_address = "udp4://:8094"
# service_address = "udp6://:8094"
# service_address = "unix:///tmp/telegraf.sock"
# service_address = "unixgram:///tmp/telegraf.sock"
```

### Change the file mode bits on unix sockets. These permissions may not be respected by some platforms, to safely restrict write permissions it is best to place the socket into a directory that has previously been created with the desired permissions.

```conf
# socket_mode = "777"
```

### Maximum number of concurrent connections.

```conf
# max_connections = 1024
```

### Read timeout.

```conf
# read_timeout = "30s"
```
## Optional TLS configuration.
## Only applies to stream sockets (e.g. TCP).
## Enables client authentication if set.
## Maximum socket buffer size (in bytes when no unit specified).
## For stream sockets, once the buffer fills up, the sender will start backing up.
## For datagram sockets, once the buffer fills up, metrics will start dropping.
## Defaults to the OS default.
## Period between keep alive probes.
## Only applies to TCP sockets.
## 0 disables keep alive probes.
## Defaults to the OS configuration.
## Data format to consume.
## Each data format has its own unique set of configuration options, read
## more about them here:
## See https://github.com/influxdata/telegraf/blob/master/docs/DATA_FORMATS_INPUT.md
## Content encoding for message payloads, can be set to "gzip" to or
## "identity" to apply no encoding.

# Read metrics from SQL queries
# [[inputs.sql]]
## Database Driver
## See https://github.com/influxdata/telegraf/blob/master/docs/SQL_DRIVERS_INPUT.md for
## a list of supported drivers.
## Data source name for connecting
## The syntax and supported options depends on selected driver.
## Timeout for any operation
## Note that the timeout for queries is per query not per gather.
## Connection time limits
## By default the maximum idle time and maximum lifetime of a connection is unlimited, i.e. the connections
# will not be closed automatically. If you specify a positive time, the connections will be closed after
# idleing or existing for at least that amount of time, respectively.
# connection_max_idle_time = "0s"
# connection_max_life_time = "0s"
#
# Connection count limits
# By default the number of open connections is not limited and the number of maximum idle connections
# will be inferred from the number of queries specified. If you specify a positive number for any of the
# two options, connections will be closed when reaching the specified limit. The number of idle connections
# will be clipped to the maximum number of connections limit if any.
# connection_max_open = 0
# connection_max_idle = auto
#
# [[inputs.sql.query]]
# Query to perform on the server
# query="SELECT user,state,latency,score FROM Scoreboard WHERE application > 0"
# # Alternatively to specifying the query directly you can select a file here containing the SQL query.
# # Only one of 'query' and 'query_script' can be specified!
# query_script = "/path/to/sql/script.sql"
#
# Name of the measurement
# In case both measurement and 'measurement_col' are given, the latter takes precedence.
# measurement = "sql"
#
# Column name containing the name of the measurement
# If given, this will take precedence over the 'measurement' setting. In case a query result
# does not contain the specified column, we fall-back to the 'measurement' setting.
# measurement_column = ""
#
# Column name containing the time of the measurement
# If ommited, the time of the query will be used.
# time_column = ""
#
# Format of the time contained in 'time_col'
# The time must be 'unix', 'unix_ms', 'unix_us', 'unix_ns', or a golang time format.
# See https://golang.org/pkg/time/#Time.Format for details.
# time_format = "unix"
#
# Column names containing tags
# An empty include list will reject all columns and an empty exclude list will not exclude any column.
# I.e. by default no columns will be returned as tag and the tags are empty.
# tag_columns_include = []
# tag_columns_exclude = []
#
# Column names containing fields (explicit types)
# Convert the given columns to the corresponding type. Explicit type conversions take precedence over
# the automatic (driver-based) conversion below.
# NOTE: Columns should not be specified for multiple types or the resulting type is undefined.
```
#     # field_columns_float = []
#     # field_columns_int = []
#     # field_columns_uint = []
#     # field_columns_bool = []
#     # field_columns_string = []
#
#     ## Column names containing fields (automatic types)
#     ## An empty include list is equivalent to '[*]' and all returned columns will be accepted. An empty
#     ## exclude list will not exclude any column. I.e. by default all columns will be returned as fields.
#     ## NOTE: We rely on the database driver to perform automatic datatype conversion.
#     # field_columns_include = []
#     # field_columns_exclude = []

# # Read metrics from Microsoft SQL Server
# [inputs.sqlserver]
# ### Specify instances to monitor with a list of connection strings.
# ### All connection parameters are optional.
# ### By default, the host is localhost, listening on default port, TCP 1433.
# ### for Windows, the user is the currently running AD user (SSO).
# ### See https://github.com/denisenkom/go-mssqldb for detailed connection
# ### parameters, in particular, tls connections can be created like so:
# ### "encrypt=true;certificate=<cert>;hostNameInCertificate=<SqlServer host fqdn>"
# servers = [
#   "Server=192.168.1.10;Port=1433;User Id=<user>;Password=<pw>;app name=telegraf;log=1;",
# ]
#
# ### Authentication method
# ### valid methods: "connection_string", "AAD"
# # auth_method = "connection_string"
#
# ### "database_type" enables a specific set of queries depending on the database type. If specified, it replaces
# azuredb = true/false and query_version = 2
# ### In the config file, the sql server plugin section should be repeated each with a set of servers for a specific
# database_type.
# ### Possible values for database_type are - "SQLServer" or "AzureSQLDB" or "AzureSQLManagedInstance" or
# "AzureSQLPool"
# # database_type = "SQLServer"
#
# ### A list of queries to include. If not specified, all the below listed queries are used.
# include_query = []
#
# ### A list of queries to explicitly ignore.
# exclude_query = ["SQLServerAvailabilityReplicaStates", "SQLServerDatabaseReplicaStates"]
# # Queries enabled by default for database_type = "SQLServer" are -
# # SQLServerPerformanceCounters, SQLServerWaitStatsCategorized, SQLServerDatabaseIO,
```
SQLServerProperties, SQLServerMemoryClerks,
### SQLServerSchedulers, SQLServerRequests, SQLServerVolumeSpace, SQLServerCpu,
SQLServerAvailabilityReplicaStates, SQLServerDatabaseReplicaStates
#
### Queries enabled by default for database_type = "AzureSQLDB" are -
### AzureSQLDBResourceStats, AzureSQLDBResourceGovernance, AzureSQLDBWaitStats,
AzureSQLDBDatabaseIO, AzureSQLDBServerProperties,
### AzureSQLDBOsWaitstats, AzureSQLDBMemoryClerks, AzureSQLDBPerformanceCounters,
AzureSQLDBRequests, AzureSQLDBSchedulers
#
### Queries enabled by default for database_type = "AzureSQLManagedInstance" are -
### AzureSQLMIResourceStats, AzureSQLMIResourceGovernance, AzureSQLMIIDatabaseIO,
AzureSQLMIIServerProperties, AzureSQLMIOSWaitstats,
### AzureSQLMIIMemoryClerks, AzureSQLMIPerformanceCounters, AzureSQLMIRequests,
AzureSQLMIISchedulers
#
### Queries enabled by default for database_type = "AzureSQLPool" are -
### AzureSQLPoolResourceStats, AzureSQLPoolResourceGovernance, AzureSQLPoolDatabaseIO,
AzureSQLPoolWaitStats,
### AzureSQLPoolMemoryClerks, AzureSQLPoolPerformanceCounters, AzureSQLPoolSchedulers
#
### Following are old config settings
### You may use them only if you are using the earlier flavor of queries, however it is recommended to use
### the new mechanism of identifying the database_type there by use it's corresponding queries
#
### Optional parameter, setting this to 2 will use a new version
### of the collection queries that break compatibility with the original
### dashboards.
### Version 2 - is compatible from SQL Server 2012 and later versions and also for SQL Azure DB
### query_version = 2
#
### If you are using AzureDB, setting this to true will gather resource utilization metrics
### azuredb = false

### Statsd UDP/TCP Server
### [inputs.statsd]
### Protocol, must be "tcp", "udp", "udp4" or "udp6" (default=udp)
### protocol = "udp"
#
### MaxTCPConnection - applicable when protocol is set to tcp (default=250)
### max_tcp_connections = 250
#
### Enable TCP keep alive probes (default=false)
### tcp_keep_alive = false
#
### Specifies the keep-alive period for an active network connection.
### Only applies to TCP sockets and will be ignored if tcp_keep_alive is false.
# Defaults to the OS configuration.
# tcp_keep_alive_period = "2h"
#
# Address and port to host UDP listener on
service_address = ":8125"
#
# The following configuration options control when telegraf clears it's cache
# of previous values. If set to false, then telegraf will only clear it's
# cache when the daemon is restarted.
# Reset gauges every interval (default=true)
delete_gauges = true
# Reset counters every interval (default=true)
delete_counters = true
# Reset sets every interval (default=true)
delete_sets = true
# Reset timings & histograms every interval (default=true)
delete_timings = true
#
# Percentiles to calculate for timing & histogram stats
percentiles = [50.0, 90.0, 99.0, 99.9, 99.95, 100.0]
#
# separator to use between elements of a statsd metric
metric_separator = "_"
#
# Parses tags in the datadog statsd format
# http://docs.datadoghq.com/guides/dogstatsd/
parse_data_dog_tags = false
#
# Parses datadog extensions to the statsd format
datatag_extensions = false
#
# Parses distributions metric as specified in the datadog statsd format
# https://docs.datadoghq.com/developers/metrics/types/?tab=distribution#definition
datatag_distributions = false
#
# Statsd data translation templates, more info can be read here:
# https://github.com/influxdata/telegraf/blob/master/docs/TEMPLATE_PATTERN.md
templates = [
    "cpu.* measurement*"
]
#
# Number of UDP messages allowed to queue up, once filled,
# the statsd server will start dropping packets
allowed_pending_messages = 10000
#
# Number of timing/histogram values to track per-measurement in the
calculation of percentiles. Raising this limit increases the accuracy
# of percentiles but also increases the memory usage and cpu time.
# percentile_limit = 1000
#
# ## Max duration (TTL) for each metric to stay cached/reported without being updated.
# #max_ttl = "1000h"

## Suricata stats and alerts plugin
# [[inputs.suricata]]
# ### Data sink for Suricata stats and alerts logs
# # This is expected to be a filename of a
# # unix socket to be created for listening.
# # source = "/var/run/suricata-stats.sock"
#
# ### Delimiter for flattening field keys, e.g. subitem "alert" of "detect"
# # becomes "detect_alert" when delimiter is "_".
# # delimiter = "_"
#
# ### Detect alert logs
# # alerts = false

## Accepts syslog messages following RFC5424 format with transports as per RFC5426, RFC5425, or RFC6587
# [[inputs.syslog]]
# ### Specify an ip or hostname with port - eg., tcp://localhost:6514, tcp://10.0.0.1:6514
# ### Protocol, address and port to host the syslog receiver.
# # server = "tcp://:6514"
#
# ### TLS Config
# # tls_allowed_cacerts = ["/etc/telegraf/ca.pem"]
# # tls_cert = "/etc/telegraf/cert.pem"
# # tls_key = "/etc/telegraf/key.pem"
#
# ### Period between keep alive probes.
# # 0 disables keep alive probes.
# # Defaults to the OS configuration.
# # Only applies to stream sockets (e.g. TCP).
# # keep_alive_period = "5m"
#
# ### Maximum number of concurrent connections (default = 0).
# # 0 means unlimited.
# # Only applies to stream sockets (e.g. TCP).
# # max_connections = 1024
#
# ### Read timeout is the maximum time allowed for reading a single message (default = 5s).
# # 0 means unlimited.
# # read_timeout = "5s"
# The framing technique with which it is expected that messages are transported (default = "octet-counting").
# Whether the messages come using the octect-counting (RFC5425#section-4.3.1, RFC6587#section-3.4.1),
# or the non-transparent framing technique (RFC6587#section-3.4.2).
# Must be one of "octet-counting", "non-transparent".
# framing = "octet-counting"
#
# The trailer to be expected in case of non-transparent framing (default = "LF").
# Must be one of "LF", or "NUL".
# trailer = "LF"
#
# Whether to parse in best effort mode or not (default = false).
# By default best effort parsing is off.
# best_effort = false
#
# The RFC standard to use for message parsing
# By default RFC5424 is used. RFC3164 only supports UDP transport (no streaming support)
# Must be one of "RFC5424", or "RFC3164".
# syslog_standard = "RFC5424"
#
# Character to prepend to SD-PARAMs (default = ")."
# A syslog message can contain multiple parameters and multiple identifiers within structured data section.
# Eg., [id1 name1="val1" name2="val2"] [id2 name1="val1" nameA="valA"]
# For each combination a field is created.
# Its name is created concatenating identifier, sdparam_separator, and parameter name.
# sdparam_separator = "."
## Method used to watch for file updates. Can be either "inotify" or "poll".
## watch_method = "inotify"

## Maximum lines of the file to process that have not yet be written by the
## output. For best throughput set based on the number of metrics on each
## line and the size of the output's metric_batch_size.
## max_undelivered_lines = 1000

## Character encoding to use when interpreting the file contents. Invalid
## characters are replaced using the unicode replacement character. When set
## to the empty string the data is not decoded to text.
## character_encoding = "utf-8"
## character_encoding = "utf-16le"
## character_encoding = "utf-16be"
## character_encoding = ""
## character_encoding = ""

## Data format to consume.
## Each data format has its own unique set of configuration options, read
## more about them here:
## data_format = "influx"

## Set the tag that will contain the path of the tailed file. If you don't want this tag, set it to an empty string.
## path_tag = "path"

## multiline parser/codec
## The pattern should be a regexp which matches what you believe to be an
## indicator that the field is part of an event consisting of multiple lines of log data.
## pattern = "^\s"

## This field must be either "previous" or "next".
## If a line matches the pattern, "previous" indicates that it belongs to the previous line,
## whereas "next" indicates that the line belongs to the next one.
## match_which_line = "previous"

## The invert_match field can be true or false (defaults to false).
## If true, a message not matching the pattern will constitute a match of the multiline
## filter and the what will be applied. (vice-versa is also true)
## invert_match = false

## After the specified timeout, this plugin sends a multiline event even if no new pattern
## is found to start a new event. The default timeout is 5s.
## timeout = 5s
## Generic TCP listener

```
# [inputs.tcp_listener]
# ## DEPRECATED: The 'tcp_listener' plugin is deprecated in version 1.3.0, use 'inputs.socket_listener' instead.
# ## DEPRECATED: the TCP listener plugin has been deprecated in favor of the
# # socket_listener plugin
# # see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/socket_listener
```

## Generic UDP listener

```
# [inputs.udp_listener]
# ## DEPRECATED: The 'udp_listener' plugin is deprecated in version 1.3.0, use 'inputs.socket_listener' instead.
# ## DEPRECATED: the TCP listener plugin has been deprecated in favor of the
# # socket_listener plugin
# # see https://github.com/influxdata/telegraf/tree/master/plugins/inputs/socket_listener
```

## Read metrics from VMware vCenter

```
# [inputs.vsphere]
# ## List of vCenter URLs to be monitored. These three lines must be uncommented
# ## and edited for the plugin to work.
# vcenters = [ "https://vcenter.local/sdk" ]
# username = "user@corp.local"
# password = "secret"

## VMs
# ## Typical VM metrics (if omitted or empty, all metrics are collected)
# # vm_include = [ "/vm/**" ] # Inventory path to VMs to collect (by default all are collected)
# # vm_exclude = [] # Inventory paths to exclude
# vm_metric_include = [
#   "cpu.demand.average",
#   "cpu.idle.summation",
#   "cpu.latency.average",
#   "cpu.readiness.average",
#   "cpu.ready.summation",
#   "cpu.run.summation",
#   "cpu.usagemhz.average",
#   "cpu.used.summation",
#   "cpu.wait.summation",
#   "mem.active.average",
#   "mem.granted.average",
#   "mem.latency.average",
#   "mem.swapin.average",
#   "mem.swapinRate.average",
#   "mem.swapout.average",
#   "mem.swapoutRate.average",
#   "mem.usage.average",
#   "mem.vmmemctl.average",
#   "net.bytesRx.average",
```
# "net.bytesTx.average",
# "net.droppedRx.summation",
# "net.droppedTx.summation",
# "net.usage.average",
# "power.power.average",
# "virtualDisk.numberReadAveraged.average",
# "virtualDisk.numberWriteAveraged.average",
# "virtualDisk.read.average",
# "virtualDisk.readOIO.latest",
# "virtualDisk.throughput.usage.average",
# "virtualDisk.totalReadLatency.average",
# "virtualDisk.totalWriteLatency.average",
# "virtualDisk.write.average",
# "virtualDisk.writeOIO.latest",
# "sys.uptime.latest",
# ]
# # vm_metric_exclude = [] ## Nothing is excluded by default
# # vm_instances = true  ## true by default
#
#
## Hosts
## Typical host metrics (if omitted or empty, all metrics are collected)
# # host_include = [ "/*/host/**"]  ## Inventory path to hosts to collect (by default all are collected)
# # host_exclude []  ## Inventory paths to exclude
# host_metric_include = [
#   "cpu.coreUtilization.average",
#   "cpu.costop.summation",
#   "cpu.demand.average",
#   "cpu.idle.summation",
#   "cpu.latency.average",
#   "cpu.readiness.average",
#   "cpu.ready.summation",
#   "cpu.swapwait.summation",
#   "cpu.usage.average",
#   "cpu.usagemhz.average",
#   "cpu.used.summation",
#   "cpu.utilization.average",
#   "cpu.wait.summation",
#   "disk.deviceReadLatency.average",
#   "disk.deviceWriteLatency.average",
#   "disk.kernelReadLatency.average",
#   "disk.kernelWriteLatency.average",
#   "disk.numberReadAveraged.average",
#   "disk.numberWriteAveraged.average",
#   "disk.read.average",
#   "disk.totalReadLatency.average",
#   "disk.totalWriteLatency.average",
#   "disk.write.average",
#   "mem.active.average",
#   ]
# "mem.latency.average",
# "mem.state.latest",
# "mem.swapin.average",
# "mem.swapinRate.average",
# "mem.swapout.average",
# "mem.swapoutRate.average",
# "mem.totalCapacity.average",
# "mem.usage.average",
# "mem.vmmemctl.average",
# "net.bytesRx.average",
# "net.bytesTx.average",
# "net.droppedRx.summation",
# "net.droppedTx.summation",
# "net.errorsRx.summation",
# "net.errorsTx.summation",
# "net.usage.average",
# "power.power.average",
# "storageAdapter.numberReadAveraged.average",
# "storageAdapter.numberWriteAveraged.average",
# "storageAdapter.read.average",
# "storageAdapter.write.average",
# "sys.uptime.latest",
# ]
# ## Collect IP addresses? Valid values are "ipv4" and "ipv6"
# # ip_addresses = ["ipv6", "ipv4"]
# # # host_metric_exclude = [] ## Nothing excluded by default
# # # host_instances = true ## true by default
#
#
# ## Clusters
# # cluster_include = [ "/host/**"] # Inventory path to clusters to collect (by default all are collected)
# # cluster_exclude = [] # Inventory paths to exclude
# # # cluster_metric_include = [] ## if omitted or empty, all metrics are collected
# # # cluster_metric_exclude = [] ## Nothing excluded by default
# # # cluster_instances = false ## false by default
#
# ## Datastores
# # datastore_include = [ "/datastore/**"] # Inventory path to datastores to collect (by default all are collected)
# # datastore_exclude = [] # Inventory paths to exclude
# # # datastore_metric_include = [] ## if omitted or empty, all metrics are collected
# # # datastore_metric_exclude = [] ## Nothing excluded by default
# # # datastore_instances = false ## false by default
#
# ## Datacenters
# # datacenter_include = [ "/host/**"] # Inventory path to clusters to collect (by default all are collected)
# # datacenter_exclude = [] # Inventory paths to exclude
# # datacenter_metric_include = [] ## if omitted or empty, all metrics are collected
# datacenter_metric_exclude = [ "*" ] ## Datacenters are not collected by default.
# # datacenter_instances = false ## false by default
#
# ## Plugin Settings
# ## separator character to use for measurement and field names (default: "_")
# # separator = " _ "
#
# ## number of objects to retrieve per query for realtime resources (vms and hosts)
# ## set to 64 for vCenter 5.5 and 6.0 (default: 256)
# # max_query_objects = 256
#
# ## number of metrics to retrieve per query for non-realtime resources (clusters and datastores)
# ## set to 64 for vCenter 5.5 and 6.0 (default: 256)
# # max_query_metrics = 256
#
# ## number of go routines to use for collection and discovery of objects and metrics
# # collect_concurrency = 1
# # discover_concurrency = 1
#
# ## the interval before (re)discovering objects subject to metrics collection (default: 300s)
# # object_discovery_interval = "300s"
#
# ## timeout applies to any of the api request made to vcenter
# # timeout = "60s"
#
# ## When set to true, all samples are sent as integers. This makes the output
# ## data types backwards compatible with Telegraf 1.9 or lower. Normally all
# ## samples from vCenter, with the exception of percentages, are integer
# ## values, but under some conditions, some averaging takes place internally in
# ## the plugin. Setting this flag to "false" will send values as floats to
# ## preserve the full precision when averaging takes place.
# # use_int_samples = true
#
# ## Custom attributes from vCenter can be very useful for queries in order to slice the
# ## metrics along different dimension and for forming ad-hoc relationships. They are disabled
# ## by default, since they can add a considerable amount of tags to the resulting metrics. To
# ## enable, simply set custom_attribute_exclude to [] (empty set) and use custom_attribute_include
# ## to select the attributes you want to include.
# ## By default, since they can add a considerable amount of tags to the resulting metrics. To
# ## enable, simply set custom_attribute_exclude to [] (empty set) and use custom_attribute_include
# ## to select the attributes you want to include.
# # custom_attribute_include = []
# # custom_attribute_exclude = ["*"]
#
# ## The number of vSphere 5 minute metric collection cycles to look back for non-realtime metrics. In
# ## some versions (6.7, 7.0 and possible more), certain metrics, such as cluster metrics, may be reported
# ## with a significant delay (>30min). If this happens, try increasing this number. Please note that increasing
# ## it too much may cause performance issues.
# # metric_lookback = 3
#
# ## Optional SSL Config
# # ssl_ca = "/path/to/cafile"
# # ssl_cert = "/path/to/certfile"
# # ssl_key = "/path/to/keyfile"
# ## Use SSL but skip chain & host verification
# # insecure_skip_verify = false
#
# ## The Historical Interval value must match EXACTLY the interval in the daily
# ## "Interval Duration" found on the VCenter server under Configure > General > Statistics > Statistic intervals
# # historical_interval = "5m"

# # A Webhooks Event collector
# [[inputs.webhooks]]
# ## Address and port to host Webhook listener on
# service_address = ":1619"
#
# [[inputs.webhooks.filestack]]
# path = "/filestack"
#
# [[inputs.webhooks.github]]
# path = "/github"
# # secret = ""
#
# [[inputs.webhooks.mandrill]]
# path = "/mandrill"
#
# [[inputs.webhooks.rollbar]]
# path = "/rollbar"
#
# [[inputs.webhooks.papertrail]]
# path = "/papertrail"
#
# [[inputs.webhooks.particle]]
# path = "/particle"

# # This plugin implements the Zipkin http server to gather trace and timing data needed to troubleshoot latency
# # problems in microservice architectures.
# [[inputs.zipkin]]
# # path = "/api/v1/spans" # URL path for span data
# # port = 9411 # Port on which Telegraf listens

Found in path(s):
* /opt/cola/permits/1219538005_1652753100.9400022/0/telegraf-1.21.4-1.x86_64.src.rpm-cosi-expand-archive-NK33rePD/etc/telegraf/telegraf.conf
1.1239 go-humanize 1.0.0

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  * Basic-authenticated HTTPSConnectionPool (merged into make_headers)
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* Client-verified SSL certificates for HTTPSConnectionPool
* Response gzip and deflate encoding support
* Better unicode support for filepost using StringIO buffers

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* SSL fingerprint and alternative hostname verification
* Bugfixes in testsuite

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* Cory Benfield <http://lukasa.co.uk/about/>
  * Stream method for Response objects.
  * Return native strings in header values.
  * Generate 'Host' header when using proxies.

* Jason Robinson <jaywink@basshero.org>
  * Add missing WrappedSocket.fileno method in PyOpenSSL

* Audrius Butkevicius <audrius.butkevicius@elastichosts.com>
  * Fixed a race condition

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  * Support for separate connect and request timeouts

* Peter Waller <p@pwaller.net>
  * HTTPResponse.tell() for determining amount received over the wire

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  * Ignore default ports when comparing hosts for equality

* Danilo @dbrgn <http://dbrgn.ch/>
  * Disabled TLS compression by default on Python 3.2+
  * Disabled TLS compression in pyopenssl contrib module
  * Configurable cipher suites in pyopenssl contrib module

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  * Use the platform-specific CA certificate locations

* Josh Schneier <https://github.com/jschneier>
  * HTTPHeaderDict and associated tests and docs
  * Bugfixes, docs, test coverage

* Tahia Khan <http://tahia.tk/>
* Added Timeout examples in docs

* Arthur Grunseid <http://grunseid.com>
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* Add ability to pass socket options to an HTTP Connection

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* Support for standard library io module.

* Krishna Prasad <kprasad.iitd@gmail.com>
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* Security Warning Documentation update for proper capture

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* Support for using ConnectionPool and PoolManager as context managers.

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* Updates to the default SSL configuration

* Tomas Tomecek <ttomecek@redhat.com>
* Implemented generator for getting chunks from chunked responses.

* tlynn <https://github.com/tlynn>
* Respect the warning preferences at import.

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* IPv6 bugfixes in testsuite

* Jon Wayne Parrott <jonwayne@google.com>
* App Engine environment tests.

* John Krauss <https://github.com/talos>
* Clues to debugging problems with `cryptography` dependency in docs

* Disassem <https://github.com/Disassem>
* Fix pool-default headers not applying for url-encoded requests like GET.
* James Atherfold <jlatherfold@hotmail.com>
  * Bugfixes relating to cleanup of connections during errors.

* Christian Pedersen <https://github.com/chripede>
  * IPv6 HTTPS proxy bugfix

* Jordan Moldow <https://github.com/jmoldow>
  * Fix low-level exceptions leaking from `HTTPResponse.stream()`.
  * Bugfix for `ConnectionPool.urlopen(release_conn=False)`.
  * Creation of `HTTPConnectionPool.ResponseCls`.

* Predrag Gruevski <https://github.com/obi1kenobi>
  * Made cert digest comparison use a constant-time algorithm.

* Adam Talsma <https://github.com/a-tal>
  * Bugfix to ca_cert file paths.

* Evan Meagher <https://evanmeagher.net>
  * Bugfix related to `memoryview` usage in PyOpenSSL adapter

* John Vandenberg <jayvdb@gmail.com>
  * Python 2.6 fixes; pyflakes and pep8 compliance

* Andy Caldwell <andy.m.caldwell@googlemail.com>
  * Bugfix related to reusing connections in indeterminate states.

* Ville Skytt <ville.skytta@iki.fi>
  * Logging efficiency improvements, spelling fixes, Travis config.

* Shige Takeda <smtakeda@gmail.com>
  * Started Recipes documentation and added a recipe about handling concatenated gzip data in HTTP response

* Jesse Shapiro <jesse@jesseshapiro.net>
  * Various character-encoding fixes/tweaks
  * Disabling IPv6 DNS when IPv6 connections not supported

* David Foster <http://dafoster.net/>
  * Ensure order of request and response headers are preserved.

* Jeremy Cline <jeremy@jcline.org>
  * Added connection pool keys by scheme

* Aviv Palivoda <palaviv@gmail.com>
  * History list to Retry object.
  * HTTPResponse contains the last Retry object.

* Nate Prewitt <nate.prewitt@gmail.com>
  * Ensure timeouts are not booleans and greater than zero.
* Fixed infinite loop in `stream` when `amt=None`.
* Added `length_remaining` to determine remaining data to be read.
* Added `enforce_content_length` to raise exception when incorrect content-length received.

* Seth Michael Larson <sethmichaellarson@protonmail.com>
  * Created selectors backport that supports PEP 475.

* Alexandre Dias <alex.dias@smarkets.com>
  * Don't retry on timeout if method not in whitelist

* Moinuddin Quadri <moin18@gmail.com>
  * Lazily load idna package

* Tom White <s6yglez3@mail2tor.com>
  * Made SOCKS handler differentiate socks5h from socks5 and socks4a from socks4.

* Tim Burke <tim.burke@gmail.com>
  * Stop buffering entire deflate-encoded responses.

* Tuukka Mustonen <tuukka.mustonen@gmail.com>
  * Add counter for status_forcelist retries.

* Erik Rose <erik@mozilla.com>
  * Bugfix to pyopenssl vendoring

* Wolfgang Richter <wolfgang.richter@gmail.com>
  * Bugfix related to loading full certificate chains with PyOpenSSL backend.

* Mike Miller <github@mikeage.net>
  * Logging improvements to include the HTTP(S) port when opening a new connection

* Ioannis Tziakos <mail@itziakos.gr>
  * Fix `util.selectors._fileobj_to_fd` to accept `"long`.
  * Update appveyor tox setup to use the 64bit python.

* Akamai (through Jesse Shapiro) <jshapiro@akamai.com>
  * Ongoing maintenance

* Dominique Leuenberger <dimstar@opensuse.org>
  * Minor fixes in the test suite

* Will Bond <will@wbond.net>
  * Add Python 2.6 support to `contrib.securetransport`

* Aleksei Alekseev <alekseev.yeskela@gmail.com>
  * using auth info for socks proxy

* Chris Wilcox <git@crwilcox.com>
* Improve contribution guide
* Add `HTTPResponse.geturl` method to provide `urllib2.urlopen().geturl()` behavior

* [Your name or handle] <[email or website]>
* [Brief summary of your changes]

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   analysis/common/src/java/net/sf/snowball
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   analysis/common/src/resources/org/apache/lucene/analysis/bg/stopwords.txt,
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1.1246 elasticsearch-scripting-painless-spi

7.10.2

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## Commands to generate dependency files
GEN_DEPS.c=$(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc=$(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE=-Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS=-Wl,-Bsymbolic

## Shared object suffix
SO = so

## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation rules
%.$(STATIC_O): $(srcdir)/%.c
$(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<

%.o: $(srcdir)/%.c
$(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
$(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<

%.o: $(srcdir)/%.cpp
$(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<

## Dependency rules
%.d: $(srcdir)/%.c
@echo "generating dependency information for $<"
@$(SHELL) -ec '$(GEN_DEPS.c) $<
| sed '$s/\n\n/\n\n/g' > $@; \\
[-s $@ ] || rm -f $@

%.d: $(srcdir)/%.cpp
@echo "generating dependency information for $<"
@$(SHELL) -ec '$(GEN_DEPS.cc) $<

## Versioned libraries rules

```bash
%.S(SO).$(SO_TARGET_VERSION_MAJOR): %.S(SO).$(SO_TARGET_VERSION)
$RM $@ && ln -s %{<F} $@
%.S(SO): %.S(SO).$(SO_TARGET_VERSION_MAJOR)
$RM $@ && ln -s %{*F}.$(SO).$(SO_TARGET_VERSION) $@
```

## Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library `s`
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup

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  jar/org/locationtech/spatial4j/io/jackson/package-info.java
* /opt/cola/permits/1136404733_1613763670.46/0/spatial4j-0-7-sources-4-

jar/org/locationtech/spatial4j/io/jackson/ShapeDeserializer.java
*/

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* /opt/cola/permits/1136404733_1613763670.46/0/spatial4j-0-7-sources-4-jar/org/locationtech/spatial4j/shape/jts/JtsShapeFactory.java

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* /opt/cola/permits/1136404733_1613763670.46/0/spatial4j-0-7-sources-4-jar/org/locationtech/spatial4j/io/ShapeReader.java
* /opt/cola/permits/1136404733_1613763670.46/0/spatial4j-0-7-sources-4-jar/org/locationtech/spatial4j/io/ShapeWriter.java
* /opt/cola/permits/1136404733_1613763670.46/0/spatial4j-0-7-sources-4-jar/org/locationtech/spatial4j/io/ShapeIO.java
* /opt/cola/permits/1136404733_1613763670.46/0/spatial4j-0-7-sources-4-jar/org/locationtech/spatial4j/io/ShapeFactory.java
* /opt/cola/permits/1136404733_1613763670.46/0/spatial4j-0-7-sources-4-jar/org/locationtech/spatial4j/io/OnePointsBuilder.java

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* /opt/cola/permits/1136404733_1613763670.46/0/spatial4j-0-7-sources-4-jar/org/locationtech/spatial4j/io/ShapeWriter.java
* /opt/cola/permits/1136404733_1613763670.46/0/spatial4j-0-7-sources-4-jar/org/locationtech/spatial4j/io/ShapeIO.java
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:Contact: goodger@python.org
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Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and
modification follow. Pay close attention to the difference between a
"work based on the library" and a "work that uses the library". The
former contains code derived from the library, whereas the latter must
be combined with the library in order to run.

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A "library" means a collection of software functions and/or data
prepared so as to be conveniently linked with application programs
(which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work
which has been distributed under these terms. A "work based on the
Library" means either the Library or any derivative work under
copyright law: that is to say, a work containing the Library or a
portion of it, either verbatim or with modifications and/or translated
straightforwardly into another language. (Hereinafter, translation is
included without limitation in the term "modification").

"Source code" for a work means the preferred form of the work for
making modifications to it. For a library, complete source code means
all the source code for all modules it contains, plus any associated
interface definition files, plus the scripts used to control compilation
and installation of the library.

Activities other than copying, distribution and modification are not
covered by this License; they are outside its scope. The act of
running a program using the Library is not restricted, and output from
such a program is covered only if its contents constitute a work based
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writing it). Whether that is true depends on what the Library does
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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.
In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a
derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2)
will operate properly with a modified version of the library, if
the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
least three years, to give the same user the materials
specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above
specified materials from the same place.

e) Verify that the user has already received a copy of these
materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the
Library" must include any data and utility programs needed for
reproducing the executable from it. However, as a special exception,
the materials to be distributed need not include anything that is
normally distributed (in either source or binary form) with the major
components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
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restrictions of other proprietary libraries that do not normally
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a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or
table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or
derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse
You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
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   b) Give prominent notice with the combined library of the fact
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1.1270 pb 1.0.28

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1.1271 nghttp2 1.33.0 3.el8_2.1

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1.1276 pcre 10.32 2.el8

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THE BASIC LIBRARY FUNCTIONS

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1.1277 hk2-locator 2.6.1

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 *
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 *
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 *
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KHR/khrplatform.h  Khronos

*****************************************************************************
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include/GL/g1.h :

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*****************************************************************************
----
include/GL/glext.h
include/GL/glxext.h
include/GL/wglxext.h :

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----------------------------------------------------------------------
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1.1292 pysnmp 4.4.6
1.1292.1 Available under license:

No license file was found, but licenses were detected in source scan.

Revision 4.4.6, released 2018-09-13

- Improved package build and dependency tracking
- Fixed missing LICENSE from the tarball distribution
- Fixed `CommandGeneratorLcdConfigurator.unconfigure()` to fully clean up internal caches, otherwise repetitive attempts to configure the target would fail.
- Fix to tolerate possible duplicate enumerations in `Bits` and `Integer` SMI types.
- Fix to tolerate non-initialised entries in SNMP community table. Once a bad entry sneaked into the SNMP community table, all the subsequent SNMP v1/v2c operations failed. The fix ignores incomplete SNMP community table entries in the course of building indices.

Revision 4.4.5, released 2018-08-05

- Added PySnmpError.cause attribute holding parent exception tuple
- Fixed broken InetAddressType rendering caused by a pyasn1 regression
- Fixed typo in RFC1158 module
- Fixed possible infinite loop in GETBULK response PDU builder
- Fixed memory leak in the `config.delContext()` VACM management harness
- Fixed `Bits` class initialization when enumeration values are given
- Fixed crash caused by incoming SNMPv3 message requesting SNMPv1/v2c security model
- Fixed out-of-scope OIDs leaking at the end of SNMP table at hlapi `nextCmd` and `bulkCmd` calls when `lexicographicMode = False`

Revision 4.4.4, released 2018-01-03

- Copyright notice extended to the year 2018
- Fixed short local key expansion at 3DES key localization implementation.

Revision 4.4.3, released 2017-12-22

- Migrated references from SourceForge
- Added missing SHA2 support for Blumenthal key localization
- Fixed named bits handling at rfc1902.Bits
- Fixed missing SmiError exception class at pysnmp.proto.rfc1155
- Fixed SNMP v1->v2c PDU proxy -- error-status & error-index fields from v1 PDU get copied over to v2c PDU in addition to the exception
sentinels being set

Revision 4.4.2, released 2017-11-11
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- The pysnmp version being used gets exposed to the MIB modules via the `MibBuilder` instance
- The `.setObjects()` method of the SMI types now accepts ‘append=False’ parameter to let the caller adding more than 255 elements over the course of multiple calls
- Added support for some more missing fields of SMIv2 MACRO types
- Example scripts rearranged in a way that IPv6 requirement is clearly encoded in the script’s name
- Fixed SNMPv2-SMI.NotificationType to expose `.set/getReference()` instead of `.set/getRevision()` which should not be there in the first place
- Fixed non-implied-OID encoding in SNMP table indices
- Fixed inconsistent SNMPv3 discovery and retrying algorithm

Revision 4.4.1, released 2017-10-23
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- HMAC-SHA-2 Authentication Protocols support added (RFC-7860)
- The pycryptodome dependency replaced with pycryptodomex as it is recommended by the upstream to avoid unwanted interference with PyCrypto package should it also be installed
- Sphinx theme changed to Alabaster in the documentation
- Minor adjustments towards pyasn1 0.4.x compatibility
- Fixed ObjectIdentifier-into-ObjectIdentity casting at rfc1902.ObjectType MIB resolution harness
- Fixed NetworkAddress object handling in SNMP table indices
- Fixed MIB lookup by module:object.indices MIB object with InetAddressIPv{4,6} objects being in the index
- Fixed non-translated PDU being retries at CommandGenerator what leads to wrong PDU version being sent and even a crash on incompatible PDU/SNMP message combination

Revision 4.3.10, released 2017-10-06
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- Refactored partial SNMP message decoding to make it less dependent on unpublished pyasn1 API features.
- Fix to MibTableRow.setFromName() to keep the input parameter type when it propagates to the return value. Before this fix ObjectIdentity.prettyPrint() may crash when rendering malformed SNMP table indices.
- Fixed NotificationReceiver to include SNMPv1 TRAP Message community string into SNMPv2c/v3 TRAP PDU
- Fixed multiple bugs in SNMP table indices rendering, especially the InetAddressIPv6 type which was severely broken.
- Fixed crashing `Bits.prettyPrint()` implementation
- Fixed crashing `Bits.clone()/subtype()` implementation
- Fixed leaking exceptions bubbling up from the asyncio and Twisted adapters

Revision 4.3.9, released 2017-07-26
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- Deprecated `UsmUserData` initialization parameters removed
- Adapted to pyasn1 API changes introduced by release 0.3.1
- Fix to a crash happening on inbound SNMP message having non-initialized fields
- Fix to (persistent SNMP engine ID) file writing on Windows

Revision 4.3.8, released 2017-06-15
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- Security fix to the bug introduced in 4.3.6: `msgAuthoritativeEngineTime` stopped changing over time and was returning the same timestamp (process start time). This fix makes it growing as it should.

Revision 4.3.7, released 2017-05-29
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* Fixed import error in legacy `NotificationOriginator` implementation

Revision 4.3.6, released 2017-05-28
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- More instrumentation hooks added addressing security failures auditing needs.
- SNMP table indices correlation implemented within SMI framework. The opaque `InetAddress` type implemented. INET-ADDRESS-MIB included into the distribution.
- SNMP table indices resolution logic made more robust against malformed indices.
- Fixes to `*lexicographicMode*` option documentation to make it unambiguous.
- The `ErrorIndication` object is now derived from `Exception` so that it could be raised in exceptions.
- The `errorIndication` values produced by various parts of SNMP engine unified to be `ErrorIndication` instances. This fixes an issue with Twisted.
- Embedded MIB modules rebuilt with the latest pysmi adding previously missing attributes like `status`, `description` etc.
- Fixed potential SNMP engine crash on handling incoming message at unsupported security level
Revision 4.3.5, released 2017-03-24
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- The getNext() and getBulk() calls of Twisted interface now support ignoreNonIncreasingOid option.
- TextualConvention is now a new-style class.
- Fix to accidentally reset error-status when building confirmed class SNMPv1 PDU.
- Fix to possible infinite recursion in TextualConvention.prettyIn().
- Fixed crash when attempting to report unsupported request/notification PDU back to sender.

Revision 4.3.4, released 2017-03-01
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- Fix to low-level SNMP API example to accommodate changed pyasn1 SEQUENCE supporting iterator protocol.
- The pyasn1 version dependency bumped (0.2.3), SEQUENCE/SEQUENCE OF API calls adjusted to accommodate changed pyasn1 API (in part of .setComponentBy*() kw flags).
- Fixed crash on SNMP engine's invalid message counter increment.

Revision 4.3.3, released 2017-02-04
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- Switched from now unmaintained PyCrypto to PyCryptodome.
- Switched to new-style classes.
- NotificationType now allows additional var-binds specified as MIB objects. A side effect of this change is that additional var-binds can only be added prior to .resolveMibObjects() is run.
- Non-standard (but apparently used by many vendors) Reeder AES192/256 key localization algorithm implemented and set as default for usmAesCfb192Protocol and usmAesCfb256Protocol identifiers. Original and more standard implementation can still be used with the usmAesBlumenthalCfb192Protocol and usmAesBlumenthalCfb192Protocol IDs respectively.
- TextualConvention.prettyOut() improved to produce prettier and more SMI-compliant output.
- TextualConvention.prettyIn() implemented to handle DISPLAY-HINT based value parsing.
- Fix to NotificationType to make additional var-binds overriding MIB objects implicitly included through NOTIFICATION-TYPE OBJECTS.
- Fix to SNMP engine boots counter persistence on Python 3.
- Fix to Pythonized MIBs loading when only .pyc files are present (e.g. py2exe/cx_freeze environments).
- Fix broken 3DES key localization and encryption procedures.
- Updated IP address for demo.snmplabs.com in examples.
- Missing index added to bundled RFC1213::atEntry MIB table.
- Twisted integration made Python3 compatible.
- Accommodated ASN.1 SEQUENCE iteration rules change in upcoming pyasn1 version.
- Author's email changed, copyright extended to 2017.

Revision 4.3.2, released 2016-02-12

- Copyright notice added to non-trivial source code files.
- SNMP table row consistency check added. This change may break valid SNMP SET operations on tables if RowStatus column is not passed at the very end of var-binds.
- All SNMP counters now incremented via ‘+= 1’ rather than ‘x = x + 1’ to simplify their tracking by third-party code.
- Notification originator examples re-pointed to Notification Receiver at demo.snmplabs.com.
- Two more execution observer points added: rfc2576.processIncomingMsg and rfc3414.processIncomingMsg to give an insight on security modules internals.
- TEXTUAL-CONVENTION's DISPLAY-HINT text formatting reworked for better performance and encoding accuracy of 'a' and 't' formats.
- WARNING: security fix to USM - extra user entry clone removed on incoming message processing. It made USM accepting SNMPv3 TRAPs from unknown SNMP engine IDs.
- Fix to snmpInvalidMsgs and snmpUnknownSecurityModels MIB symbols import at SNMPv3 MP model.
- Fix to NotificationOriginator to cope with unspecified user callable.
- Fix to OctetString.prettyOut() to pretty-print Python 3 bytes without 'b' qualifier.
- Fix to better pysmi import errors handling.
- Fix to missing next() in Python 2.5 at pysnmp.hlapi

Revision 4.3.1, released 2015-11-12

- Added recursive resolution of ObjectIdentifier values at ObjectType by converting it to ObjectIdentity.
- A bunch of convenience shortcuts to rfc1902.ObjectIdentity added from rfc1902.ObjectType and rfc1902.NotificationType (.addAsn1MibSource(), .addMibSource(), .loadMibs())
- When pretty printing indices at rfc1902.ObjectType, quote only strings.
- SNMP overview and PySNMP hlapi tutorial added to documentation.
- Fix to __doc__ use in setup.py to make -O0 installation mode working.
- Fix to ObjectIdentity->ObjectIdentifier attributes handover
- Fixed crash at oneliner compatibility code on EOM response.
- Fixed crash in hlapi.transport module.
- Fixed OID resolution issues that roots at node 0 and 2.
- Fix to MIB builder to fail gracefully on corrupted MIB package encounter.
- Fix to docs distribution -- now the are Sphinx-buildable out-of-the-box.
- Source code re-linted

Revision 4.3.0, released 2015-09-28

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- Critical error fixed in key localization procedure for AES192/AES256/3DES cyphers. Previous versions might never worked properly in this respect.
- Initial PySMI integration. Original ASN.1 MIBs could now be parsed, stored at a local pysnmp MIBs repository and loaded into SNMP Engine. Relevant example scripts added. Obsolete libsmi-based scripts removed.
- Major rewrite of native SNMPv3 CommandGenerator and NotificationOriginator applications towards the following goals:

* avoid binding to specific SNMP engine instance to promote single SNMP app instance using many SNMP engine instances
* support two APIs for working with request data: one operates on the whole PDU object while the other on PDU contents
* keep callback context data in stack rather than in stateful application cache
* newly introduced sendVarBinds() method offers a more functional and logical signatures.
* Promote the use of dedicated classes for dealing with OID-value pairs. Instances of those classes resemble OBJECT-IDENTITY, OBJECT-TYPE and NOTIFICATION-TYPE MIB structures.
* Oneliner API reworked to become more generic: its LCD configuration shortcuts and and var-bindings processing code split off SNMP apps classes to stand-alone objects. The whole API also moved up in package naming hierarchy and becomes 'pysnmp.hlapi.asyncore' (hlapi is apparently an African fish). Old oneliner API remains fully operational at its original location.
* Synchronous oneliner apps redesigned to offer Python generator-based API along with a more comprehensive set of accepted parameters.
* Asyncore-based asynchronous apps reworked to become functions.
* Twisted API moved entirely into high-level domain to be aligned with other high-level APIs. This WILL BREAK backward compatibility for those apps that use Twisted API.
* Keep backward compatibility for all existing major/documented interfaces

- Sphinx documentation added to source code and example scripts. Library documentation converted from .html into RsT markup.
- Execution Observer facility implemented to give app an inside view of SNMP engine inner workings. This is thought to be a generic framework for viewing (and modifying) various internal states of pysnmp engine. Previously introduced non-standard APIs (like getting peer's transport endpoint which is not suggested in RFCs) will be gradually migrated to this new framework.
- Initial support for the asyncio & Trollius frameworks and
coroutines-based SNMP Applications interfaces added. Both IPv4 and IPv6 datagram transports are currently supported.
- Original asynsock transport and AsyncsockDispatcher renamed into asyncore and AsyncoreDispatcher respectively to provide better hint to fellow devs on the underlying transport being used. Backward compatibility preserved.
- The asyncore-based transport subsystem extended to support POSIX sendmsg()/recvmsg() based socket communication what could be used, among other things, in the context of a transparent SNMP proxy application. Technically, the following features were brought into pysnmp with this update:

* Sending SNMP packets from a non-local IP address
* Receiving IP packets for non-local IP addresses
* Responding to SNMP requests from exactly the same IP address the query was sent to. This proves to be useful when listening on both primary and secondary IP interfaces.

- Internal oneliner apps configuration cache moved from respective apps objects to [a singular] snmpEngine "user context" object. That would allow for better cache reuse and allow for a single app working with many snmpEngine instances.
- Oneliner GETBULK Command Generator now strips possible excessive OIDs off the bottom of returned var-binds table.
- Constraints assignment shortcut added to some base rfc1902 types (Integer, Integer32, OctetString, Bits). That formally constitutes ASN.1 sub-typing.
- Built-in debugging is now based on Python logging module.
- Examples on a single Transport Dispatcher use with multiple SnmpEngine instances added.
- Example script on transport timeout & retries manipulation added.
- Example script explaining incoming message's communityName re-mapping added.
- Broadcast socket option can now be enabled with the .enableBroadcast() call for any datagram-based transport (namely, UDP and UDP6).
- AbstractTransportDispatcher's jobStarted() and jobFinished() methods now accept optional 'count' parameter which is a way for an app to indicate how many responses are expected or have been processed in bulk.
- Example script on SNMP Agents UDP broadcast-based discovery added.
- Oneliner transport object now supports setLocalAddress() method to force socket binding to specified local interface.
- New public DgramSocketTransport.getLocalAddress() returns local endpoint address underlying BSD socket is currently bound to.
- Passing request details to access control callback at CommandResponder reworked towards more robust and simple design with the execution observer facility.
- All MIBs rebuilt with pysmi.
- MIB instrumentation example improved to cover table index building facility.
- Handle the case of null writer at Debug printer.
- Do not cache snmpEngineId & snmpAdminString at CommandGenerator to let it
be reused with many different snmpEngines.
- TRAP PDU agent address evaluation at proto.api made lazy to improve startup time.
- Multiple fixes to verify pyasn1 decoder.decode() return to withstand broken SNMP messages or its components.
- First attempt made to make some of SNMP Engine settings persistent across reboots.
- Make config.delTransport() returning detached transport object. Asyncio examples now use this facility to explicitly shutdown transport object.
- Parts of SMIv1 remnant MIBs (RFC1213-MIB, RFC1158-MIB) added to provide complete compatibility with SMIv1. Symbols defined in these MIBs only present in SMIv1 so they can't be substituted with their SMIv2 analogues.
- MibBuilder.addMibSources() convenience method added.
- The smi.MibBuilder() will now raise more specific exceptions (MibLoadError, MibNotFoundError) on MIB loading problems rather than more generic SmiError.
- The oneliner's MibVariable MIB lookup subsystem redesigned for more generality to mimic OBJECT-TYPE macro capabilities related to SNMP PDU handling. The two new classed are ObjectIdentity and ObjectType. The ObjectIdentity class additionally supports just a MIB module name initializer in which case if resolves into either first or last symbol in given MIB. Another option is just a MIB symbol initializer without specifying MIB module.

This new subsystem is moved from the scope of oneliner to more common pysnmp.smi.rfc1903 scope to more naturally invoke it from whatever part of pysnmp requires MIB services.
- MibBuilder now prepends the contents of environment variables it recognizes (PYSNMP_MIB_DIR, PYSNMP_MIB_DIRS, PYSNMP_MIB_PKGS) rather than using them instead of its default core MIBs.
- Removed RowStatus default value as it may collide with possible subclass constraints.
- A few additional MIB tree management methods added to MibViewController to better address ordered nature of MIB tree nodes (namely, getFirst*, getLast* family of methods).
- Wheel distribution format now supported.
- Fix to authoritative engine side snmpEngineID discovery procedure: respond with notInTimeWindows rather then with unsupportedSecurityLevel at time synchronization phase.
- Fix to rfc1902.Bits type to make it accepting hex and binary initializers, cope with missing bits identifiers at prettyPrint().
- Memory leak fixed in CommandForwarder examples.
- Fix to BULK CommandGenerator to use the same nonRepeaters OIDs across multiple GETBULK iterations so returned table for nonRepeaters columns would hold the same var-bind.
- Fix to CommandGenerator to make sendRequestHandle persistent across multiple iterations of GETNEXT/GETBULK queries.
- Fix to sendNotification() error handling at NotificationOriginator.
- Fix to preserve possible 'fixed length' setting atrfc1902.OctetString
- Fix to rfc1902.OctetString & Bits to base them on OctetString class to make the 'fixed length' property working.
- Fix to .clone() method of rfc1902.Bits class to make its signature matching the rest of classes. This may broke code which used to pass namedValue parameter positionally rather than binding it by name.
- Fix to PDU translation service (proto.proxy.rfc2576) to make it initializing errorIndex & errorStatus components of the resulting PDU.
- Fix to MsgAndPduDispatcher.sendPdu() to clean up request queue on pysnmp-level processing failure.
- Fix to SNMPv1/v2c message processing subsystem to make it serving unique PDU request-id's in both outgoing and incoming confirmed and response PDU types. Duplicate request-id's in unrelated PDUs may cause cache errors otherwise.
- Fix to licensing terms of multiple twisted backend modules to make the whole pysnmp package licensed under BSD 2-Clause license. This change has been explicitly permitted by the original modules authors.
- Fix to asyncore-based transport not to use asyncore's cheap inheritance from socket object what caused warnings.
- Fix at NotificationOriginator to make is using MibInstrumentationController when expanding Notification OBJECTS into Managed Objects Instances.
- Missing wrongLength and wrongEncoding SMI errors added.
- Fix to file descriptor leak at MibBuilder.
- Fix to rfc2576.v2ToV1() to ignore impossible errorStatus.
- Fix to rfc2576.v1ToV2() to reset ErrorStatus==noSuchName on proxying.
- Fix to smi.builder to explicitly fail on any MIB file access error (but ENOENT) and raise IOError uniformly on any directory/egg access failure.
- Fix to infinite loop at config.delV3User().

Revision 4.2.5, released 2013-10-02
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- License updated to vanilla BSD 2-Clause to ease package use (http://opensource.org/licenses/BSD-2-Clause).
- A dozen of lightweight Twisted-based example scripts replaced more complex example implementations used previously.
- SNMP Proxy example apps separated into a larger set of more specialized ones.
- Most of Command Generator examples re-pointed to a live SNMP Agent at demo.snmplabs.com to ease experimentation and adoption.
- Multithreaded oneliner CommandGenerator example added.
- Packet-level SNMP API (pysnmp.proto.api) getErrorIndex() method can now be instructed to ignore portentially malformed errorIndex SNMP packet value what sometimes happens with buggy SNMP implementations.
- Standard SNMP Apps and built-in proxy now ignores malformed errorIndex value.
- Built-in logging now includes timestamps.
- Multi-lingual capabilities of all CommandGenerator & NotificationOriginator apps re-worked and improved. For instance it is now it's possible to run getBulk() against a SNMPv1 Agent invoking built-in SNMP Proxy behind the scene.

- The $PYSNMP_MIB_DIR & $PYSNMP_MIB_DIRS & $PYSNMP_MIB_PKGS path separator made platform-specific.

- Change to rfc2576.v1tov2() logic: errorStatus = noSuchName is now translated into rfc1905.noSuchObject exception value for *all* var-bindings at once. Although RFC2576 does not suggest error-status -> v2c exception translation, historically pysnmp used to perform it for a long time so we can't easily stop doing that.

- Exception re-raising improved at MibInstrumController.flipFlopFsm() and asynsock/twisted dispatchers so that original traceback is preserved.

- A single instance of transport dispatcher can now serve multiple receivers (identified by IDs) chosen by a public data routing method.

- SnmpEngine.[un]registerTransportDispatcher() methods now accept optional receiver ID token to be used by transport dispatcher's data router. This allows for multiple SNMP engines registration with a single transport dispatcher.

- Distribute is gone, switched to setuptools completely.

- The snmpCommunityTable row selection improved to follow RFC2576, clause 5.2.1.

- Asyncore-based dispatcher attempts to use poll() whenever available on the platform. It would help handling a really large number (>1024) of file descriptors.

- AsyncCommandGenerator.makeReadVarBinds() generalized into a new makeVarBinds() method which replaces somewhat redundant code at setCmd() and AsynNotificationOriginator.sendNotification().

- AsyncCommandGenerator.uncfgCmdGen() & AsynNotificationOriginator.uncfgCmdGen() methods now accept optional authData parameter to remove specific entries from LCD. This can be useful for modifying security parameters for specific securityName.

- SNMP credentials management reworked to separate userName from securityName in snmpCommunityEntry and usmUserEntry tables. Changes made to addV1System(), addV3User() functions as well as to their oneliner's wrappers.

- The contextEngineId parameter of config.addV3User() and auth.UsmUserData() renamed into securityEngineId as it's semantically correct.

- Oneliner UsmUserData() and CommunityData() classes now support clone()'ing to facilitate authentication data management in user applications.

- Oneliner transport target classes now support the getTransportInfo() method that returns network addresses used on protocol level.

- Oneliner CommandGenerator.getNext() & .getBulk() methods now support the maxCalls kwarg to limit the maximum number of iterations to perform.

- The config.addSocketTransport() helper renamed into config.addTransport() and improved by automatically instantiating compatible TransportDispatcher making it dispatcher-agnostic. As an additional bonus, application may not call registerTransportDispatcher() as it would be called by addTransport().

- The SnmpV3MessageProcessingModel.getPeerEngineInfo() method is implemented
to communicate discovered peer SNMP engine information to SNMP apps what can be used for fine usmUserTable configuration.

- AsynNotificationOriginator.cfgCmdGen() does not take into account securityModel & securityLevel when reducing LCD access via addTrapUser(). This improves LCD consistency on sparse add/del operations but also does not let you to configure different securityModels per securityName at VACM though the cfgCmdGen() wrapper.

- MIB builder traceback formatting and reporting improved.

- SNMP Engine object now has a snmpEngineID attribute exposed.

- Fix to inet_niop()/inet_pton() support on Windows at TRANSPORT-ADDRESS-MIB.

- Fix to usmUserSecurityName table column implementation -- automatic value generation from index value removed.

- Fix and significant logic rework of snmpCommunityTable to make it working in both Generator and Responder modes and better follow RFC2576 requirements on sequential entries lookup and selection. As a side effect, untagged snmpCommunityTable entries will *not* match tagged snmpTargetAddrTable entries and vice versa.

- Fix to Twisted-based NotificationOriginator to make it serving INFORMs again.

- Fix to rfc2576.v1tov2() logic: errorStatus = noSuchName is now translated into rfc1905.noSuchObject exception value for *all* var-bindings. Although this is not mentioned in RFC, it looks as a more consistent approach.

- Fix of rounding error to base I/O dispatcher's next timer call calculation.

- Explicit twisted dispatcher's timer resolution (of 1 sec) removed to make use of global default of 0.5 sec.

- Fix to twisted/udp non-default local endpoint binding features. Common socket ('host', port) notation is now supported.

- Fix to Twisted-based transport to make it closing UDP port / UNIX pipe on shutdown.

- Fix to Twisted-based dispatcher not to close transport on unregistration at dispatcher as transports can potentially be reused elsewhere.

- Fix to asyncore-based transport to work only with AsynsockDispatcher's socket map and not to touch default asyncore's one. The latter have caused dispatcher/transport restarting issues.

- The delV3User() function improved to drop all rows from USM table that were cloned from the target one.

- Fix to exceptions handling at MsgAndPduDispatcher.sendPdu() to avoid sendPduHandle miss (followed by system crash) on cache expiration run.

- Break cyclic references at CommandResponder and NotificationReceiver apps through close() method.

- Fix to octet string typing at 3DES codec (used to throw an exception).

- Fix to SnmpAdminString, SnmpTagList, SnmpTagValue types to make them supporting UTF-8 initializers.

- Fix to v1/v2c message processing module which used to refer to a bogus stateReference in some cases what causes SNMP engine crashes.

- Fix to IPv6 transport to zero ZoneID, FlowID and ScopeID components sometimes coming along with incoming packet.

- Fix to SNMPv1 MP module to pass stateReference to registered app on unconfirmed notifications reception (to let NotificationReceiver
Apps browsing request details).
(transport information at the moment) at SNMP engine.
- Asyncsock sockets now configured with SO_REUSEADDR option to fix possible
Windows error 10048.
- Gracefully handle malformed SnmpEngineID at USM coming from SNMPv3 header.
- Typos fixed in error-status constants at CommandResponder
- Missing import added to oneliner auth module.
- Cosmetic changes to v3arch example scripts.

Revision 4.2.4, released 2013-01-30

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- SNMPv3 high-level and native API examples reworked and extended to cover
many use cases.
- The missing functionality of NOTIFICATION-TYPE objects being looked up
at local Management Instrumentation and attached to TRAP/INFORM message
by Notification Originator is now fully implemented.
- The missing functionality of passing Response PDU contents of INFORM
request is now implemented at Notification Originator app. The return
value of NotificationOriginator.sendNotification is now a composite object
that includes errorStatus, errorIndex and varBinds.
- The missing functionality of passing lookupNames & lookupValues params
to Notification Originator is now implemented. It may make sense for
INFORMs.
- The missing functionality of passing contextName to oneliner
version of NotificationOriginator.sendNotification is now implemented.
- Oneliner example apps now include cases where non-default SNMP
ContextEngineId/ContextName/SecurityEngineId is used.
- The contextName parameter of SnmpContext.getMibInstrum made optional.
- AbstractMibInstrumController class added as a base class for all possible
kinds of Management Instrumentation controllers.
- Report package version on debugging code initialization.
- MibInstrumController.getMibBuilder() added.
- I/O sockets buffer sizes made configurable, minimum default is now
forced to be no less than 2**17 (to fit two huge datagrams).
- Catch possible exceptions on pyasn1 encoder invocation.
- VACM modules converted from a function into an object to let it keep
state (caches) in the future.
- Unnecessary MibSource explicit initialization calls removed at MibBuilder.
- Example configuration for Net-SNMP's snmptrapd added.
- Cast additionalVarBinds into ObjectIdentifier type at
NotificationOriginator.sendNotification()
- Standard SNMPv3 Apps hardened to catch protocol-related exceptions and
report them as errorIndication's.
- Catch and mute possible failure of getsockname(), that seems to happen
on Windows only so far.
- Memory leak fixed at oneliner cache of already configured targets.
- Fixes to at AsynNotificationOriginator.sendNotification() to make
a) the notificationType param mandatory b)t e varBinds param really optional
- Fixes to ContextEngineId/ContextName support at the oneliner API: now both items should be passed to request PDU through Cmd() request initiation method, the items of authData object should be used only for LCD configuration.
- Fix to MiBVariable handling of the MiB. <empty-symbol> initializers.
- Fix to outgoing queue processing order at socket transport. Now it's a FIFO discipline rather than LIFO.
- Fix to NotificationOriginator's additionalVarBinds parameter - it is not mandatory anymore with the oneliner API. Also additionalVarBinds defaulted value changed from None to () meaning no var-binds.
- Attempt to convert Windows style EOL into UNIX ones in MiB source modules appeared to be unnecessary and even destructive to modules data in some cases. So the conversion code removed altogether.
- Fix to isAccessAllowed() error handling at NotificationOriginator. System used to crash on access denied condition.
- Fix to NotificationOriginator to make it use system uptime and trap OID values from SNMP engine's instrumentation rather then from SNMP context.
- Fix a couple of bugs at MibTable* logic involved for table instances creation.
- Fix to Management Instrumentation code to handle cases of non-initialized or not-compliant-to-constraints Managed Objects Instances.
- Fix to Management Instrumentation code to make table row removal through SNMP working again. Wrong method (instumClone) was probed at terminal MiB nodes values instead of the right one (setValue).

Revision 4.2.3, released 2012-09-06
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- SECURITY FIX: USM subsystem did not verify securityLevel of a request to an authoritative SNMP engine against auth/priv protocols configured for the user in question. That allowed unauthenticated/unciphered access to pysnmp-based Agent even if USM user is configured to provide one.
- Oneliner [Asyn]CommandGenerator now supports optional keyword args lookupNames, lookupValues that enable response OID / value looked up at MiB and reported as a MiBVariable container object carrying relevant MiB info.
- Oneliner [Asyn]CommandGenerator now supports symbolic MiB object names to be passed within a MiBVariable container object which would do a deferred MiB lookup for name resolution. This is a new and preferred API which obsoletes the tuple-based one (it is still supported though).
- Oneliner CommandGenerator's class attributes lexicographicMode, maxRows and ignoreNonIncreasingOid moved to optional keyword args of nextGen() and bulkGen() methods.
- IPv6/UDP and Local Domain Socket transport interfaces added to the oneliner API.
- MiB Instrumentation subsystem re-worked to replace excessive
- MibNode's smiCreate()/smiWriter()/smiDestroy() methods with MibScalarInstance's getValue()/setValue()
- MibTree.readTest[Get]Next() reworked to be called uniformly so user could tap on these methods at any level of the MIB tree.
- MibTableColumn.getNextNodeWithValue() unpublished API method obsoleted and removed for clarity.
- Hex dumps of binary parts of the protocol added to ease system operations analysis.
- SnmpEngineId autogeneration does not call DNS resolver but uses local hostname not to depend upon local IP availability and performance.
- Example apps reworked, additional SNMPv3 auth/priv protocols and transports added.
- Package version is now available as __init__.__version__ and it is in-sync with distutils.
- __init__.py's made non-empty (rumors are that they may be optimized out by package managers).
- Multiple fixes to UNIX domain socket transport to make it fully operational again.
- Use sysUpTime value whenever it is included in Notification PDU, otherwise resort to SNMP engine uptime reading.
- SNMPv2c Message is now defined in rfc1901.py what matches standard definition.
- Types defined within SNMPv1/v2c data structures (rfc1157.py/rfc1905.py) moved to module scope to become accessible by wrapper routines (v1.py/v2c.py). This is used for setting strictly typed default values to corresponding SNMP data structures.
- The obsolete and unpublished MibInstrumController.readVarsFast() method removed for API clarity.
- MibBuilder now distinguishes case of MIB modules filenames even if underlying OS does not.
- LCD configuration caching is implemented at pysnmp.entity.rfc3413.config that improves performance of repetitive calls by 10% and might hugely improve NotificationOriginator's performance when working on a large number of targets.
- A caching maps implemented at rfc2576 subsystem to speed-up communityName to/from securityName resolution. The also makes transport tags processing better compliant to the standard.
- Community and Transport tags processing changed at the oneliner interface to make the whole mechanism more compliant with the standard. Most importantly, it is now possible to tag authentication and transport information separately.
- The NoSuchInstanceError exception class is no more inherits from NoSuchObjectError to make class hierarchy closer to SNMP specification which states that these errors are separate and independent.
- The Next & BulkCommandGenerator's split onto single-run and iterative implementations. The former just process a single interaction and complete while the latter run as many interactions as user callback function
indicates to.

- The pysnmp.entity.rfc3413.mibvar module is now obsolete by
  pysnmp.entity.rfc3413.oneliner.mibvar featuring basically the same
  features but within a stateful, dedicated object.
- Auth & target configuration container classes moved to their separate
  modules at oneliner API.
- The notificationType parameter of AsynNotificationOriginator.sendNotification
  made defaulted to reflect its optional nature.
- Oneliner UsmUserData, UdpTransportTarget, Udp6TransportTarget instances
  are not hashable anymore as they are intended to act more like a data
  structure than object.
- Built-in debugger now supports negating debugging categories.
- An async/getgen.py example script added.
- Fix to MIB data reading routine to make it working with possible
  Windows end-of-line's.
- Fix to CommandGenerator's SNMPv3 engine autodiscovery algorithm
  when retryCount is administratively set to 0.
- Fix to Notification Originator to make it communicating a single
  sendPduHandle to an application even when multiple INFORMs are triggered
  and processed by a single call by way of transport tagging feature.
- Fix to rfc2576:processIncomingMessage() to take SecurityModel into account
  when lookup up SecurityName by CommunityName. This allows mixed SNMPv1/v2c
  communication with the same target.
- Fix to internal MessageProcessing and SecurityModel timers so they become
  dependant on system timer resolution.
- Fix to v1.PDUAPI.setDefaults() method that used to set wrongly typed
  time-stamp component.
- Fix to IPv6 address handling to prevent system from crashing whilst
  running Python3.
- Fix to SNMPv2 exception objects translation into SNMPv1 PDU and NEXT
  OIDs calculation.
- Fix to MibTree class to properly report noSuchObject & noSuchInstance
  SNMP special values.
- Fix to libsmi2pysnmp tool to make it working again in Python < 2.7
- Fix to exception handling at decodeMessageVersion() caller to prevent
  ASN.1 parsing errors crashing the whole app.
- Fix to GenericTrap type processing at rfc2576:v1Tov2c() which used to
  crash the whole SNMP engine.
- Fix to [possibly uninialized] pyasn1 objects printouts at
  MibInstrumController.__indexMib()
- Fix to maxSizeResponseScopedPDU calculation at rfc3414/service.py.
- Dedicated 'withmib' example set is obsolete and removed.
- Another SNMP proxy example app added (1to3.py).
- Fix to MIB modules loading code to make it using __import__() properly.
  This also makes pysnmp working again with Python 3.3rc0.
- Typo fix to snmpInASNParseErrs MIB instance object.
- Typo fix to errind.EngineIdMismatch class and its instance.
- Oneliner CommandGenerator can now limit the number of SNMP table rows returned by nextCmd()/bulkCmd() methods.
- Oneliner CommunityData configuration object can now be initialized with community name only, security name will be chosen automatically.
- Oneliner LCD configuration routines reworked towards clarity. The side-effect of this change is that repetitive oneliner call with the same securityName and different configuration options will only honor the first settings. Previous implementation would override older settings.
- Transport dispatcher now provides its own time expressed in fractions of second. SNMP engine uses this notion of time for handling requests timeout to make packet flow time bound to async I/O core operations rather than to real time.
- The libsmi2pysnmp tool improved to handle incomplete SMI v1->v2 conversion performed by smidump. The remaining core SMIV1 modules excluded from the core MIB set.
- The pyasn1 constraint and enumeration objects put into ASN1-* MIB modules what appears to be more in-line with SMI. Existing MIB modules as well as libsmi2pysnmp tool corrected accordingly.
- SMIV1 MIB modules (including RFC1155 and RFC1213) were moved to pysnmp-mibs as pysnmp is SMIV2-based.
- The MibBuilder.importSymbols() now takes optional kwargs and push them into MIB modules globals(). This is to facilitate passing user information, such as DB connection handler, to MIB module namespace so it could be used by ManagedObjects implementations.
- When running on Python3, SMI will re-raise exceptions with the original traceback for easier diagnostics.
- Out of PYTHONPATH MIB paths now supported.
- Added pyasn1 decoder failures diagnostics in debug mode.
- Fix to non-MT-safe class attributes at SNMPv3 MP & SEC modules.
- Fix to ContextName handling in bytes form whilst running Python3. Data mismatch error would return otherwise.
- Fix to SNMPv3 MP peer engine ID discovery not to learn and use user-specified ContextEngineId.
- Fix to socket.error processing at Py3 on Windows.
- Fix to oneliner GETNEXT/GETBULK implementation to properly support ignoreNonIncreasingOIDs option.
- Fix to setEndOfMibError()/setNoSuchInstanceError() at v1 PDU not to loose errorIndex.
- Fix to api.v2c.getVarBindTable() to ignore possible non-rectangular GETBULK response tables.
- Fix to oneliner getnext/getbulk response table rectangulation procedure to gracefully handle an empty column condition.
- Fix to legacy MibBuilder.getMibPath() to prevent it from missing .egg-based components in path.
- Fix to oneliner configuration routine that used to implicitly
tag SNMPv1/v2c auth and transport LCD rows what resulted in huge delays when processing incoming messages with large number of peers configured.
- Fix to UDP6 transport handling at rfc2576 security module.
- Fix to SnpEngineID value autogeneration (used to fail on Mac).
- SNMPv2-SMI.ObjectType.__repr__() fixed to do a repr() on its components.
- All SNMPv2-SMI.MibNode-based objects, once exported to a mibBuilder, will carry an embedded label symbol.
- Explicit repr() calls replaced with ‘%r’
- Fix to error processing at GETNEXT & GETBULK apps response handlers.
- Fix to libsmi2pysnmp to make it supporting long (256+) list of function params.
- Fix to libsmi2pysnmp to support inheritance of MIB types.

Revision 4.2.1, released 2011-11-07
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- Support string OIDs at one-liner API.
- Code quality of libsmi2pysnmp tool improved, MIBs re-built.
- SNMP-PROXY-MIB & SNMP-USER-BASED-SM-3DES-MIB added
- vlarch bulkgen.py example added
- Major overhawl for Python 2.4 -- 3.2 compatibility:
  + get rid of old-style types
  + drop string module usage
  + switch to rich comparation
  + drop explicit long integer type use
  + map()/filter() replaced with list comprehension
  + apply() replaced with var-args
  + dictionary operations made 2K/3K compatible
  + division operator made 2K/3K compatible
  + sorting function now operates on key
  + iterators returned by some funcs in py3k converted to lists
  + exception syntax made 2K/3K compatible
  + tuple function arguments resolved to scalars to become py3k compatible
  + BER octetstream is now of type bytes (Py3k) or still string (Py2k)

Revision 4.1.16d, released 2011-09-22
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- Fix to SNMPv1 Trap PDU agentAddress setter shortcut method.

Revision 4.1.16c, released 2011-08-14
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- Missing module import fixed in privacy subsystem

Revision 4.1.16b, released 2011-08-13
- Oneliner CommandGenerator can now optionally ignore non-increasing OIDs.
- Default CommandResponder now skips non-compliant (Counter64) values when responding to a v1 Manager.
- Fix to state information handling at CommandResponder app.
- Fix to Twisted reactor shutdown condition.
- Fix to distutils dependencies syntax.

Revision 4.1.16a, released 2011-03-17

- Extended Security Options (3DESEDE, AES192, AES256) privacy protocols implemented.
- The error-indication codes moved from literals to objects for reliability and clarity.
- Fix to v1.TrapPDUAPI.getVarBinds() to address PDU component at the right position.
- Fix to rfc1902.Bits initialization from named bits sequence.
- Fix to MIB builder by-extension module filtering code to cope with .pyw files.
- Internal caches structure improved.
- Sync versions of oneliner apps split off async implementation for clarity.
- Randomize initial in various numeric sequences.
- MsgAndPduDsp expectResponse parameters passing reworked.
- GetNext/GetBulk response processing logic moved to getNextVarBinds().
- Changes towards performance improvement:

  + all dict.has_key() & dict.get() invocations replaced with modern syntax (this breaks compatibility with Python 2.1 and older).
  + introduce the MibInstrumControlle.readVarsFast() method (which skips the "testing" phase of MIB value readin) for dealing with internal configuration (LCD).
  + default debug.logger is now just a zero value instead of an object what saves big on frequent calls
  + SNMPv2-SMI columnar indices <-> index values conversion code optimized.
  + pre-compute and re-use some of ASN.1 structures.
  + avoid setting PDU defaults to save on unnecessary initialization.
  + skip ASN.1 types verification where possible.
  + at oneliner Command Generator, avoid looking up pure OID arguments at MIB as it's pointless but takes time.
  + cache MIB columnar objects instance ID <-> symbolic index representation mapping

Revision 4.1.15a, released 2010-12-13

- SNMP Proxy example added.
- End-of-MIB condition detection reworked what caused backward incompatibility at v1 arch GETNEXT API. Previous pysnmp versions used value = None in var-binds as returned by getVarBindTable() API method. This version uses rfc1905 exception values (v2c/v3) or pysnmp Null (v1).

Built-in GETNEXT/GETBULK apps now do not require user to track end-of-mib conditions anymore -- this is now done automatically.
- CommandResponder API now supports async mode of operation.
- SNMP exception values now exported from rfc1905 module, and made pretty printable.
- Lexicographic walking mode is now supported at oneliner CommandGenerator.
- ContextEngineId&ContextName parameters passing implemented at v3arch oneliner API.
- Multiple instances of the same transport domain now supported.
- Initial snmpEngineId value generation improved not to accidentally collide within an administrative domain.
- MibTableColumn instances now build value-to-column-instance map to speedup by-value search.
- SNMPv2-CONF::AgentCapabilities macro implemented.
- The libsmi2pysnmp tool handles some more MACROs.
- Void access control module implemented to let apps disabling [default] VACM.
- Allow standard SNMP apps to choose access control method to use.
- Twisted-based CommandResponder example added.
- Fix/rework of Twisted GETNEXT/BULK CommandGenerator callback API to make it simpler and uniform with other CommandGenerators
- Fix to SNMPv3 security module to store peer SNMP engine timeline only if taken from an authenticated message. Prior to this fix SNMP engine was not been protected from spoofing.
- Fix to $SMIPATH initialization at build-pysnmp-mib.
- Fix to maxSizeResponseScopedPDU calculation.
- Fix to Next/Bulk CommandGenerators to catch a non-increasing OID error condition (what prevents looping).
- Fix to Opaque value tagging at rfc1155.Opaque type.
- Fix to handle (fail gracefully) zero-length user password.
- Fix to SNMP error propagation at Twisted driver (SF tracker ID #3054505).
- Fix to Agent-role snmpEngineId discovery procedure that allows authenticated ReportPDU generation.
- Fix to SNMPv1 PDU handling at CommandResponder & NotificationReceiver apps.
- Fix to CommandResponder app to skip Counter64 SMI values when responding to SNMPv1 Manager.
- Fix to protocol translator code (rfc2576) to handle Counter64 type in v2c-to-v1 PDU translation.
- Fix to non-response var-binds translation in rfc2576.v2ToV1().
- Fix to wrong exceptions used in pysnmp/entity modules.
- Fix to noauth/nopriv security module so that it would not crash SNMP engine if called accidentally.
- Fix to CommandResponder not to return out-of-range errorIndex along
with genErr
- Fix to GETBULK CommandResponder to do a by-column MIB walk, not by-raw.
- Fix to getVarBindTable() API function logic.
- Fix to example Manager scripts to use errorIndex when available.
- Fix to dummy encryptData()/decryptData() API
- Fix to oneliner GETBULK table collection code to make it stripping uneven rows off table tail.

Revision 4.1.14a, released 2010-07-15

- Fix to maxSizeResponseScopedPDU calculation at USM security module: now more precise and robust against screwed values on input.
- Fix to MIB loading logic that used to load same-name modules at distincts search paths on each loadModules() call.
- Fix to AsynsockDispatcher.runDispatcher() to make use of optional non-default select() timeout value.
- AbstractTransportDispatcher now allows user application registering multiple timer callbacks each with dedicated call period.
- Asynsock mainloop default idle period reduced to 0.5 sec for better timer resolution.
- Fix to SNMPv1->SNMPv2c error status handling at proxy module. This defect may have caused an infinite loop on a multiple var-bind SNMPv1 GetNext operation.
- Fix to contextName processing at config.addV1System -- typo rendered passed contextName not committed into LCD.
- Fix to unknown ContextName exception handling at CommandResponder App.
- config.addVacmUser() now accepts an optional contextName what makes it usable for configuring multiple contextName-bound bases of Managed Objects to SnmpEngine.
- MP pending states cache management re-worked so that SNMP engine will now handle an unlimited number of pending request/responses.
- Fix to SNMP discovery procedure: include ContentName in SNMP discovery messaging.
- Many fixes to AES crypto code that makes it actually working.
- Fix to SNMPv2-SMI createUndo operations.
- Fix to INFORM sending error handling at oneliner.
- Fix to mismatched response PDU handling at CommandGenerator application.
- Debug category 'app' (for Application) added to facilitate Standard SNMP Applications debugging.
- The retryCount semantic of CommandGenerator application changed to include sole retries and do not include initial request. Thus, retryCount=1 will now send up to two packets, not just one as it used to be.
- Debugging printout now escapes non-printable characters.

Revision 4.1.13a, released 2010-02-09

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- UDP over IPv6 transport implemented.
- Fix to MIB tree walking code that used to fail on table columns where indices have identical leading parts.
- SNMPv1/v2c snmpCommunityTransportTag-based incoming message filtering implemented (rfc2576).

Revision 4.1.12a, released 2009-12-03
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- API versioning retired (pysnmp.v4 -> pysnmp).
- MIB loading mechanics re-designed to allow ZIP import.
- MIB loader supports code objects (py[co])
- Installer now uses setuptools for package management whenever available.
- The libsmi2pysnmp tool improved to build constraints of more than 256 items (Python has a limit on the number of function params).
- Missing SNMPTrap PDU API implemented at proto.api.v2c, RFC2576 proxy code reworked.
- Fix to sysUpTime OID at SNMPv2 TRAP PDU.

Revision 4.1.11a, released 2009-08-21
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- Twisted integration implemented.
- Attempt to use hashlib whenever available.
- Fix to oneliner Manager code on < Python 2.4.
- Let NotificationReceiver and CommandResponder Apps browsing request details (transport information at the moment) at SNMP engine.
- Fix to config.addV1System() to allow multiple systems to co-exist in LCD.
- Fix to wrongly succeeding user-parameters-by-community-name searching code in rfc2576 processIncomingMsg() method.
- Do sanity checking on PYSNMP_MODULE_ID, Groups and Notifications in libsmi2pysnmp (SF bug #2122489).
- Fix to oneliner Notification Originator that sometimes used to send multiple requests at once.
- Oneliners LCD names generation code reworked to avoid accidental clashes.
- Fix and re-work of sysUpTime value management in LCD.
- Fix to pending inform request data caching in mpmod/rfc2576.py -- previous code led to cache data corruption on multiple outstanding requests.
- In SMI configuration wrapper functions, catch access to non-configured entries and raise an exception.
- Allow multiple callback timer functions in all transport dispatchers.
- Fix to libsmi2pysnmp code to preserve more underscored object names and to guess the right type between indistinguishable ObjectGroup & NotificationGroup
- Fix to MibScalarInstance value setting logic - previous code failed when modifying the same OID multiple times within a single SET operation.
- Minor usability improvements to tools/build-pysnmp-mib.
- Made MIB objects unexport feature operational.
Revision 4.1.10a, released 2008-05-25
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- Internal MIB indexing method __indexMib() unmangled to facilitate setting up mutex there for sharing MIB stuff between threads.
- Fixed broken IpAddress value handling in SET operation.
- Broken MibBuilder.unloadModules() method now works.
- Use getLabel() SMI object method when building MIB tree (in builder.py) in addition to direct attribute access for clearer object protocol.
- The MIB building tools updated to match significantly improved smidump tool (libsmi version > 0.4.5).
- Made libsmi2pysnmp tool optionally building MIB text fields into pysnmp MIB code (enabled by default) and MibBuilder conditionally loading them up (disabled by default).
- SnmpEngine and MsgAndPduDispatcher constructors now optionally take msgAndPduDspr and mibInstrumController class instances respectively to facilitate these objects sharing within a process.
- Unique integers, for various parts of the system, are now generated by a nextid.py module. This fixes possible issues with duplicate request IDs and handlers.
- Built-in MIBs re-generated to include text fields.

Revision 4.1.9a, released 2007-11-28
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- UNSTABLE ALPHA RELEASE.
- At onliner CommandGenerator, close transport on destruction to prevent socket leak. Implicit async transports registration at default asyncore's socket map has been disabled to avoid side effects.
- Fix to rfc2576.v1ToV2c() PDU converter to perform noSuchName error code translation.
- Fixes to Notification PDU conversion code at rfc2576 in part of snmpTrapOID handling.
- Fix to nonRepeaters object use as sequence slicer (must be int) at cmdrsp.CommandResponderApplication
- Make AsynsockDispatcher using its own socket map by default for threading safety. This will break asyncore apps that rely on pysnmp sharing the same socket map with them. A solution would be to either set asyncore map to pysnmp (AsynsockDispatcher.setSocketMap()) or pass pysnmp map (AsynsockDispatcher.getSocketMap()) to asyncore.
- Fix to response timeout roundup bug at CommandGenerator and NotificationOriginator code.
- Oneline configuration classes made hashable to prevent memory leaks when committing them into CommandGenerator/NotificationOriginator internal repository.
- Security information is now released properly in all MP modules.
This might fix a significant memory leak.
- Typo fix to rfc3411 confirmed class PDU members.

Revision 4.1.8a, released 2007-08-14

- UNSTABLE ALPHA RELEASE.
- SMI/dispatcher timeout conversion multiplier is actually 100 (1/100 sec) rather than 1/1000. This fix affects timeouts specified through SMI.
- __repr__() implemented for UdpTransportTarget, CommunityData, UsmUserData in oneliner module.
- Automatically initialize table index values on table management operations (SF bug ID #1671989).
- Fix to carrier code: ignore BADFD socket error as it may happen upon FD closure on n-1 select() event.
- Fix to MibName.setMibName() to preserve previously loaded modules intact. Otherwise loadModules() called after setMibName() might fail with 'MIB file not found in search path' exception.
- Fix to oneliner classes that now invoke unconfiguration methods on destruction. This might have caused memory leaks.
- Automatically initialize SNMP-USER-BASED-SM-MIB::UsmUserSecurityName columnar object instance on creation, as stated in DESCRIPTION (SF tracker ID #1620392).
- Fix to USM timeframe arithmetics (SF bug #1649032).
- VACM shortcuts merged into universal add/delVacmUser() to let notifications and requests to co-exist for the same user.
- At oneliners, build LCD tables keys from a hashed mix of input parameters to make sure these automatic entries won't interfere or exceed constraints on keys values.
- Made use of notificationType parameter of the sendNotification method in NotificationOriginator applications. This parameter used to be ignored in the past. Note, that previously used (and ignored) syntax has been changed in an incompatible way.
- Allow plain Python values in setCmd() and sendNotification() methods in CommandGenerator and NotificationOriginator applications respectively.
- Multi-target oneliner API-based example script added.
- Ignore more socket errors in datagram-type async socket code.
- AES cipher now supported (rfc3826).
- Fix to messed up tagIDs of noSuchInstance and noSuchObject types.
- SET Command Responder fixed to obscure access to non-existing variables by returning notWritable error (SF bug #1764839).
- AsynsockDispatcher.setSocketMap() method added to facilitate pysnmp transport integration into third-party asyncore-based applications.
- Fix to errorIndex generation at CommandResponder application, the value should be a one-based.

Revision 4.1.7a, released 2007-02-19
- UNSTABLE ALPHA RELEASE.
- Low-level debugging facility implemented.
- Support UdpTransportTarget timeout and retries parameters in oneliner API.
- Fix to snmpTrapOID construction at ...proxy.rfc2576.v1ToV2() function.
- Fix to MibViewController.getNodeName() to take MIB module name into account (SF bug #1505847).
- Do explicit check for Counter32,Unsigned32,TimeTicks,Counter64 value types in MibTableRow index conversion and in TextualConvention.prettyPrint() methods (SF bug #1506341). Handle Bits in indices as RFC2578 suggests.
- Apply read-create column status to libsmi2pysnmp-generated code whenever MIB text specifies that (SF bug #1508955).
- Honor and apply DISPLAY-HINT specification when building TextualConvention class at libsmi2pysnmp.
- Managed Objects Instances files (smi/mibs/instances/) are now double-underscore prefixed to make them imported explicitly by these prefixed names. They used to be imported as a side-effect of Managed Objects files import what is way too hackerish.
- The libsmi2pysnmp now supports future libsmi bugfix that would generate "ranges" subtree along with the legacy and ambiguous "range" one.
- SMI support for fixed-length string indices implemented (SF bug #1584799, #1653908).
- Managed Object Instances may now have smiRead, smiWrite, smiCreate methods to support specific value mangling. These methods, if present, would be invoked from SNMP [Agent] core instead of conventional clone() method. The reason is to separate trivial value duplication from specific Instance value mangling that may have Agent-specific side effects (such as RowStatus).
- MIB table row destruction now works (SF bug #1555010).
- LCD unconfiguration functions for oneliners implemented (SF bug #1635270).
- unloadModules() and unexportSymbols() implemented at MibBuilder
- Notification type PDU proxy code fixed to produce symmetrical conversion.
- Various SNMP engine-internal caches expiration implemented.
- SMI-level access control now takes effect only if AC object is passed to MIB instrumentation API.
- LCD management code now uses generic MIB instrumentation features.
- Fix to oneliner manager code to have individual UdpSocketTransport instance per each SnmpEngine. Multithreaded apps might fail otherwise. (SF bug ID #1586420).
- Exclude the PYSNMP_MODULE_ID symbol from MIB view index, as it may get resolved into OID label instead of actual MIB object name.
- Memory leak fixed in indices.OidOrderedDict implementation.
- Fix to VACM shortcuts to let notifications and requests to co-exist for the same user otherwise.
- Fix to ...oneliner.cmdgen.UsmUserData to support non-default ciphers.
- USM now uses local notion of snmpEngineBoots/Time when authoritative and cached estimate otherwise. Also, a security fix applied to USM time-window verification (SF bug #1649032).
- Fix to notification objects resolution code at NotificationOriginator.sendNotification()
- Do not raise securityLevel for USM error reports that lacks user information, as these reports could never be ciphered (SF bug #1624720).
- Non-default BULK PDU params now actually applied.
- SnmpEngineID default value generation algorithmic function changed to allow multiple SNMP engines running on the same host.
- Documentation updated.
- A handful of minor fixes applied (SourceForge tracker IDs #1537592, #1537600, #1537659, #1548208, #1560939, #1563715, #1575697, #1599220, #1615077, #1615365, #1616579).

Revision 4.1.6a, released 2006-05-25

- UNSTABLE ALPHA RELEASE.
- pysnmpUsmSecretAuthKey and pysnmpUsmSecretPrivKey length increased up to 256 octets. There seems no limit on this in RFC, though.
- A workaround for probably broken Agents: SNMPv3 Manager code defaults ContextEngineId to SecurityEngineId whenever ContextEngineId is not reported by authoritative SNMP engine on discovery.
- Use empty PDU in engine-discovery report at mpmod/rfc3412.py.
- MibBuilder.loadModules() now fails on missing MIB files.
- MibBuilder.exportSymbols() now accepts unnamed objects (likely Managed Objects Instances)
- SNMPv2-SMI.MibScalarInstance objects now support create*/destroy* Management Instrumentation methods to pass Columnar Object creation and removal events. MibTableColumn class invoke these methods accordingly.
- Fix to AsynNotificationOriginator.asyncSendNotification() callback formal parameters
- Initial VACM configuration implemented according to rfc3415 Appendix 1
- tools/buildmibs.sh split-up and re-implemented as tools/build-pysnmp-mib and pysnmp-mibs/tools/rebuild-pysnmp-mibs for better usability. These and libsmi2pysnmp scripts made installable.
- Types/Notifications/Groups exportSymbols() call chunking implemented in tools/libsmi2pysnmp
- Initial values specified to pyasn1 types to comply with latest pyasn1 API.
- Documentation improved
- Minor fixes towards Python 1.5 compatibility

Revision 4.1.5a, released 2005-11-04

- UNSTABLE ALPHA RELEASE.
- Multi-lingual SNMP Trap/Inform Applications completed; examples added
- SMI model re-designed to make a clear separation between Managed Objects and their specification (AKA Agent and Manager side)
- SNMP SET Application support completed
- Minor, though backward incompatible, changes to one-liner API
- Many bugfixes

Revision 4.1.4a, released 2005-08-16
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- UNSTABLE ALPHA RELEASE.
- SHA-based authentication fixed and privacy implemented
- ...oneliner.cmdgen.UsmUserData constructor now takes authProtocol and privProtocol parameters in a backward incompatible manner.

Revision 4.1.3a, released 2005-07-28
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- UNSTABLE ALPHA RELEASE.
- RFC3413 applications API changes (related to callback function behaviour).
- TransportDispatcher now provides "jobs" interface to clients for better control of dispatcher's execution.
- Many minor fixes.

Revision 4.1.2a, released 2005-07-12
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- UNSTABLE ALPHA RELEASE.
- Top-level application classes renamed into longer, self describing names for clarity.
- CommandResponder & NotificationOriginator applications now uses stand-alone SnmpContext for application registration.
- Many minor fixes (inspired by testing on WinXP)

Revision 4.1.1a, released 2005-06-29
------------------------------------

- UNSTABLE ALPHA RELEASE.
- SNMPv3 code first published
- SNMP engine and applications implemented on library level
- Major re-design towards SNMPv3-style API.

Revision 4.0.2a, released 2005-03-01
------------------------------------

- Adopted to slightly changed asyncore API (as shipped with python 2.4)
Revision 4.0.1a, released 2004-11-18
---------------------------------------

- Minor bug/typo fixes, mostly in example/ scripts.

Revision 4.0.0a, released 2004-11-15
---------------------------------------

- UNSTABLE EARLY ALPHA RELEASE.
- Major re-design and re-implementation.
- Rudimental API versioning implemented to let incompatible package branches to co-exist within the same Python installation.
- SMI framework designed and implemented. This framework provides 1) various access to MIB data 2) a way to implement custom MIB instrumentation objects. There's also a tool for building SMI classes from libsmi(3) output (smidump -f python).
- ASN.1 subtyping machinery implemented. Now dynamic ASN.1 instances subtyping and querying becomes available. Previously, this has been done through Python classes inheritance what proved to be a wrong concept.
- ASN.1 codecs framework re-designed and re-implemented aimed at a more consistent design and better performance. Highlights include abstract codec interface and serialized data caching (at encoder).
- Asn1Item constraints machinery re-implemented based on Mike C. Fletcher's design and code. Now various constrains are implemented as stand-alone objects serving interested Asn1Object derivatives through some abstract protocol (that's probably the Decorator design pattern).
- ASN.1 tagging facility re-implemented along the client-server design pattern. Besides this seems to be a more appropriate design, it allows an easier way for dynamic subtyping.

Found in path(s):
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4.4-6-tar-gz/pysnmp-4.4.6/CHANGES.txt
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if mibBuilder.loadTexts: snmpUsmHmacSha2MIB.setDescription("Definitions of Object Identities needed for the use of HMAC-SHA2 Authentication Protocols by SNMP's User-based Security Model. Copyright (c) 2016 IETF Trust and the persons identified as authors of the code. All rights reserved. Redistribution and use in source and binary forms, with or without modification, is permitted pursuant to, and subject to the license terms contained in, the Simplified BSD License set forth in Section 4.c of the IETF Trust's Legal Provisions Relating to IETF Documents (http://trustee.ietf.org/license-info).")

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Metadata-Version: 1.2
Name: pysnmp
Version: 4.4.6
Summary: SNMP library for Python
Home-page: https://github.com/etingof/pysnmp
Author: Ilya Etingof
Author-email: etingof@gmail.com
Maintainer: Ilya Etingof <etingof@gmail.com>
License: BSD
Description:
SNMP v1/v2c/v3 engine and Standard Applications suite written in pure-Python.
Supports Manager/Agent/Proxy roles, Manager/Agent-side MIBs, asynchronous
operation and multiple network transports.

Platform: any
Classifier: Development Status :: 5 - Production/Stable
Classifier: Environment :: Console
Classifier: Intended Audience :: Developers
Classifier: Intended Audience :: Education
Classifier: Intended Audience :: Information Technology
Classifier: Intended Audience :: System Administrators
Classifier: Intended Audience :: Telecommunications Industry
Classifier: License :: OSI Approved :: BSD License
Classifier: Natural Language :: English
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Classifier: Programming Language :: Python :: 2
Classifier: Programming Language :: Python :: 2.4
Classifier: Programming Language :: Python :: 2.5
Classifier: Programming Language :: Python :: 2.6
Classifier: Programming Language :: Python :: 2.7
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Classifier: Programming Language :: Python :: 3.2
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Further development

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Although PySNMP is already a mature software and it is being used at many places, the ultimate goal of the project is to implement most of the useful features that SNMP standards can offer. What follows is a list of most prominent missing features that PySNMP developers are planning to put their hands on in the future.

PySNMP library

#. Built-in MIB parser. PySNMP uses a data model of its own to work with information contained in MIB files. To convert ASN.1-based MIB texts into Python modules, an off-line, third-party tool is employed. As it turns out, this approach has two major drawbacks: one is that PySNMP users may need to pre-process MIB texts to use them with their PySNMP-based applications. Another is that LibSMI's Python driver seems to miss some information carried by MIBs. Thus the solution would be to write another MIB parser and code generator which would produce PySNMP compliant Python code right from MIB text files all by itself.

**Done:** see `PySMI project <http://snmplabs.com/pysmi/>` in conjunction with the latest PySNMP codebase.

#. Reverse MIB index. The variable-bindings received by the system whilst in Manager role could be post-processed using the information kept in MIB files to include human-friendly OIDs names, tables indices and values representation. However, there is currently no provisioning in the PySNMP system for locating and loading up MIB files containing additional information on arbitrary OIDs. So the idea is to maintain an OID-to-MIB index to let PySNMP load relevant MIB automatically on demand.

#. Stream sockets support. Currently, PySNMP transport subsystem only supports datagram-type network sockets. That covers UDP-over-IPv4 and UDP-over-IPv6. However, SNMP engine can potentially run over stream-oriented protocols what would let it support TCP-over-IPv4, TCP-over-IPv6 and SSL/TSL transports. Neither of these is currently implemented with PySNMP.

#. AgentX implementation. We anticipate many uses of this. For instance, having AgentX protocol support in pure-Python would let us write AgentX modules in pure-Python and attach them to high-performance Net-SNMP Agent. Or we could build and maintain a fully-featured, stand-alone PySNMP-based Agent so that users would write their own AgentX extensions what would comprise a complete SNMP Agent solution at lesser effort.

#. A DBMS-based SMI. Currently implemented SMI takes shape of live Python objects that let user hook up his own handler on any existing Managed Object Instance. That's flexible and working approach in many cases, however sometimes, for instance when Management Instrumentation is
inherently DBMS-based, it may be more efficient to move the entire
SMI/MIB subsystem into a database. PySNMP engine would talk to it
through its simple and well defined SMI API.

Stand-alone PySNMP-based tools
+++++++++++++++++++++++++++++++

#. SNMP Proxy Forwarder. That would be a stand-alone, application-level
proxy service supporting all SNMP versions, multiple network transports,
Command and Notification SNMP message types. Its anticipated features
include extensive configuration facilities, fine-grained access
control and logging.

**Done:** see `SNMP Proxy Forwarder <http://snmplabs.com/snmpfwd/>`

#. SNMP Trap Receiver. We see this application as a simple yet flexible
SNMP TRAP collector. It would listen on network sockets of different
types receiving SNMP TRAP/INFORM notifications over any SNMP version
and putting all the details into a database and possibly triggering
external events.

#. Database backend for SNMP Simulator. We have already built a tool for
simulating SNMP Agents based on a snapshot of their Management
Instrumentation state. Current implementation uses a plain-text file
for keeping and possibly managing the snapshot. Many users of the
Simulator software requested a value variation feature to be supported
so that simulated Agents would look live, not static. We consider this
variation and also dependencies features would be best implemented as
a relational database application. So we are planning to put some more
efforts into the Simulator project as time permits.

**Done:** since `snmpsim-0.2.4 <http://snmplabs.com/snmpsim/>`

If you need some particular feature - please,
`open a feature request <https://github.com/etingof/pysnmp/issues/new>`
. Once we see a greater demand in particular area, we would re-arrange our
development resources to meet it sooner.

You could greater speed up the development of particular feature by
sponsoring it. Please get back to us to discuss details.

Contributions to the PySNMP source code is greatly appreciated as well.
We require contributed code to run with Python 2.4 through the latest
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Open Source Used In BGP TE Controller Version 4.3.0 14765
4.4.6/pysnmp/hlapi/asyncore/sync/compat/cmdgen.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-carrier/sockmsg.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-entity/rfc3413/mibvar.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-hlapi/asyncio/asyncore/sync/ntforg.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-hlapi/asyncio/ntforg.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-hlapi/asyncio/transport.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-hlapi/asyncio/ntforg.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-4.4.6/pysnmp/hlapi/asyncio/sync/ntforg.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-4.4.6/pysnmp/carrier/base.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-4.4.6/pysnmp/carrier/asynsock/dgram/udp.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-4.4.6/pysnmpproto/secmod/rfc7860/auth/hmacsha2.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-4.4.6/pysnmpproto/secmod/rfc3414/priv/nopriv.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-4.4.6/pysnmpproto/security/rfc3414/auth/hmacmd5.py
* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4-4-6-tar-gz/pysnmp-4.4.6/pysnmpproto/security/rfc3414/auth/hmacsha2.py

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* /opt/cola/permits/1203830719_1631819374.63/0/pysnmp-4.4.6/pysnmp/carrier/asyncio/dgram/udp.py

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1.1293 kazoo-go 0.0.0-20180202103751-f72d8611297a
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1.1294 libsolve 0.7.19-1.el8

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1.1296 netty-codec 4.1.62.Final
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Manifest-Version: 1.0
Implementation-Title: Netty/Codec
Bundle-Description: Netty is an asynchronous event-driven network application framework for rapid development of maintainable high performance protocol servers and clients.
Automatic-Module-Name: io.netty.codec
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0
Bundle-SymbolicName: io.netty.codec
Implementation-Version: 4.1.62.Final
Built-By: norman
Bnd-LastModified: 1617128255368
Bundle-ManifestVersion: 2
Implementation-Vendor-Id: io.netty
Bundle-DocURL: https://netty.io/
Bundle-Vendor: The Netty Project
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.6))"
Tool: Bnd-2.4.1.201501161923
Implementation-Vendor: The Netty Project
Open Source Used In BGP TE Controller Version 4.3.0

.netty.channel,io.netty.handler.codec;version="4.1.62"
Bundle-Name: Netty/Codec
Bundle-Version: 4.1.62.Final
Created-By: Apache Maven Bundle Plugin
Build-Jdk: 1.8.0_252
Implementation-URL: https://netty.io/netty-codec/

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1.1297 metrics 4.1.12.1

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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=head1 NAME

IO::Socket - Object interface to socket communications

=head1 SYNOPSIS

use IO::Socket;

=head1 DESCRIPTION

C<IO::Socket> provides an object interface to creating and using sockets. It is built upon the L<IO::Handle> interface and inherits all the methods defined
by L<IO::Handle>.

C<IO::Socket> only defines methods for those operations which are common to all types of socket. Operations which are specified to a socket in a particular domain have methods defined in sub classes of C<IO::Socket>.

C<IO::Socket> will export all functions (and constants) defined by L<Socket>.

=head1 CONSTRUCTOR

=over 4

=item new ( [ARGS] )

Creating an C<IO::Socket>, which is a reference to a newly created symbol (see the C<Symbol> package). C<new> optionally takes arguments, these arguments are in key-value pairs. C<new> only looks for one key C<Domain> which tells new which domain the socket will be in. All other arguments will be passed to the configuration method of the package for that domain, See below.

NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE

As of VERSION 1.18 all IO::Socket objects have autoflush turned on by default. This was not the case with earlier releases.

NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE

=back

=head1 METHODS

See L<perlfunc> for complete descriptions of each of the following supported C<IO::Socket> methods, which are just front ends for the corresponding built-in functions:

  socket
  socketpair
  bind
  listen
  accept
  send
  recv
  peername (getpeername)
  sockname (getsockname)
  shutdown

Some methods take slightly different arguments to those defined in L<perlfunc>
in attempt to make the interface more flexible. These are

=item accept([PKG])

perform the system call C<accept> on the socket and return a new object. The new object will be created in the same class as the listen socket, unless C<PKG> is specified. This object can be used to communicate with the client that was trying to connect.

In a scalar context the new socket is returned, or undef upon failure. In a list context a two-element array is returned containing the new socket and the peer address; the list will be empty upon failure.

The timeout in the [PKG] can be specified as zero to effect a "poll", but you shouldn't do that because a new IO::Select object will be created behind the scenes just to do the single poll. This is horrendously inefficient. Use rather true select() with a zero timeout on the handle, or non-blocking IO.

=item socketpair(DOMAIN, TYPE, PROTOCOL)

Call C<socketpair> and return a list of two sockets created, or an empty list on failure.

=back

Additional methods that are provided are:

=item atmark

True if the socket is currently positioned at the urgent data mark, false otherwise.

use IO::Socket;

   my $sock = IO::Socket::INET->new('some_server');
   $sock->read($data, 1024) until $sock->atmark;

Note: this is a reasonably new addition to the family of socket functions, so all systems may not support this yet. If it is unsupported by the system, an attempt to use this method will abort the program.
The `atmark()` functionality is also exportable as `sockatmark()` function:

use IO::Socket 'sockatmark';

This allows for a more traditional use of `sockatmark()` as a procedural socket function. If your system does not support `sockatmark()`, the C<use> declaration will fail at compile time.

=item connected

If the socket is in a connected state, the peer address is returned. If the socket is not in a connected state, undef is returned.

Note that `connected()` considers a half-open TCP socket to be "in a connected state". Specifically, `connected()` does not distinguish between the B<ESTABLISHED> and B<CLOSE-WAIT> TCP states; it returns the peer address, rather than undef, in either case. Thus, in general, `connected()` cannot be used to reliably learn whether the peer has initiated a graceful shutdown because in most cases (see below) the local TCP state machine remains in B<CLOSE-WAIT> until the local application calls `shutdown()` or `close()`; only at that point does connected() return undef.

The "in most cases" hedge is because local TCP state machine behavior may depend on the peer's socket options. In particular, if the peer socket has SO_LINGER enabled with a zero timeout, then the peer's `close()` will generate a RST segment, upon receipt of which the local TCP transitions immediately to B<CLOSED>, and in that state, connected() will return undef.

=item protocol

Returns the numerical number for the protocol being used on the socket, if known. If the protocol is unknown, as with an AF_UNIX socket, zero is returned.

=item sockdomain

Returns the numerical number for the socket domain type. For example, for an AF_INET socket the value of &AF_INET will be returned.

=item sockopt(OPT [, VAL])

Unified method to both set and get options in the SOL_SOCKET level. If called with one argument then `getsockopt` is called, otherwise `setsockopt` is called.

=item getsockopt(LEVEL, OPT)

Get option associated with the socket. Other levels than SOL_SOCKET may be specified here.
=item setsockopt(LEVEL, OPT, VAL)

Set option associated with the socket. Other levels than SOL_SOCKET
may be specified here.

=back

=head1 LIMITATIONS

On some systems, for an IO::Socket object created with new_from_fd(),
or created with accept() from such an object, the protocol(),
sockdomain() and socktype() methods may return undef.

=head1 SEE ALSO

L<Socket>, L<IO::Handle>, L<IO::Socket::INET>, L<IO::Socket::UNIX>

=head1 AUTHOR

Graham Barr.  atmark() by Lincoln Stein.  Currently maintained by the
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=head1 NAME

IO::Socket::UNIX - Object interface for AF_UNIX domain sockets

=head1 SYNSPIS

use IO::Socket::UNIX;

my $SOCK_PATH = "$ENV{HOME}/unix-domain-socket-test.sock";

# Server:
my $server = IO::Socket::UNIX->new(
    Type => SOCK_STREAM(),
    Local => $SOCK_PATH,
    Listen => 1,
);

my $count = 1;
while (my $conn = $server->accept()) {
    $conn->print("Hello " . ($count++) . "\n");
}

# Client:
my $client = IO::Socket::UNIX->new(
    Type => SOCK_STREAM(),
    Peer => $SOCK_PATH,
);

# Now read and write from $client

=head1 DESCRIPTION

C<IO::Socket::UNIX> provides an object interface to creating and using sockets
in the AF_UNIX domain. It is built upon the L<IO::Socket> interface and
inherits all the methods defined by L<IO::Socket>.

=head1 CONSTRUCTOR

=over 4
=item new ( [ARGS] )

Creates an C<IO::Socket::UNIX> object, which is a reference to a newly created symbol (see the C<Symbol> package). C<new> optionally takes arguments, these arguments are in key-value pairs.

In addition to the key-value pairs accepted by L<IO::Socket>, C<IO::Socket::UNIX> provides.

- **Type**: Type of socket (eg SOCK_STREAM or SOCK_DGRAM)
- **Local**: Path to local fifo
- **Peer**: Path to peer fifo
- **Listen**: Queue size for listen

If the constructor is only passed a single argument, it is assumed to be a C<Peer> specification.

If the C<Listen> argument is given, but false, the queue size will be set to 5.

=back

=head1 METHODS

=over 4

=item hostpath()

Returns the pathname to the fifo at the local end

=item peerpath()

Returns the pathname to the fifo at the peer end

=back

=head1 SEE ALSO

L<Socket>, L<IO::Socket>

=head1 AUTHOR

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=head1 NAME

IO::Socket::INET - Object interface for AF_INET domain sockets

=head1 SYNOPSIS

use IO::Socket::INET;

=head1 DESCRIPTION

C<IO::Socket::INET> provides an object interface to creating and using sockets in the AF_INET domain. It is built upon the L<IO::Socket> interface and inherits all the methods defined by L<IO::Socket>.

=head1 CONSTRUCTOR

=over 4

=item new ( [ARGS] )

Creates an C<IO::Socket::INET> object, which is a reference to a newly created symbol (see the C<Symbol> package). C<new> optionally takes arguments, these arguments are in key-value pairs.

In addition to the key-value pairs accepted by L<IO::Socket>, C<IO::Socket::INET> provides.

PeerAddr    Remote host address          <hostname>[:<port>]
PeerHost    Synonym for PeerAddr
PeerPort    Remote port or service       <service>[(<no>)] | <no>
LocalAddr   Local host bind address      hostname[:port]
LocalHost   Synonym for LocalAddr
LocalPort   Local host bind port         <service>[(<no>)] | <no>
Proto       Protocol name (or number)    "tcp" | "udp" | ...
Type        Socket type                  SOCK_STREAM | SOCK_DGRAM | ...
Listen     Queue size for listen
ReuseAddr  Set SO_REUSEADDR before binding
Reuse      Set SO_REUSEADDR before binding (deprecated,
            prefer ReuseAddr)
ReusePort  Set SO_REUSEPORT before binding
Broadcast   Set SO_BROADCAST before binding
Timeout    Timeout value for various operations
MultiHomed Try all addresses for multi-homed hosts
Blocking   Determine if connection will be blocking mode

If C<Listen> is defined then a listen socket is created, else if the
socket type, which is derived from the protocol, is SOCK_STREAM then
connect() is called. If the C<Listen> argument is given, but false,
the queue size will be set to 5.

Although it is not illegal, the use of C<MultiHomed> on a socket
which is in non-blocking mode is of little use. This is because the
first connect will never fail with a timeout as the connect call
will not block.

The C<PeerAddr> can be a hostname or the IP-address on the
"xx.xx.xx.xx" form. The C<PeerPort> can be a number or a symbolic
service name. The service name might be followed by a number in
parenthesis which is used if the service is not known by the system.
The C<PeerPort> specification can also be embedded in the C<PeerAddr>
by preceding it with a ":".

If C<Proto> is not given and you specify a symbolic C<PeerPort> port,
then the constructor will try to derive C<Proto> from the service
name. As a last resort C<Proto> "tcp" is assumed. The C<Type>
parameter will be deduced from C<Proto> if not specified.

If the constructor is only passed a single argument, it is assumed to
be a C<PeerAddr> specification.

If C<Blocking> is set to 0, the connection will be in nonblocking mode.
If not specified it defaults to 1 (blocking mode).

Examples:

$sock = IO::Socket::INET->new(PeerAddr => 'www.perl.org',
                            PeerPort => 'http(80)',
                            Proto    => 'tcp');

$sock = IO::Socket::INET->new(PeerAddr => 'localhost:smtp(25)');

$sock = IO::Socket::INET->new(Listen => 5,
                            LocalAddr  => 'localhost',
                            Listen => 5,
LocalPort => 9000,
Proto => 'tcp');

$sock = IO::Socket::INET->new('127.0.0.1:25');

$sock = IO::Socket::INET->new(
    PeerPort => 9999,
    PeerAddr => inet_ntoa(INADDR_BROADCAST),
    Proto => udp,
    LocalAddr => 'localhost',
    Broadcast => 1)
or die "Can't bind : $@
";

NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE
As of VERSION 1.18 all IO::Socket objects have autoflush turned on
by default. This was not the case with earlier releases.

NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE
=back
=head2 METHODS
=over 4
=item sockaddr()
Return the address part of the sockaddr structure for the socket

=item sockport()
Return the port number that the socket is using on the local host

=item sockhost()
Return the address part of the sockaddr structure for the socket in a
text form xx.xx.xx.xx

=item peeraddr()
Return the address part of the sockaddr structure for the socket on
the peer host

=item peerport()
Return the port number for the socket on the peer host.
Return the address part of the sockaddr structure for the socket on the peer host in a text form xx.xx.xx.xx
No license file was found, but licenses were detected in source scan.

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=head1 NAME

IO::Dir - supply object methods for directory handles

=head1 SYNOPSIS

use IO::Dir;
$d = IO::Dir->new(".");
if (defined $d) {
    while (defined($_ = $d->read)) { something($_); }
    $d->rewind;
    while (defined($_ = $d->read)) { something_else($_); }
    undef $d;
}

tie %dir, 'IO::Dir', ".";
foreach (keys %dir) {
    print $_, " ", $dir{$_}->size,"\n";
}

=head1 DESCRIPTION

The C<IO::Dir> package provides two interfaces to perl's directory reading routines.

The first interface is an object approach. C<IO::Dir> provides an object constructor and methods, which are just wrappers around perl's built in directory reading routines.

=over 4

=item new ( [ DIRNAME ] )

C<new> is the constructor for C<IO::Dir> objects. It accepts one optional argument which, if given, C<new> will pass to C<open>

=back

The following methods are wrappers for the directory related functions built into perl (the trailing 'dir' has been removed from the names). See L<perlfunc> for details of these functions.

=over 4
item open (DIRNAME)

item read()

item seek (POS)

item tell()

item rewind()

item close()

C<IO::Dir> also provides an interface to reading directories via a tied hash. The tied hash extends the interface beyond just the directory reading routines by the use of C<lstat>, from the C<File::stat> package, C<unlink>, C<rmdir> and C<utime>.

over 4

tie %hash, 'IO::Dir', DIRNAME [, OPTIONS]

The keys of the hash will be the names of the entries in the directory. Reading a value from the hash will be the result of calling C<File::stat::lstat>. Deleting an element from the hash will delete the corresponding file or subdirectory, provided that C<DIR_UNLINK> is included in the C<OPTIONS>.

Assigning to an entry in the hash will cause the time stamps of the file to be modified. If the file does not exist then it will be created. Assigning a single integer to a hash element will cause both the access and modification times to be changed to that value. Alternatively a reference to an array of two values can be passed. The first array element will be used to set the access time and the second element will be used to set the modification time.

SEE ALSO

L<File::stat>

AUTHOR

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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# PCG64

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PCG Random Number Generation for C.

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Written in 2015 by Sebastiano Vigna (vigna@acm.org)

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# SFC64
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Adapted from a C++ implementation of Chris Doty-Humphrey's SFC PRNG.

https://gist.github.com/imneme/f1f7821f07cf76504a97f6537c818083

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Original algorithm for the implementation of rk_interval function from Richard J. Wagner's implementation of the Mersenne Twister RNG, optimised by Magnus Jonsson.

Constants used in the rk_double implementation by Isaku Wada.

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A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting
Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands
as a successor of a language called ABC. Guido remains Python's
principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for
National Research Initiatives (CNRI, see http://www.cnri.reston.va.us)
in Reston, Virginia where he released several versions of the
software.
In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

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1.1352 otel-sdk 0.20.0

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1.1370 cryptography 2.3.1

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* /opt/cola/permits/1302209236_1649328277.58/0/ydk-0-8-4-1-tar-gz/ydk-0.8.4/ydk/entity_utils/entity_utils.py
* /opt/cola/permits/1302209236_1649328277.58/0/ydk-0-8-4-1-tar-gz/ydk-0.8.4/ydk/filters/__init__.py
The YANG Development Kit (YDK) is a Software Development Kit that provides APIs that are modeled in YANG. The main goal of YDK is to reduce the learning curve of YANG data models by expressing the model semantics in an API and abstracting protocol/encoding details. YDK is composed of a core package that defines services and providers, plus one or more module bundles that are based on YANG models.

Keywords: yang,C++11,python bindings
Platform: UNKNOWN
Classifier: Development Status :: 3 - Alpha
Classifier: Intended Audience :: Developers
Classifier: Intended Audience :: Education
Classifier: Intended Audience :: Information Technology
Classifier: Intended Audience :: Science/Research
Classifier: Intended Audience :: System Administrators
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Classifier: Programming Language :: Python :: 3
Classifier: Programming Language :: Python :: 3.2
Classifier: Programming Language :: Python :: 3.3
Classifier: Programming Language :: Python :: 3.4
Classifier: Programming Language :: Python :: 3.5
Classifier: Programming Language :: C++

Found in path(s):
* /opt/cola/permits/1302209236_1649328277.58/0/ydk-0-8-4-1-tar-gz/ydk-0.8.4/PKG-INFO
* /opt/cola/permits/1302209236_1649328277.58/0/ydk-0-8-4-1-tar-gz/ydk-0.8.4/ydk.egg-info/PKG-INFO
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1.1373 x-pack-core 7.10.2
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1.1377 docker-scan-plugin 0.17.0-3.el8

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1.1378 nested-lookup 0.2.12

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* /opt/cola/permits/1203830839_1631819532.85/0/nested-lookup-0-2-1220-1-tar-gz/nested-lookup-0.2.12/setup.py

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Metadata-Version: 1.1
Name: nested-lookup
Version: 0.2.12
Summary: Python functions for working with deeply nested documents (lists and dicts)
Home-page: https://github.com/russellballestrini/nested-lookup
Author: Russell Ballestrini
Author-email: russell@ballestrini.net
License: Public Domain
Description: nested_lookup

Make working with JSON, YAML, and XML document responses fun again!

The `nested_lookup` package provides many Python functions for working with deeply nested documents. A document in this case is a a mixture of Python dictionary and list objects typically derived from YAML or JSON.

*nested_lookup:*
Perform a key lookup on a deeply nested document.
Returns a `list` of matching values.

*nested_update:*
Given a document, find all occurrences of the given key and update the value.
By default, returns a copy of the document.
To mutate the original specify the `in_place=True` argument.

*nested_delete:*
Given a document, find all occurrences of the given key and delete it.
By default, returns a copy of the document.
To mutate the original specify the `in_place=True` argument.

*get_all_keys:*
Fetch all keys from a deeply nested dictionary.
Returns a `list` of keys.

*get_occurrence_of_key/get_occurrence_of_value:*
Returns the number of occurrences of a key/value from a nested dictionary.

For example function invocations, please see the tutorial.

.. contents::

install

========
install from pypi using pip:

```
pip install nested-lookup
```

or easy_install::

```
easy_install nested-lookup
```

or install from source using::

```
git clone https://github.com/russellballestrini/nested-lookup.git
cd nested-lookup
pip install .
```

quick tutorial
==============

```python
>>> from nested_lookup import nested_lookup

>>> document = [ { 'taco' : 42 }, { 'salsa' : [ { 'burrito' : { 'taco' : 69 } } ] } ]

>>> print(nested_lookup('taco', document))
[42, 69]

>>> from nested_lookup import nested_update, nested_delete

>>> nested_update(document, key='burrito', value='Test')
[{'taco': 42}, {'salsa': [{'burrito': 'Test'}]}]

>>> nested_delete(document, 'taco')
[{}, {'salsa': [{'burrito': {}}]}]

>>> from nested_lookup import get_all_keys

>>> get_all_keys(document)
['taco', 'salsa', 'burrito', 'taco']

>>> from nested_lookup import get_occurrence_of_key, get_occurrence_of_value

>>> get_occurrence_of_key(document, key='taco')
2

>>> get_occurrence_of_value(document, value='42')
1
```
You may control the function's behavior by passing some optional arguments.

wild (defaults to `False`):
if `wild` is `True`, treat the given `key` as a case insensitive substring when performing lookups.

with_keys (defaults to `False`):
if `with_keys` is `True`, return a dictionary of all matched keys and a list of values.

For example, given the following document:

```python
from nested_lookup import nested_lookup

my_document = {
    'name' : 'Russell Ballestrini',
    'email_address' : 'test1@example.com',
    'other' : {
        'secondary_email' : 'test2@example.com',
        'EMAIL_RECOVERY' : 'test3@example.com',
        'email_address' : 'test4@example.com',
    },
},
```

Next, we could act `wild` and find all the email addresses like this:

```python
results = nested_lookup(
    key = 'mail',
    document = my_document,
    wild = True
)

print(results)
```

Additionally, if you also needed the matched key names, you could do this:
```python
results = nested_lookup(
    key = 'mail',
    document = my_document,
    wild = True,
    with_keys = True,
)

print(results)
```

```python
{
    'email_address': ['test1@example.com', 'test4@example.com'],
    'secondary_email': ['test2@example.com'],
    'EMAIL_RECOVERY': ['test3@example.com']
}
```

To Get / Delete / Update a key->value pair in nested document

```python
from nested_lookup import nested_update, nested_delete

result = nested_delete(my_document, 'EMAIL_RECOVERY')

print(result) # result => {'other': {'secondary_email': 'test2@example.com', 'email_address': 'test4@example.com'}, 'email_address': 'test1@example.com', 'name': 'Russell Ballestrini'}

result = nested_update(my_document, key='other', value='Test')

print(result) # result => {'other': 'Test', 'email_address': 'test1@example.com', 'name': 'Russell Ballestrini'}
```

To get a list of every nested key in a document, run this:

```python
from nested_lookup import get_all_keys

keys = get_all_keys(my_document)

print(keys)
```
To get the number of occurrence of the given key/value

```python
from nested_lookup import get_occurrence_of_key, get_occurrence_of_value

no_of_key_occurrence = get_occurrence_of_key(my_document, key='email_address')
print(no_of_key_occurrence)  # result => 2

no_of_value_occurrence = get_occurrence_of_value(my_document, value='test2@example.com')
print(no_of_value_occurrence)  # result => 1
```

misc
=====

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* Douglas Miranda
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:web:
* http://russell.ballestrini.net
* http://douglasmiranda.com
* https://gist.github.com/douglasmiranda/5127251

Keywords: nested document dictionary dict list lookup schema json xml yaml
Platform: All
Classifier: Programming Language :: Python :: 2.6
Classifier: Programming Language :: Python :: 2.7
Classifier: Programming Language :: Python :: 3.5
Classifier: Programming Language :: Python :: 3.6
Classifier: Programming Language :: Python :: 3.7

Found in path(s):
* /opt/cola/permits/1203830839_1631819532.85/0/nested-lookup-0-2-1220-1-tar-gz/nested-lookup-0.2.12/nested_lookup.egg-info/PKG-INFO
* /opt/cola/permits/1203830839_1631819532.85/0/nested-lookup-0-2-1220-1-tar-gz/nested-lookup-0.2.12/PKG-INFO

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* /opt/cola/permits/1203830839_1631819532.85/0/nested-lookup-0-2-1220-1-tar-gz/nested-lookup-0.2.12/README.rst

1.1379 zap 1.17.0

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1.1386 antchfx-jsonquery 1.1.4

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1.1392 at-spi2-core 2.28.0-1.el8

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<one line to give the program's name and a brief idea of what it does.>
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<signature of Ty Coon>, 1 April 1989 
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1.1406 oauth2-oidc-sdk 7.0.2

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Authorisation code. Client authentication required only for confidential clients.

Refresh token. Client authentication required only for confidential clients.

Password. Client authentication required only for confidential clients.

Found in path(s):
/opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/GrantType.java

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/opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/validators/BadJWTExceptions.java

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/**
 * Creates a new authenticated pushed authorisation request for a confidential client.
 *
 * @param uri          The URI of the token endpoint. May be {code null} if the {link #HTTPRequest} method will not be used.
 * @param clientAuth   The client authentication. Must not be {code null}.
 * @param authzRequest The authorisation request. Must not be {code null}.
 */

Found in path(s):

/opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/PushedAuthorizationRequest.java

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 */
Client information. Encapsulates the registration and metadata details of an OAuth 2.0 client:

- The client identifier.
- The client metadata.
- The optional client secret for a confidential client.
- The optional registration URI and access token if dynamic client registration is permitted.

Related specifications:

- OAuth 2.0 Dynamic Client Registration Protocol (RFC 7591), section 3.2.1.
- OAuth 2.0 Dynamic Client Registration Management Protocol (RFC 7592), section 3.

// The client must be unambiguously public, else it is marked as confidential

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/client/ClientInformation.java

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*/
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* browser-based application), and incapable of secure client
* authentication via any other means.
*/

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-
jar/com/nimbusds/oauth2/sdk/client/ClientType.java
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* under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR
* CONDITIONS OF ANY KIND, either express or implied. See the License for the
* specific language governing permissions and limitations under the License.
*/
/**
* Creates a new request object POST request where the parameters are
* submitted as plain JSON object, and the client authenticates by
* means of mutual TLS. TLS also ensures the integrity and
* confidentiality of the request parameters. This method is not
* standard.
* *
* @param uri               The URI of the request object endpoint. May
* be [ @code null ] if the
* { @link #toHTTPRequest } method will not be
* used.
* @param tlsClientAuth     The mutual TLS client authentication. Must
* not be [ @code null ].
* @param requestJSONObject The request parameters as plain JSON
* object. Must not be [ @code null ].
*/
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/pkce/CodeChallengeMethod.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/Response.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/assurance/evidences/IDDocumentType.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/token/package-info.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/AuthorizationCode.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/AuthorizationResponse.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/TokenIntrospectionRequest.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/id/PairwiseSubjectCodec.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/AuthenticationErrorResponse.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/validators/StateValidator.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/package-info.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/claims/TXN.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/assertions/saml2/BadSAML2AssertionException.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/validators/IDTokenClaimsVerifier.java
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* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/claims/ExternalClaims.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/validators/InvalidHashException.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/assurance/evidences/package-info.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/oauth2/sdk/AbstractRequest.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/OIDCScopeValue.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/oauth2/sdk/AuthorizationRequest.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/IDTokenResponse.java
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* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/oauth2/sdk/ErrorObject.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/assurance/IdentityVerification.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/oauth2/sdk/auth/verifier/ClientX509CertificateBindingVerifier.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/oauth2/sdk/device/DeviceAuthorizationSuccessResponse.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/assurance/ISO3166_1Alpha2CountryCode.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/oauth2/sdk/assertions/package-info.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/oauth2/sdk/client/ClientInformationResponse.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/device/DeviceAuthorizationSuccessResponse.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/client/ClientInformationResponse.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/assumptions/package-info.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources.jar/com/nimbusds/openid/connect/sdk/op/OIDCProviderEndpointMetadata.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/assurance/evidences/IdentityVerificationMethod.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/TokenIntrospectionResponse.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/assurance/claims/VerifiedClaimsSet.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/auth/verifier/Hint.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/SAML2BearerGrant.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/validators/package-info.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/UserInfoResponse.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/auth/ClientAuthenticationMethod.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/OAuth2Error.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/claims/ExternalClaimsUtils.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/AssertionType.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/declarations/saml2/SAML2AssertionDetails.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/oauth2/sdk/client/ClientDeleteRequest.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/claims/AccessTokenHash.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/OIDCResponseTypeValidator.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/UserInfoRequest.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/claims/StateHash.java
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* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/UserInfoErrorResponse.java
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/oauth2-oidc-sdk-7-0-2-sources-jar/com/nimbusds/openid/connect/sdk/jarm/package-info.java
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 */
/**
 * Token revocation request. Used to revoke an issued access or refresh token.
 * 
 * Example token revocation request for a confidential client:
Example token revocation request for a public client:

```
POST /revoke HTTP/1.1
Host: server.example.com
Content-Type: application/x-www-form-urlencoded
Authorization: Basic czZCaGRSa3F0MzpnWDFmQmF0M2JW

token=45ghiukldjahdhzduauz\&amp;token_type_hint=refresh_token
```

Related specifications:

- OAuth 2.0 Token Revocation (RFC 7009), section 2.1.

// confidential client

```java
// confidential client

/*
 * Creates a new token revocation request for a confidential client.
 *
 * @param uri The URI of the token revocation endpoint. May be
 *    {code null} if the {link toHttpRequest} method
 *    will not be used.
 * @param clientAuth The client authentication. Must not be
 *    {code null}.
 * @param token The access or refresh token to revoke. Must not be
 *    {code null}.
 */
```

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 */
/**
 * OpenID Connect client information. Encapsulates the registration and
 * metadata details of an OpenID Connect client:
 *
 * <ul>
 *     <li>The client identifier.</li>
 *     <li>The client OpenID Connect metadata.</li>
 *     <li>The optional client secret for a confidential client.</li>
 *     <li>The optional registration URI and access token if dynamic client
 *         registration is permitted.</li>
 * </ul>
 *
 * Related specifications:
 *
 * <ul>
 *     <li>OpenID Connect Dynamic Client Registration 1.0.</li>
 *     <li>OAuth 2.0 Dynamic Client Registration Protocol (RFC 7591), section
 *         3.2.1.</li>
 *     <li>OAuth 2.0 Dynamic Client Registration Management Protocol (RFC
 *         7592), section 3.</li>
 * </ul>
 */

Found in path(s):
* /opt/ws_local/PERMITS_SQL/1062753109_1592843968.54/0/oauth2-oidc-sdk-7.0-2-sources-jar/com/nimbusds/openid/connect/sdk/rp/OIDCClientInformation.java
1.1407 gopsutil 3.21.10

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This package contains a modified version of ca-bundle.crt:

ca-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#
This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree:
It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication. Just configure this file as the SSLCACertificateFile.#

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**Parameters**

In addition to the 2 objects being compared:

- ignore_order
- report_repetition
- verbose_level

**Returns**

A DeepDiff object that has already calculated the difference of the 2 items.

**Supported data types**
int, string, unicode, dictionary, list, tuple, set, frozenset, OrderedDict, NamedTuple and custom objects!

**Examples**

Importing

```python
>>> from deepdiff import DeepDiff
>>> from pprint import pprint
>>> from __future__ import print_function # In case running on Python 2
```

Same object returns empty

```python
>>> t1 = {1:1, 2:2, 3:3}
>>> t2 = t1
>>> print(DeepDiff(t1, t2))
{}
```

Type of an item has changed

```python
>>> t1 = {1:1, 2:2, 3:3}
>>> t2 = {1:1, 2:"2", 3:3}
>>> pprint(DeepDiff(t1, t2), indent=2)
{'type_changes': {'root[2]': {'new_type': <class 'str'>,
        'new_value': '2',
        'old_type': <class 'int'>,
        'old_value': 2}}}
```

Value of an item has changed

```python
>>> t1 = {1:1, 2:2, 3:3}
>>> t2 = {1:1, 2:4, 3:3}
>>> pprint(DeepDiff(t1, t2), indent=2)
{'values_changed': {'root[2]': {'new_value': 4, 'old_value': 2}}}
```

Item added and/or removed

```python
>>> t1 = {1:1, 2:2, 3:3, 4:4}
>>> t2 = {1:1, 2:4, 3:3, 5:5, 6:6}
>>> ddiff = DeepDiff(t1, t2)
>>> pprint (ddiff)
{'dictionary_item_added': ['root[5]', 'root[6]'],
 'dictionary_item_removed': ['root[4]'],
 'values_changed': {'root[2]': {'new_value': 4, 'old_value': 2}}}
```

String difference

```python
>>> t1 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":"world"}}
>>> t2 = {1:1, 2:4, 3:3, 4:{"a":"hello", "b":"world!"}}
>>> ddiff = DeepDiff(t1, t2)
>>> pprint (ddiff, indent = 2)
{'values_changed': {'root[2]': {'new_value': 4, 'old_value': 2},
 'root[4][b]': {'new_value': 'world!'}}
```
String difference 2
>>> t1 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":"world!\nGoodbye!\n1\n2\nEnd"}}
>>> t2 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":"world!\n1\n2\nEnd"}}
>>> ddiff = DeepDiff(t1, t2)
>>> pprint (ddiff, indent = 2)
{'values_changed': { "root[4]["b"]: [ 'diff': '--- 
@@ -1,5 +1,4 @@
'-world!\n'-Goodbye!\n'+world\n 1\n 2\n End',
'new_value': 'world
1
2
End',
'old_value': 'world!
Goodbye!
1
2
End'}}

>>> print (ddiff['values_changed']["root[4]["b"]']['diff'])
---
@@ -1,5 +1,4 @@
-world!
-Goodbye!
+world
 1
 2
 End

Type change
>>> t1 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":[1, 2, 3]}}
>>> t2 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":"world!\n\nEnd"}}
>>> ddiff = DeepDiff(t1, t2)
>>> pprint (ddiff, indent = 2)
{'type_changes': { "root[4]["b"]: { 'new_type': <class 'str'>,
'new_value': 'world

End',
'old_type': <class 'list'>,
'old_value': [1, 2, 3]}}}

List difference
>>> t1 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":[1, 2, 3, 4]}}
```python
>>> t2 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":[1, 2]}}
>>> ddiff = DeepDiff(t1, t2)
>>> pprint (ddiff, indent = 2)
{'iterable_item_removed': {'root[4][b][2]': 3, 'root[4][b][3]': 4}}

List difference 2:
>>> t1 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":[1, 2, 3]}}
>>> t2 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":[1, 3, 2, 3]}}
>>> ddiff = DeepDiff(t1, t2)
>>> pprint (ddiff, indent = 2)
{'iterable_item_added': {'root[4][b][3]': 3},
'values_changed': {'root[4][b][1]': {'new_value': 3, 'old_value': 2},
'root[4][b][2]': {'new_value': 2, 'old_value': 3}}}

List difference ignoring order or duplicates: (with the same dictionaries as above)
>>> t1 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":[1, 2, 3]}}
>>> t2 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":[1, 3, 2, 3]}}
>>> ddiff = DeepDiff(t1, t2, ignore_order=True)
>>> print (ddiff)
{}

List that contains dictionary:
>>> t1 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":[1, 2, {1:1, 2:2}]]}
>>> t2 = {1:1, 2:2, 3:3, 4:{"a":"hello", "b":[1, 2, {1:3}]} }
>>> ddiff = DeepDiff(t1, t2)
>>> pprint (ddiff, indent = 2)
{'dictionary_item_removed': ['root[4][b][2][2]'],
'values_changed': {'root[4][b][2][1]': {'new_value': 3, 'old_value': 1}}}

Sets:
>>> t1 = {1, 2, 8}
>>> t2 = {1, 2, 3, 5}
>>> ddiff = DeepDiff(t1, t2)
>>> pprint (DeepDiff(t1, t2))
{'set_item_added': ['root[3]', 'root[5]'], 'set_item_removed': ['root[8]']}

Named Tuples:
>>> from collections import namedtuple
>>> Point = namedtuple('Point', ['x', 'y'])
>>> t1 = Point(x=11, y=22)
>>> t2 = Point(x=11, y=23)
>>> pprint (DeepDiff(t1, t2))
{'values_changed': {'root.y': {'new_value': 23, 'old_value': 22}}}

Custom objects:
>>> class ClassA(object):
...     a = 1
...     def __init__(self, b):
```
... self.b = b
...

>>> t1 = ClassA(1)
>>> t2 = ClassA(2)

>>> pprint(DeepDiff(t1, t2))
{'values_changed': {'root.b': {'new_value': 2, 'old_value': 1}}}

Object attribute added:

>>> t2.c = "new attribute"

>>> pprint(DeepDiff(t1, t2))
{'attribute_added': ['root.c'],
 'values_changed': {'root.b': {'new_value': 2, 'old_value': 1}}}

Exclude certain types from comparison:

>>> l1 = logging.getLogger("test")
>>> l2 = logging.getLogger("test2")
>>> t1 = {"log": l1, 2: 1337}
>>> t2 = {"log": l2, 2: 1337}

>>> print(DeepDiff(t1, t2, exclude_types=[logging.Logger]))
{}

Exclude part of your object tree from comparison:

>>> t1 = {"for life": "vegan", "ingredients": ["no meat", "no eggs", "no dairy"]}
>>> t2 = {"for life": "vegan", "ingredients": ["veggies", "tofu", "soy sauce"]}

>>> print (DeepDiff(t1, t2, exclude_paths="root[\'ingredients\']"))
{}

Using DeepDiff in unit tests

result is the output of the function that is being tests.
expected is the expected output of the function.

>>> assertEqual(DeepDiff(result, expected), { })

**Difference with Json Patch**

Unlike Json Patch https://tools.ietf.org/html/rfc6902 which is designed only for Json objects, DeepDiff is
designed specifically for almost all Python types. In addition to that, DeepDiff checks for type changes and attribute
value changes that Json Patch does not cover since there are no such things in Json. Last but not least, DeepDiff
gives you the exact path of the item(s) that were changed in Python syntax.

Example in Json Patch for replacing:

{ "op": "replace", "path": "/a/b/c", "value": 42 }

Example in DeepDiff for the same operation:

>>> item1 = {'a':{'b':{'c':'foo'}}}
>>> item2 = {'a':{'b':{'c':42}}}


DeepDiff uses jsonpickle in order to serialize and deserialize its results into json. This works for both tree view and text view.

Serialize and then deserialize back to deepdiff:
```python
>>> t1 = {1: 1, 2: 2, 3: 3}
>>> t2 = {1: 1, 2: 2, 3: 3}
>>> ddiff = DeepDiff(t1, t2)
>>> jsoned = ddiff.json
>>> ddiff_new = DeepDiff.from_json(jsoned)
>>> ddiff == ddiff_new
True
```

**Pycon 2016**

I was honored to give a talk about how DeepDiff does what it does at Pycon 2016. Please check out the video and let me know what you think:

Diff It To Dig It Video
https://www.youtube.com/watch?v=J5r99eJixF4
And here is more info:
http://zepworks.com/blog/diff-it-to-digg-it/

**Changelog**

- v3-3-0: Searching for objects and class attributes
- v3-2-2: Adding help(deepdiff)
- v3-2-1: Fixing hash of None
- v3-2-0: Adding grep for search: object | grep(item)
- v3-1-3: Unicode vs. Bytes default fix
- v3-1-2: NotPresent Fix when item is added or removed.
- v3-1-1: Bug fix when item value is None (#58)
- v3-1-0: Serialization to/from json
- v3-0-0: Introducing Tree View
- v2-5-3: Bug fix on logging for content hash.
- v2-5-2: Bug fixes on content hash.
- v2-5-0: Adding ContentHash module to fix ignore_order once and for all.
- v2-1-0: Adding Deep Search. Now you can search for item in an object.
- v2-0-0: Exclusion patterns better coverage. Updating docs.
- v1-8-0: Exclusion patterns.
- v1-7-0: Deep Set comparison.
- v1-6-0: Unifying key names. i.e newvalue is new_value now. For backward compatibility, newvalue still works.
- v1-5-0: Fixing ignore order containers with unordered items. Adding significant digits when comparing decimals. Changes property is deprecated.
- v1-1-0: Changing Set, Dictionary and Object Attribute Add/Removal to be reported as Set instead of List. Adding Pypy compatibility.
- v1-0-2: Checking for ImmutableMapping type instead of dict
- v1-0-1: Better ignore order support
- v1-0-0: Restructuring output to make it more useful. This is NOT backward compatible.
- v0-6-1: Fixing iterables with unhashable when order is ignored
- v0-6-0: Adding unicode support
- v0-5-9: Adding decimal support
- v0-5-8: Adding ignore order of unhashables support
- v0-5-7: Adding ignore order support
- v0-5-6: Adding slots support
- v0-5-5: Adding loop detection

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ZepWorks: http://www.zepworks.com
Article about Deepdiff: http://zepworks.com/blog/diff-it-to-digg-it/

Victor Hahn Castell

- [hahncastell.de](http://hahncastell.de)
- [flexoptix.net](http://www.flexoptix.net)

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- nfvs for Travis-CI setup script.
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- WangFenjin for unicode support.
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- Bernhard10 for significant digits comparison.
- b-jazz for PEP257 cleanup, Standardize on full names, fixing line endings.
- finnhughes for fixing __slots__
- moloney for Unicode vs. Bytes default
- serv-inc for adding help(deepdiff)
- movermeyer for updating docs
- maxrothman for search in inherited class attributes
- maxrothman for search for types/objects
1.1412 libaio 0.3.112 1.el8
1.1412.1 Available under license:

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1.1413 jackson-dataformat-yaml 2.10.4
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=head1 NAME

IO::Socket::INET - Object interface for AF_INET domain sockets

=head1 SYNOPSIS

use IO::Socket::INET;

=head1 DESCRIPTION

C<IO::Socket::INET> provides an object interface to creating and using sockets in the AF_INET domain. It is built upon the L<IO::Socket> interface and inherits all the methods defined by L<IO::Socket>.

=head1 CONSTRUCTOR

=over 4

=item new ( [ARGS] )

Creates an C<IO::Socket::INET> object, which is a reference to a newly created symbol (see the C<Symbol> package). C<new> optionally takes arguments, these arguments are in key-value pairs.

In addition to the key-value pairs accepted by L<IO::Socket>, C<IO::Socket::INET> provides.

PeerAddr    Remote host address          <hostname>[<port>]
PeerHost    Synonym for PeerAddr
PeerPort    Remote port or service       <service>[<no>]|<no>
LocalAddr   Local host bind address      hostname:<port>
LocalHost   Synonym for LocalAddr
LocalPort   Local host bind port         <service>[<no>]|<no>
Proto       Protocol name (or number)    "tcp" | "udp" | ...
Type        Socket type                  SOCK_STREAM | SOCK_DGRAM | ...
Listen      Queue size for listen
ReuseAddr   Set SO_REUSEADDR before binding
Reuse        Set SO_REUSEADDR before binding (deprecated, prefer ReuseAddr)
ReusePort   Set SO_REUSEPORT before binding
Broadcast    Set SO_BROADCAST before binding
Timeout     Timeout value for various operations
MultiHomed   Try all addresses for multi-homed hosts
Blocking     Determine if connection will be blocking mode
If C<Listen> is defined then a listen socket is created, else if the socket type, which is derived from the protocol, is SOCK_STREAM then connect() is called. If the C<Listen> argument is given, but false, the queue size will be set to 5.

Although it is not illegal, the use of C<MultiHomed> on a socket which is in non-blocking mode is of little use. This is because the first connect will never fail with a timeout as the connect call will not block.

The C<PeerAddr> can be a hostname or the IP-address on the "xx.xx.xx.xx" form. The C<PeerPort> can be a number or a symbolic service name. The service name might be followed by a number in parenthesis which is used if the service is not known by the system. The C<PeerPort> specification can also be embedded in the C<PeerAddr> by preceding it with a ":".

If C<Proto> is not given and you specify a symbolic C<PeerPort> port, then the constructor will try to derive C<Proto> from the service name. As a last resort C<Proto> "tcp" is assumed. The C<Type> parameter will be deduced from C<Proto> if not specified.

If the constructor is only passed a single argument, it is assumed to be a C<PeerAddr> specification.

If C<Blocking> is set to 0, the connection will be in nonblocking mode. If not specified it defaults to 1 (blocking mode).

Examples:

```perl
$sock = IO::Socket::INET->new(PeerAddr => 'www.perl.org',
   PeerPort => 'http(80)',
   Proto    => 'tcp');

$sock = IO::Socket::INET->new(PeerAddr => 'localhost:smtp(25)');

$sock = IO::Socket::INET->new(Listen    => 5,
   LocalAddr => 'localhost',
   LocalPort => 9000,
   Proto     => 'tcp');

$sock = IO::Socket::INET->new('127.0.0.1:25');

$sock = IO::Socket::INET->new(
   PeerPort => 9999,
   PeerAddr => inet_ntoa(INADDR_BROADCAST),
   Proto    => udp,
   LocalAddr => 'localhost',
);```
NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE

As of VERSION 1.18 all IO::Socket objects have autoflush turned on by default. This was not the case with earlier releases.

NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE

=head2 METHODS

=item sockaddr ()

Return the address part of the sockaddr structure for the socket

=item sockport ()

Return the port number that the socket is using on the local host

=item sockhost ()

Return the address part of the sockaddr structure for the socket in a text form xx.xx.xx.xx

=item peeraddr ()

Return the address part of the sockaddr structure for the socket on the peer host

=item peerport ()

Return the port number for the socket on the peer host.

=item peerhost ()

Return the address part of the sockaddr structure for the socket on the peer host in a text form xx.xx.xx.xx

=head1 SEE ALSO

L<Socket>, L<IO::Socket>
AUTHOR

Graham Barr. Currently maintained by the Perl Porters. Please report all bugs to <perlbug@perl.org>.

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NAME

IO::Socket::UNIX - Object interface for AF_UNIX domain sockets

SYNOPSIS

use IO::Socket::UNIX;

my $SOCK_PATH = "$ENV{HOME}/unix-domain-socket-test.sock";

# Server:
my $server = IO::Socket::UNIX->new(
    Type => SOCK_STREAM(),
    Local => $SOCK_PATH,
    Listen => 1,
);

my $count = 1;
while (my $conn = $server->accept()) {
    $conn->print("Hello ". ($count++) . "\n");
}

# Client:
my $client = IO::Socket::UNIX->new(
    Type => SOCK_STREAM(),
    Peer => $SOCK_PATH,
# Now read and write from $client

=head1 DESCRIPTION

C<IO::Socket::UNIX> provides an object interface to creating and using sockets in the AF_UNIX domain. It is built upon the L<IO::Socket> interface and inherits all the methods defined by L<IO::Socket>.

=head1 CONSTRUCTOR

=over 4

=item new ( [ARGS] )

Creates an C<IO::Socket::UNIX> object, which is a reference to a newly created symbol (see the C<Symbol> package). C<new> optionally takes arguments, these arguments are in key-value pairs.

In addition to the key-value pairs accepted by L<IO::Socket>, C<IO::Socket::UNIX> provides.

<table>
<thead>
<tr>
<th>Type</th>
<th>Type of socket (eg SOCK_STREAM or SOCK_DGRAM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Path to local fifo</td>
</tr>
<tr>
<td>Peer</td>
<td>Path to peer fifo</td>
</tr>
<tr>
<td>Listen</td>
<td>Queue size for listen</td>
</tr>
</tbody>
</table>

If the constructor is only passed a single argument, it is assumed to be a C<Peer> specification.

If the C<Listen> argument is given, but false, the queue size will be set to 5.

=back

=head1 METHODS

=over 4

=item hostpath()

Returns the pathname to the fifo at the local end

=item peerpath()

Returns the pathanme to the fifo at the peer end

=back
=head1 SEE ALSO

L<Socket>, L<IO::Socket>

=head1 AUTHOR

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=head1 NAME

IO::Socket - Object interface to socket communications

=head1 SYNOPSIS

use IO::Socket;

=head1 DESCRIPTION

C<IO::Socket> provides an object interface to creating and using sockets. It
is built upon the L<IO::Handle> interface and inherits all the methods defined by L<IO::Handle>.

C<IO::Socket> only defines methods for those operations which are common to all types of socket. Operations which are specified to a socket in a particular domain have methods defined in sub classes of C<IO::Socket>

C<IO::Socket> will export all functions (and constants) defined by L<Socket>.

=head1 CONSTRUCTOR

=over 4

=item new ( [ARGS] )

Creates an C<IO::Socket>, which is a reference to a newly created symbol (see the C<Symbol> package). C<new> optionally takes arguments, these arguments are in key-value pairs. C<new> only looks for one key C<Domain> which tells new which domain the socket will be in. All other arguments will be passed to the configuration method of the package for that domain, See below.

NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE
As of VERSION 1.18 all IO::Socket objects have autoflush turned on by default. This was not the case with earlier releases.

NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE

=back

=head1 METHODS

See L<perlfunc> for complete descriptions of each of the following supported C<IO::Socket> methods, which are just front ends for the corresponding built-in functions:

socket
socketpair
bind
listen
accept
send
recv
peername (getpeername)
sockname (getsockname)
shutdown
Some methods take slightly different arguments to those defined in \texttt{L<perlfunc>}
in attempt to make the interface more flexible. These are

\texttt{over 4}

\texttt{item accept([PKG])}

perform the system call \texttt{C<accept>} on the socket and return a new
object. The new object will be created in the same class as the listen
socket, unless \texttt{C<PKG>} is specified. This object can be used to
communicate with the client that was trying to connect.

In a scalar context the new socket is returned, or undef upon
failure. In a list context a two-element array is returned containing
the new socket and the peer address; the list will be empty upon
failure.

The timeout in the [PKG] can be specified as zero to effect a "poll",
but you shouldn't do that because a new \texttt{IO::Select} object will be
created behind the scenes just to do the single poll. This is
horrendously inefficient. Use rather true \texttt{select()} with a zero
timeout on the handle, or non-blocking IO.

\texttt{item socketpair(DOMAIN, TYPE, PROTOCOL)}

Call \texttt{C<socketpair>} and return a list of two sockets created, or an
empty list on failure.

\texttt{back}

Additional methods that are provided are:

\texttt{over 4}

\texttt{item atmark}

True if the socket is currently positioned at the urgent data mark,
false otherwise.

\texttt{use IO::Socket;}

\texttt{my $sock = IO::Socket::INET->new('some_server');}
$sock->read($data, 1024) until $sock->atmark;

Note: this is a reasonably new addition to the family of socket
functions, so all systems may not support this yet. If it is
unsupported by the system, an attempt to use this method will
abort the program.
The atmark() functionality is also exportable as sockatmark() function:

use IO::Socket 'sockatmark';

This allows for a more traditional use of sockatmark() as a procedural socket function. If your system does not support sockatmark(), the C<use> declaration will fail at compile time.

=item connected

If the socket is in a connected state, the peer address is returned. If the socket is not in a connected state, undef is returned.

Note that connected() considers a half-open TCP socket to be "in a connected state". Specifically, connected() does not distinguish between the B<ESTABLISHED> and B<CLOSE-WAIT> TCP states; it returns the peer address, rather than undef, in either case. Thus, in general, connected() cannot be used to reliably learn whether the peer has initiated a graceful shutdown because in most cases (see below) the local TCP state machine remains in B<CLOSE-WAIT> until the local application calls shutdown() or close(); only at that point does connected() return undef.

The "in most cases" hedge is because local TCP state machine behavior may depend on the peer's socket options. In particular, if the peer socket has SO_LINGER enabled with a zero timeout, then the peer's close() will generate a RST segment, upon receipt of which the local TCP transitions immediately to B<CLOSED>, and in that state, connected() I<will> return undef.

=item protocol

Returns the numerical number for the protocol being used on the socket, if known. If the protocol is unknown, as with an AF_UNIX socket, zero is returned.

=item sockdomain

Returns the numerical number for the socket domain type. For example, for an AF_INET socket the value of &AF_INET will be returned.

=item sockopt(OPT [, VAL])

Unified method to both set and get options in the SOL_SOCKET level. If called with one argument then getsockopt is called, otherwise setsockopt is called.

=item getsockopt(LEVEL, OPT)

Get option associated with the socket. Other levels than SOL_SOCKET
may be specified here.

=item setsockopt(LEVEL, OPT, VAL)

Set option associated with the socket. Other levels than SOL_SOCKET may be specified here.

=item socktype

Returns the numerical number for the socket type. For example, for a SOCK_STREAM socket the value of &SOCK_STREAM will be returned.

=item timeout([VAL])

Set or get the timeout value (in seconds) associated with this socket. If called without any arguments then the current setting is returned. If called with an argument the current setting is changed and the previous value returned.

=head1 LIMITATIONS

On some systems, for an IO::Socket object created with new_from_fd(), or created with accept() from such an object, the protocol(), sockdomain() and socktype() methods may return undef.

=head1 SEE ALSO

L<Socket>, L<IO::Handle>, L<IO::Socket::INET>, L<IO::Socket::UNIX>

=head1 AUTHOR

Graham Barr. atmark() by Lincoln Stein. Currently maintained by the Perl Porters. Please report all bugs to <perlbug@perl.org>.

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* /opt/cola/permits/1244677656_1652680089.837031/0/perl-IO-1.38-420.el8.x86_64.src.rpm-cosi-expand-archive-0nagQet4/usr/lib64/perl5/IO/Socket.pm

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=head1 NAME

IO::Dir - supply object methods for directory handles

=head1 SYNOPSIS

use IO::Dir;
$d = IO::Dir->new(".");
if (defined $d) {
    while (defined($_ = $d->read)) { something($_); }
    $d->rewind;
    while (defined($_ = $d->read)) { something_else($_); }
    undef $d;
}

tie %dir, 'IO::Dir', ".";
foreach (keys %dir) {
    print $_, " ", $dir{$_}->size,"\n";
}

=head1 DESCRIPTION

The C<IO::Dir> package provides two interfaces to perl's directory reading routines.

The first interface is an object approach. C<IO::Dir> provides an object constructor and methods, which are just wrappers around perl's built in directory reading routines.

=over 4

=item new ( [ DIRNAME ] )

C<new> is the constructor for C<IO::Dir> objects. It accepts one optional argument which, if given, C<new> will pass to C<open>

=back

The following methods are wrappers for the directory related functions built
into perl (the trailing 'dir' has been removed from the names). See L<perfunc> for details of these functions.

=over 4

=item open ( DIRNAME )

=item read ()

=item seek ( POS )

=item tell ()

=item rewind ()

=item close ()

=back

C<IO::Dir> also provides an interface to reading directories via a tied hash. The tied hash extends the interface beyond just the directory reading routines by the use of C<lstat>, from the C<File::stat> package, C<unlink>, C<rmdir> and C<utime>.

=over 4

=item tie %hash, 'IO::Dir', DIRNAME [, OPTIONS ]

=back

The keys of the hash will be the names of the entries in the directory. Reading a value from the hash will be the result of calling C<File::stat::lstat>. Deleting an element from the hash will delete the corresponding file or subdirectory, provided that C<DIR_UNLINK> is included in the C<OPTIONS>.

Assigning to an entry in the hash will cause the time stamps of the file to be modified. If the file does not exist then it will be created. Assigning a single integer to a hash element will cause both the access and modification times to be changed to that value. Alternatively a reference to an array of two values can be passed. The first array element will be used to set the access time and the second element will be used to set the modification time.

=head1 SEE ALSO

L<File::stat>
=head1 AUTHOR

Graham Barr. Currently maintained by the Perl Porters. Please report all bugs to <perlbug@perl.org>.

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=cut

Found in path(s):
* /opt/cola/permits/1244677656_1652680089.837031/0/perl-IO-1.38-420.el8.x86_64.src.rpm-cosi-expand-archive-0nagQet4/usr/lib64/perl5/IO/Dir.pm
No license file was found, but licenses were detected in source scan.

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* /opt/cola/permits/1244677656_1652680089.837031/0/perl-IO-1.38-420.el8.x86_64.src.rpm-cosi-expand-archive-0nagQet4/usr/lib64/perl5/IO/Pipe.pm

1.1415 zabbix 4.0.39-1.el8
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1.1422 cobra 1.2.1
1.1422.1 Available under license :
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"Types used by cobra, used by mypy

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from typing import Any, Dict

JsonDict = Dict[str, Any]
YamlDict = Dict[str, Any]

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/common/cobra_types.py
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"Utility for batch publishing.

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FIXME: Should be renamed

import json

def computeEventTimeDeltas(events: str) -> list:
    lines = events.splitlines()
N = len(lines)
assert N > 0, 'event list should not be empty'

events = [json.loads(line) for line in lines]
deltas = []
for i in range(1, N):
    previousTs = events[i - 1]['timestamp']
    currentTs = events[i]['timestamp']
    delta = currentTs - previousTs

deltas.append((lines[i - 1], delta))
deltas.append((lines[N-1], 0))
return deltas

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/client/publish.py
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"Publish jobs gets enqueued into a multi-publisher, which publish them to redis in a batch fashion, using a pipeline.

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https://redis.io/topics/pipelining
Weird leaks https://bugs.python.org/issue31620
...

import asyncio

class PipelinedPublisher():
    def __init__(self, redis, batchSize=None):
        self.redis = redis
        self.queue = asyncio.Queue()
        self.batchSize = batchSize or 100
        self.lock = asyncio.Lock()

        self.xaddMaxLength = 1000

    async def publishAll(self):
        pipe = self.redis.pipeline()
        async with self.lock:
            while True:
                try:
                    job = self.queue.get_nowait()
except asyncio.QueueEmpty:
    break
else:
    self.publish(pipe, job)
    self.queue.task_done()

await pipe.execute()

def enqueue(self, job):
    self.queue.put_nowait(job)

def publish(self, pipe, job):
    appkey, channel, data = job
    appChannel = '{}::{}'.format(appkey, channel)
    pipe.xadd(appChannel, {'json': data},
               max_len=self.xaddMaxLength, exact_len=False)

async def publishNow(self, job):
    async with self.lock:
        pipe = self.redis.pipeline()
        self.publish(pipe, job)
        await pipe.execute()

async def push(self, job, batchPublish=False):
    if not batchPublish:
        await self.publishNow(job)
        return

    self.enqueue(job)

    if self.queue.qsize() >= self.batchSize:
        await self.publishAll()

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/server/pipelined_publisher.py
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"""Cobra main driver.

Calls into sub commands like git.

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"

from pkgutil import walk_packages

import click
import coloredlogs
coloredlogs.install(level='WARNING')

@click.group()
@click.version_option()
def main():
    ""
    ___      _
   / __\___ | |__  _ __ __ _
   / /  / _ \| '_ \| '__/ _` |
  / /__| (_) | |_) | | | (_| |
 /\____/\___/|_.__/|_|  \__,_|

Cobra is a realtime messaging server using Python3, WebSockets and Redis.
""

for loader, module_name, is_pkg in walk_packages(__path__, __name__ + '.):'
    module = __import__(module_name, globals(), locals(), ['__name__'])
    cmd = getattr(module, module_name.rsplit('.', 1)[-1])
    if isinstance(cmd, click.Command):
        main.add_command(cmd)

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.390/cobras-1-2-1-tar.gz/cobras-1.2.1/cobras/runner/__init__.py
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"""Tools used when running as superuser (which we should almost never do)"

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""

import os
import sys

import click

def preventRootUsage():
    """Make sure a root user cannot run this command"

    if os.geteuid() == 0:
        msg = 'Cobra cannot be run as root / sudo. Exiting'
        click.secho(msg, fg='red')
        sys.exit(1)

Found in path(s):
from cobras.common.apps_config import AppConfig, getDefaultAppsConfigPath
from cobras.common.superuser import preventRootUsage

@click.command()
def init():
    
    preventRootUsage()
    
    path = getDefaultAppsConfigPath()
    appsConfig = AppConfig(path)
    appsConfig.generateDefaultConfig()

    Found in path(s):
    * /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/runner/init.py
    No license file was found, but licenses were detected in source scan.

Metadata-Version: 2.1
Name: cobras
Version: 1.2.1
Summary: A realtime messaging server using WebSockets and Redis.
Home-page: https://github.com/machinezone/cobra
Author: Benjamin Sergeant
Author-email: bsergean@gmail.com
License: BSD 3
Description: # General

Cobra is a realtime messaging server using Python3, WebSockets and Redis PubSub. It was presented in great
details during [RedisConf 2019](https://events.redislabs.com/redis-conf/redis-conf-2019/).

* [slides](https://bsergean.github.io/redis_conf_2019/slides.html)
* [youtube](https://www.youtube.com/watch?v=o8CC8qYfRQE&t=147s)

Cobra has been used in production receiving heavy traffic for about a year. Since it was written in Python it was
named after a snake as an homage to a great programming language.

# News
Cobra is actively being developed, check out the [changelog](CHANGELOG.md) to know what's cooking.

# Installation

## With pip

```sh
pip install cobras
```

## With docker

```sh
docker pull bsergean/cobra
```

## For development

```sh
git clone <url>
cd cobra
python3 -m venv venv
source venv/bin/activate
make dev
make test
```

# Usage

```sh
$cobra
```

Usage: cobra [OPTIONS] COMMAND [ARGS]...

Cobra is a realtime messaging server using Python3, WebSockets and Redis PubSub.

Options:

```
--version  Show the version and exit.
--help     Show this message and exit.
```

Commands:

```
admin       Run admin commands.
health      Health check
init        Setup cobra
monitor     Monitor cobra
publish     Publish to a channel
run         Run the cobra server
```
redis_subscribe  Subscribe to a channel (with redis)
subscribe      Subscribe to a channel
secret         Generate secrets used for authentication...

To run the server use `cobra run`. You can run a health-check against the server with `cobra health`.

cobra health --url 'ws://jeanserge.com/v2?appkey=_health' --secret A5a3BdEfbc6Df5AAFFcadE7F9Dd7F17E -
-role health

# Setup

To run in production you will need a redis (version > 5) instance. Here are environment variables that you will
likely want to tweak, to connect to 2 redis instances (for scalability), and to bind on 0.0.0.0 so that the internet can see
your instance.

- name: COBRA_HOST
  value: 0.0.0.0
- name: COBRA_REDIS_URLS
  value: redis://redis1;redis://redis2

# Thank you

There would be no cobra without some other amazing open-source projects and tech. Here are 3 very
remarkable ones.

- [Python](https://www.python.org/) (and [asyncio](https://realpython.com/async-io-python/), one of the killer
  python3 feature !)
  - [Redis](https://redis.io/), the swiss army knife of the internet which provide a very scalable publish/subscribe
    feature to dispatch messages while retaining them and allowing lookups of old messages (see [Redis Streams]
    (https://redis.io/topics/streams-intro).

Platform: UNKNOWN
Classifier: Development Status :: 5 - Production/Stable
Classifier: Environment :: Web Environment
Classifier: Intended Audience :: Developers
Classifier: License :: OSI Approved :: BSD License
Classifier: Operating System :: OS Independent
Classifier: Programming Language :: Python
Classifier: Programming Language :: Python :: 3
Classifier: Programming Language :: Python :: 3.7
Description-Content-Type: text/markdown
```python
import os

from cobras.common.apps_config import AppsConfig, getDefaultAppsConfigPath

def createCredentials(role, secret):
    return {'role': role, 'secret': secret}
```
def getDefaultRoleForApp(app) -> str:
    path = os.getenv('COBRA_APPS_CONFIG', getDefaultAppsConfigPath())
    appsConfig = AppsConfig(path)
    return appsConfig.getDefaultRoleForApp(app)

def getDefaultSecretForApp(app) -> str:
    path = os.getenv('COBRA_APPS_CONFIG', getDefaultAppsConfigPath())
    appsConfig = AppsConfig(path)
    return appsConfig.getDefaultSecretForApp(app)

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/client/credentials.py
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""Subscribe to a channel

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...

import click
import uvloop

from cobras.common.superuser import preventRootUsage
from cobras.common.throttle import Throttle
from cobras.server.redis_connections import RedisConnections
from cobras.server.redis_subscriber import (RedisSubscriberMessageHandlerClass,
                                          runSubscriber)

class MessageHandlerClass(RedisSubscriberMessageHandlerClass):
    def __init__(self, obj):
        self.cnt = 0
        self.cntPerSec = 0
        self.throttle = Throttle(seconds=1)

    def log(self, msg):
        print(msg)

    async def on_init(self, redisConnection):
        pass

    async def handleMsg(self, msg: str, position: str,
                          payloadSize: int) -> bool:
        self.cnt += 1
        self.cntPerSec += 1
if self.throttle.exceedRate():
    return True

print(f"#messages {self.cnt} msg/s {self.cntPerSec}" )
self.cntPerSec = 0

return True

@click.command()
@click.option('--redis_urls', default='redis://localhost')
@click.option('--redis_password')
@click.option('--channel')
@click.option('--appkey')
@click.option('--position')
def redis_subscribe(redis_urls, redis_password, channel, position, appkey):
    """Subscribe to a channel

    ..
    ..
    cobra subscribe --redis_urls redis://localhost:7379 --channel foo --appkey bar # noqa

    ..
    ..
    cobra subscribe --redis_urls redis://localhost:7001;redis://localhost:7002 --channel foo --appkey bar  # noqa
    ..
    ..
    ..
   
    preventRootUsage()
    uvloop.install()

    appChannel = '{}:{}' .format(appkey, channel)
    redisConnections = RedisConnections(redis_urls, redis_password)
    runSubscriber(redisConnections, appChannel, position, MessageHandlerClass)

Found in path(s):
  * /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-
    1.2.1/cobras/runner/redis_subscribe.py
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Found in path(s):
  * /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-
    1.2.1/cobras/bavarde/runner/client.py
  * /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/server/redis_kv_store.py
No license file was found, but licenses were detected in source scan.
import click
import uvloop

from cobras.client.credentials import (createCredentials, getDefaultRoleForApp,
                                        getDefaultSecretForApp)
from cobras.client.monitor import runMonitor
from cobras.common.apps_config import STATS_APPKEY
from cobras.common.superuser import preventRootUsage

DEFAULT_URL = f'ws://127.0.0.1:8765/v2?appkey={STATS_APPKEY}'

@click.command()
@click.option('--url', default=DEFAULT_URL)
@click.option('--role', default=getDefaultRoleForApp('stats'))
@click.option('--secret', default=getDefaultSecretForApp('stats'))
@click.option('--raw', is_flag=True)
@click.option('--hide_nodes', is_flag=True)
@click.option('--hide_roles', is_flag=True)
@click.option('--subscribers', is_flag=True)
@click.option('--role_filter')
@click.option('--system', is_flag=True)
def monitor(url, role, secret, raw, role_filter, hide_nodes, hide_roles, subscribers, system):
    """Monitor cobra"
    ""
    preventRootUsage()
    uvloop.install()

    credentials = createCredentials(role, secret)
    runMonitor(url, credentials, raw, role_filter,
                not hide_nodes, not hide_roles, subscribers, system)

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/runner/monitor.py

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"""Subscribe to a channel"

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"""
import json

import click
import uvloop

from cobras.client.client import subscribeClient
from cobras.client.credentials import (createCredentials, getDefaultRoleForApp,
    getDefaultSecretForApp)
from cobras.common.apps_config import PUBSUB_APPKEY
from cobras.common.superuser import preventRootUsage
from cobras.common.throttle import Throttle

DEFAULT_URL = f'ws://127.0.0.1:8765/v2?appkey={PUBSUB_APPKEY}'

class MessageHandlerClass:
    def __init__(self, websockets, args):
        self.cnt = 0
        self.cntPerSec = 0
        self.throttle = Throttle(seconds=1)
        self.verbose = args['verbose']

        async def on_init(self):
            pass

        async def handleMsg(self, msg: str) -> bool:
            self.cnt += 1
            self.cntPerSec += 1

            if self.verbose >= 1:
                data = json.loads(msg)
                body = data['body']
                message = body['messages'][0]
                position = body['position']
                print(f'{message} at position {position}')

            if self.throttle.exceedRate():
                return True

                print(f'#messages {self.cnt} msg/s {self.cntPerSec}')
                self.cntPerSec = 0

            return True

@click.command()
@click.option('--url', default=DEFAULT_URL)
@click.option('--role', default=getDefaultRoleForApp('pubsub'))
@click.option('--secret', default=getDefaultSecretForApp('pubsub'))
@click.option('--channel', default='sms_republished_v1_neo')
@click.option('--position')
@click.option('--verbose', '-v', count=True)
@click.option('--stream_sql')
def subscribe(url, role, secret, channel, position, stream_sql, verbose):
    '''Subscribe to a channel
    '''
    preventRootUsage()
    uvloop.install()
    credentials = createCredentials(role, secret)
    asyncio.get_event_loop().run_until_complete(
        subscribeClient(url, credentials, channel, position,
                        stream_sql, MessageHandlerClass,
                        {'verbose': verbose}))

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/runner/subscribe.py
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'''Small class to record data attached to a connection

FIXME: use this to enforce publish+subscribe permissions.

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'''

import uuid

class ConnectionState:
    def __init__(self, appkey):
        self.appkey = appkey

        self.connection_id = uuid.uuid4().hex[:8]
        self.subscriptions = {}
        self.ok = True
        self.role = 'na'
        self.authenticated = False
        self.permissions = []

        self.nonce = None
        self.error = 'na'

        self.path = f'/tmp/log_{self.connection_id}’
def log(self, msg):
    log = f"[{self.connection_id}::{self.role}] {msg}"
    print(log)
    if self.fileLogging:
        with open(self.path, 'a') as f:
            f.write(log + '
')

import pkg_resources

def getVersion():
    """Get our own version using pkg_resources""

    return pkg_resources.get_distribution("cobras").version

import os
import psutil

from cobras.common.memoize import memoize

@memoize
def getContainerMemoryLimit():

No license file was found, but licenses were detected in source scan.
In bytes

path = '/sys/fs/cgroup/memory/memory.limit_in_bytes'
if not os.path.exists(path):
    return psutil.virtual_memory().total
else:
    with open(path) as f:
        mem = f.read()
    return int(mem)

def getProcessUsedMemory():
    p = psutil.Process()
    return p.memory_info().rss

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1.2.1-tar-gz/cobras-1.2.1/cobras/common/memory_usage.py
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"Memoization decorator for functions taking one or more arguments.

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"

def memoize(f):
    """Memoization decorator for functions taking one or more arguments.""

class Memodict(dict):
    """Helper class derived from dict"

    def __init__(self, f):
        """Constructor"

        dict.__init__(self)
        self.f = f

    def __call__(self, *args):
        """Call function"

        return self[args]

    def __missing__(self, key):
        """Missing method"

        ret = self[key] = self.f(*key)
        return ret
return Memodict(f)

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/common/memoize.py
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""Generate secrets used for authentication

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""

import click

from cobras.common.apps_config import genSecret
from cobras.common.superuser import preventRootUsage

@click.command()
def secret():
    ""
    Generate secrets used for authentication
    
    \b
cobra secret
    ""

    preventRootUsage()

    secret = genSecret()
    print(secret)

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/runner/secret.py
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""djb2 hash (unused)

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""

def djb2Hash(data):
    ""Return a 32 bits digest"

    hash = 5381
    for x in data:
        hash = ((hash << 5) + hash) + ord(x)
return hash & 0xFFFFFFFF

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/common/djb2_hash.py
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""Bavarde main driver.
Calls into sub commands like git.

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"

from pkgutil import walk_packages

import click
import coloredlogs

coloredlogs.install(level='WARNING')

@click.group()
@click.version_option()
def main():
    """\nBavarde is a chat app written on top of cobra
""

    for loader, module_name, is_pkg in walk_packages(__path__, __name__ + '.'):  
        module = __import__(module_name, globals(), locals(), ['__name__'])
        cmd = getattr(module, module_name.rsplit('.', 1)[-1])
        if isinstance(cmd, click.Command):
            main.add_command(cmd)

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-
1.2.1/cobras/bavarde/runner/__init__.py
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"""Module used for python packaging

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"

from __future__ import absolute_import
import platform
import os
import sys
from setuptools import find_packages, setup

if sys.version_info[:2] < (3, 7):
    print('Error: Cobra requires Python 3.7')
    sys.exit(1)

ROOT = os.path.realpath(os.path.join(os.path.dirname(__file__)))

with open(os.path.join(ROOT, 'DOCKER_VERSION')) as f:
    VERSION = f.read().strip()

dev_requires = [
    'flake8',
    'isort',
    'honcho',
    'mypy',
    'aiojobs==0.1.0',
    'twine'
]

tests_require = [
    'pytest',
    'pytest-cov',
    'pytest-xdist',
    'coverage'
]

with open('requirements.txt') as f:
    install_requires = f.read().splitlines()

setup(
    name='cobras',
    version=VERSION,
    author='Benjamin Sergeant',
    author_email='bsergean@gmail.com',
    url='https://github.com/machinezone/cobra',
    description='A realtime messaging server using WebSockets and Redis.',
    long_description=open(os.path.join(ROOT, 'README.md')).read(),
    long_description_content_type='text/markdown',
    packages=find_packages(exclude=['tests']),
    zip_safe=False,
    install_requires=install_requires,
    extras_require={'tests': tests_require,
                    'dev': dev_requires}
)
import asyncio
import functools
import json
import click
import uvloop

from cobras.client.client import client
from cobras.client.credentials import (createCredentials, getDefaultRoleForApp,
                                      getDefaultSecretForApp)
from cobras.common.apps_config import ADMIN_APPKEY
from cobras.common.superuser import preventRootUsage

DEFAULT_URL = f'ws://127.0.0.1:8765/v2?appkey={ADMIN_APPKEY}'

async def clientCallback(websocket, **args):
    method = args['method']
    params = args.get('params')
params = json.loads(params)

pdu = {
    "action": "rpc/admin",
    "id": 1,
    "body": {
        "method": method,
        "params": params
    }
}

await websocket.send(json.dumps(pdu))

response = await websocket.recv()
print(response)

async def start(url, credentials, verbose, method, params):
    callback = functools.partial(clientCallback,
                                verbose=verbose,
                                method=method,
                                params=params)

    task = asyncio.create_task(
        client(url, credentials, callback))

    await task

@click.command()
@click.option('--url', default=DEFAULT_URL)
@click.option('--role', default=getDefaultRoleForApp('admin'))
@click.option('--secret', default=getDefaultSecretForApp('admin'))
@click.option('--verbose', is_flag=True)
@click.option('--method', default='close_all')
@click.option('--params', default='{}')
def admin(url, role, secret, verbose, method, params):
    """Admin"

    cobra admin --method toggle_file_logging --params '{"connection_id": ":..:"}'
    """
verbose, method, params))

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/runner/admin.py
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""Class to used to throttle function calls, so that something isn't called too often

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""

from datetime import datetime, timedelta

class Throttle(object):
    def __init__(self,
        seconds: int = 1,
        minutes: int = 0,
        hours: int = 0) -> None:
        self.throttle_period = timedelta(
            seconds=seconds, minutes=minutes, hours=hours)
        self.time_of_last_call = datetime.min

def exceedRate(self) -> bool:
    now = datetime.now()
    time_since_last_call = now - self.time_of_last_call

    if time_since_last_call > self.throttle_period:
        self.time_of_last_call = now
        return False
    else:
        return True

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/common/throttle.py
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""Bot

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""

import click

from cobras.bavarde.bot.bot import runBot
@click.command()
def bot():
    
    runBot()

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/bavarde/runner/bot.py
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"Health check.

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Subscribe to a channel, publish and make sure a message is received

import sys
import urllib.request

import click
import uvloop

from cobras.client.credentials import (getDefaultRoleForApp,
    getDefaultSecretForApp)
from cobras.client.health_check import (getDefaultHealthCheckChannel,
    getDefaultHealthCheckHttpUrl,
    getDefaultHealthCheckUrl, healthCheck)
from cobras.common.superuser import preventRootUsage

@click.option('--url', default=getDefaultHealthCheckUrl())
@click.option('--http_url', default=getDefaultHealthCheckHttpUrl)
@click.option('--http', is_flag=True)
@click.option('--role', default=getDefaultRoleForApp('health'))
@click.option('--secret', default=getDefaultSecretForApp('health'))
@click.option('--channel', default=getDefaultHealthCheckChannel())
@click.command()
def health(url, http_url, http, role, secret, channel):
    """Health check

    cobra health --http
    cobra health --http --http_url 'http://127.0.0.1:8765/health/'
    """
preventRootUsage()
uvloop.install()

if http:
    print('url:', http_url)
    with urllib.request.urlopen(http_url) as response:
        html = response.read()
        print(html.decode('utf8'), end='')
else:
    try:
        healthCheck(url, role, secret, channel)
    except ValueError as e:
        click.secho(f'System is unhealthy !!: {e}', fg='red')
        sys.exit(1)
    click.secho('System is healthy', fg='green')

Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/runner/health.py
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'''Run the cobra frontend

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...

import os

import click
import sentry_sdk
import uvloop

from cobras.common.apps_config import getDefaultAppsConfigPath
from cobras.common.superuser import preventRootUsage
from cobras.server.app import AppRunner

@click.command()
@click.option('--host', envvar='COBRA_HOST', default='127.0.0.1',
              help='Binding host address. Set to 0.0.0.0 in prod environments')
@click.option('--port', envvar='COBRA_PORT', default='8765')
@click.option('--redis_urls', envvar='COBRA_REDIS_URLS',
              default='redis://localhost;redis://localhost')
@click.option('--redis_password', envvar='COBRA_REDIS_PASSWORD')
@click.option('--apps_config_path', envvar='COBRA_APPS_CONFIG',
              default=getDefaultAppsConfigPath())
@click.option('--verbose', envvar='COBRA_VERBOSE', is_flag=True)
@click.option('--prod', envvar='COBRA_PROD', is_flag=True)
@click.option('--plugins', envvar='COBRA_PLUGINS')
@click.option('--debug_memory', envvar='COBRA_DEBUG_MEMORY', is_flag=True)
@click.option('--sentry', envvar='COBRA_SENTRY', is_flag=True)
@click.option('--sentry_url', envvar='COBRA_SENTRY_URL')
@click.option('--no_stats', envvar='COBRA_NO_STATS', is_flag=True)
@click.option('--max_subscriptions', envvar='COBRA_MAX_SUBSCRIPTIONS',
    default=-1)
@click.option('--idle_timeout', envvar='COBRA_IDLE_TIMEOUT',
    default=5 * 60,
    help='idle connections kicked out after X seconds')

def run(host, port, redis_urls, redis_password,
    apps_config_path, verbose, debug_memory, plugins,
    sentry, sentry_url, prod, no_stats, max_subscriptions, idle_timeout):
    """Run the cobra server

    cobra run --redis_urls 'redis://localhost:7001;redis://localhost:7002'
    env COBRA_REDIS_PASSWORD=foobared cobra run
    
    if prod:
        os.environ['COBRA_PROD'] = '1'

    preventRootUsage()
    uvloop.install()

    if sentry and sentry_url:
        sentry_sdk.init(sentry_url)

    print('runServer', locals())
    runner = AppRunner(host, port, redis_urls,
        redis_password, apps_config_path,
        verbose, debug_memory, plugins,
        not no_stats, max_subscriptions, idle_timeout)
    runner.run()

    Found in path(s):
* /opt/cola/permits/1254827647_1644305122.39/0/cobras-1-2-1-tar-gz/cobras-1.2.1/cobras/runner/run.py

1.1423 proto-otlp 0.7.0
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1.1432 snowball-stemmer 1.2.1
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Snowball stemming library collection for Python
-----------------------------------------------

This document pertains to the Python version of the stemmer library distribution,
available for download from:

* https://github.com/shibukawa/snowball/

This repository includes Python source code generator
This repository includes generated Python source codes

Original program is maintained at following place:

* http://snowball.tartarus.org/

Original Snowball product created by Dr Martin Porter and Richard Boulton (Java porting).
Original Snowball and my products are released under BSD license.

How to use library

------------------

The `snowballstemmer` module has two functions.

The `snowballstemmer.algorithms` function returns a list of available algorithm name string.

The `snowballstemmer.stemmer` function accepts algorithm name and returns `Stemmer` objects.

`Stemmer` objects have `Stemmer.stemWord(word)` method and `Stemmer.stemWords(word[])` method.

.. code-block:: python

   import snowballstemmer

   stemmer = snowballstemmer.stemmer('english');
   print(stemmer.stemWords("We are the world".split()));

`Stemmer` objects have `Stemmer.maxCacheSize` property. They cache result within the value. Default is `10000`.

Accelerates Stemming

----------------------

if **PyStemmer** is installed, `snowballstemmer.stemmer` returns `PyStemmer`’s `Stemmer` objects. This `Stemmer` object has same methods (`Stemmer.stemWord()`, `Stemmer.stemWords()`).

**PyStemmer** is a Snowball’s `libstemmer_c` wrapper module and it returns 100% compatible result with **snowballstemmer**.

**PyStemmer** has faster speed because it uses C-lang module, and **snowballstemmer** has higher usability because it is pure Python module.

* [PyStemmer <http://pypi.python.org/pypi/PyStemmer/>]_

Benchmark

~~~~~~~~~~
Test Case: Snowball stemmer check data (16 algorithms, total 582560 words, cache hit 0%)
Computer: MacBook Pro 3rd Gen Corei7 2.3GHz

* Python 2.7 + **snowballstemmer** : 2m 30s
* PyPy 1.9 + **snowballstemmer** : 45s
* Python 2.7 + **PyStemmer** : 5s

This test case is much harder than usual usecases!

The TestApp example
-------------------

The `testapp.py` example program allows you to run any of the stemmers on a sample vocabulary.

Usage::

testapp.py <algorithm> "sentences ...

.. code-block:: bash

    $ python testapp.py English "sentences...

Thanks
------

* Original Snowball authors
* Emil Stenström

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Found in path(s):
* /opt/cola/permits/1111463316_1606927819.08/0/snowballstemmer-1-2-1-1-tar-gz/snowballstemmer-1.2.1/README.rst

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Metadata-Version: 1.1
Name: snowballstemmer
Version: 1.2.1
Summary: This package provides 16 stemmer algorithms (15 + Poerter English stemmer) generated from Snowball algorithms.
Home-page: https://github.com/shibukawa/snowball_py
Author: Yoshiki Shibukawa
Author-email: yoshiki at shibu.jp
License: BSD
Description:
It includes following language algorithms:

* Danish
* Dutch
* English (Standard, Porter)
* Finnish
* French
* German
* Hungarian
* Italian
* Norwegian
* Portuguese
* Romanian
* Russian
* Spanish
* Swedish
This is a pure Python stemming library. If `PyStemmer <http://pypi.python.org/pypi/PyStemmer>`_ is available, this module uses it to accelerate.

Keywords: stemmer
Platform: UNKNOWN
Classifier: Development Status :: 5 - Production/ Stable
Classifier: Intended Audience :: Developers
Classifier: License :: OSI Approved :: BSD License
Classifier: Programming Language :: Python
Classifier: Natural Language :: Danish
Classifier: Natural Language :: Dutch
Classifier: Natural Language :: English
Classifier: Natural Language :: Finnish
Classifier: Natural Language :: French
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Classifier: Natural Language :: Hungarian
Classifier: Natural Language :: Italian
Classifier: Natural Language :: Norwegian
Classifier: Natural Language :: Portuguese
Classifier: Natural Language :: Romanian
Classifier: Natural Language :: Russian
Classifier: Natural Language :: Spanish
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Classifier: Operating System :: OS Independent
Classifier: Programming Language :: Python :: 2.5
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Classifier: Programming Language :: Python :: 3.3
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1.1433 libcap-ng 0.7.11

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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This is an attempt to acknowledge early contributions to the garbage collector. Later contributions should instead be mentioned in README.changes.
HISTORY -

Early versions of this collector were developed as a part of research projects supported in part by the National Science Foundation and the Defense Advance Research Projects Agency.

The garbage collector originated as part of the run-time system for the Russell programming language implementation. The first version of the garbage collector was written primarily by Al Demers. It was then refined and mostly rewritten, primarily by Hans-J. Boehm, at Cornell U., the University of Washington, Rice University (where it was first used for C and assembly code), Xerox PARC, SGI, and HP Labs. However, significant contributions have also been made by many others.

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More recent contributors are mentioned in the modification history in README.changes. My apologies for any omissions.

The SPARC specific code was originally contributed by Mark Weiser. The Encore Multimax modifications were supplied by Kevin Kenny (kenny@m.cs.uiuc.edu). The adaptation to the IBM PC/RT is largely due to Vernon Lee, on machines made available to Rice by IBM. Much of the HP specific code and a number of good suggestions for improving the generic code are due to Walter Underwood.

Robert Brazile (brazile@diamond.bbn.com) originally supplied the ULTRIX code. Al Dosser (dosser@src.dec.com) and Regis Cridlig (Regis.Cridlig@cl.cam.ac.uk) subsequently provided updates and information on variation between ULTRIX systems. Parag Patel (parag@netcom.com) supplied the A/UX code. Jesper Peterson(jep@mtiame.mtia.oz.au), Michel Schinz, and Martin Tauchmann (martintauchmann@bigfoot.com) supplied the Amiga port. Thomas Funke (thf@zelator.in-berlin.de(?!)) and Brian D.Carlstrom (bdc@clark.lcs.mit.edu) supplied the NeXT ports. Douglas Steel (doug@wg.icl.co.uk) provided ICL DRS6000 code. Bill Janssen (janssen@parc.xerox.com) supplied the SunOS dynamic loader specific code. Manuel Serrano (serrano@cornas.inria.fr) supplied linux and Sony News specific code. Al Dosser provided Alpha/OSF/1 code. He and Dave Detlefs(detlefs@src.dec.com) also provided several generic bug fixes. Alistair G. Crooks(age@uts.amdahl.com) supplied the NetBSD and 386BSD ports. Jeffrey Hsu (hsu@soda.berkeley.edu) provided the FreeBSD port. Brent Benson (brent@jade.ssd.csd.harris.com) ported the collector to a Motorola 88K processor running CX/UX (Harris NightHawk). Ari Huttunen (Ari.Huttunen@hut.fi) generalized the OS/2 port to nonIBM development environments (a nontrivial task). Patrick Beard (beard@cs.ucdavis.edu) provided the initial MacOS port. David Chase, then at Olivetti Research, suggested several improvements. Scott Schwartz (schwartz@groucho.cse.psu.edu) supplied some of the code to save and print call stacks for leak detection on a SPARC.
Jesse Hull and John Ellis supplied the C++ interface code.
Zhong Shao performed much of the experimentation that led to the
current typed allocation facility. (His dynamic type inference code hasn't
made it into the released version of the collector, yet.)

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The header `<boost/mp11/mpl.hpp>`, when included, defines the necessary support infrastructure for `mp_list` and `std::tuple` to be valid link:../../../../libs/mpl[MPL] sequences.

NOTE: `mpl.hpp` is not included by `.boost/mp11.hpp`.

1.1437 libgusb 0.3.0 1.el8
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1.1439 flask-httpauth 2.5.0

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Metadata-Version: 1.1
Name: Flask-HTTPAuth
Version: 2.5.0
Summary: Basic and Digest HTTP authentication for Flask routes
Home-page: http://github.com/miguelgrinberg/flask-httpauth/
Author: Miguel Grinberg
Author-email: miguelgrinberg50@gmail.com
License: MIT
Description:

Flask-HTTPAuth

Basic and Digest HTTP authentication for Flask routes.

Platform: any
Classifier: Environment :: Web Environment
Classifier: Intended Audience :: Developers
Classifier: License :: OSI Approved :: BSD License
Classifier: Operating System :: OS Independent
Classifier: Programming Language :: Python
Classifier: Topic :: Internet :: WWW/HTTP :: Dynamic Content
Classifier: Topic :: Software Development :: Libraries :: Python Modules
Flask-HTTPAuth
--------------
Basic and Digest HTTP authentication for Flask routes.

```
from setuptools import setup

setup(
    name='Flask-HTTPAuth',
    version='2.5.0',
    url='http://github.com/miguelgrinberg/flask-httpauth/',
    license='MIT',
    author='Miguel Grinberg',
    author_email='miguelgrinberg50@gmail.com',
    description='Basic and Digest HTTP authentication for Flask routes',
    long_description=__doc__,
    py_modules=['flask_httpauth'],
    zip_safe=False,
    include_package_data=True,
    platforms='any',
    install_requires=[
        'Flask'
    ],
    test_suite = "test_httpauth",
    classifiers=[
        'Environment :: Web Environment',
        'Intended Audience :: Developers',
        'License :: OSI Approved :: BSD License',
        'Operating System :: OS Independent',
        'Programming Language :: Python',
        'Topic :: Internet :: WWW/HTTP :: Dynamic Content',
        'Topic :: Software Development :: Libraries :: Python Modules'
    ]
)
```

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1.1442 golang-protobuf-extensions 1.0.2-0.20181231171920-c182affec369

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject

type License struct {
    Name string `json:"name,omitempty"`
    URL  string `json:"url,omitempty"`
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abstract: parse text into an array of tokens or array of arrays
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  - 'Alexandr Ciornii <alexchorny@gmail.com>'
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  ExtUtils::MakeMaker: 0
  Scalar::Util: 0
configure_requires:
  ExtUtils::MakeMaker: 0
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 6.78, CPAN::Meta::Converter version 2.143240'
license: perl
meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: 1.4
name: Text-ParseWords
no_index:
directory:
  - t
  - inc
requires:
  perl: 5.006
resources:
  repository: http://github.com/chorny/Text-ParseWords
  version: 3.30

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=head1 NAME

Text::ParseWords - parse text into an array of tokens or array of arrays
=head1 SYNOPSIS

use Text::ParseWords;
@lists = nested_quotewords($delim, $keep, @lines);
@words = quotewords($delim, $keep, @lines);
@words = shellwords(@lines);
@words = parse_line($delim, $keep, $line);
@words = old_shellwords(@lines); # DEPRECATED!

=heading DESCRIPTION

The &nest_quotewords() and &quotewords() functions accept a delimiter (which can be a regular expression) and a list of lines and then breaks those lines up into a list of words ignoring delimiters that appear inside quotes. &quotewords() returns all of the tokens in a single long list, while &nest_quotewords() returns a list of token lists corresponding to the elements of @lines. &parse_line() does tokenizing on a single string. The &quotewords() functions simply call &parse_line(), so if you're only splitting one line you can call &parse_line() directly and save a function call.

The $keep argument is a boolean flag. If true, then the tokens are split on the specified delimiter, but all other characters (including quotes and backslashes) are kept in the tokens. If $keep is false then the &quotewords() functions remove all quotes and backslashes that are not themselves backslash-escaped or inside of single quotes (i.e., &quotewords() tries to interpret these characters just like the Bourne shell). NB: these semantics are significantly different from the original version of this module shipped with Perl 5.000 through 5.004. As an additional feature, $keep may be the keyword "delimiters" which causes the functions to preserve the delimiters in each string as tokens in the token lists, in addition to preserving quote and backslash characters.

&shellwords() is written as a special case of &quotewords(), and it does token parsing with whitespace as a delimiter-- similar to most Unix shells.

=heading EXAMPLES

The sample program:

use Text::ParseWords;
@words = quotewords("\s+", 0, q{this is "a test" of \ quotewords \"for you\});
$i = 0;
foreach (@words) {
    print "$i: <$_>
";
$i++;
}

produces:

0: <this>
1: <is>
2: <a test>
3: <of quotewords>
4: <"for>
5: <you>

demonstrating:

=over 4
=item 0Z<>

a simple word
=item 1Z<>

multiple spaces are skipped because of our $delim
=item 2Z<>

use of quotes to include a space in a word
=item 3Z<>

use of a backslash to include a space in a word
=item 4Z<>

use of a backslash to remove the special meaning of a double-quote
=item 5Z<>

another simple word (note the lack of effect of the backslashed double-quote)
=back

Replacing C<quotewords("\s+", 0, q{this is...})>
with C<shellwords(q{this is...})>
is a simpler way to accomplish the same thing.

=head1 SEE ALSO
L<text:csv> - for parsing CSV files

=head1 AUTHORS

Maintainer: Alexandr Ciornii <alexchornyATgmail.com>.

Previous maintainer: Hal Pomeranz <pomeranz@netcom.com>, 1994-1997 (Original author unknown). Much of the code for &parse_line() (including the primary regexp) from Joerk Behrends <jbehrends@multimediaproduzenten.de>.

Examples section another documentation provided by John Heidemann <johnh@ISI.EDU>

Bug reports, patches, and nagging provided by lots of folks-- thanks everybody! Special thanks to Michael Schwern <schwern@envirolink.org> for assuring me that a &nested_quotewords() would be useful, and to Jeff Friedl <jfriedl@yahoo-inc.com> for telling me not to worry about error-checking (sort of-- you had to be there).

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* /opt/ws_local/PERMITS_SQL/1009548109_1591379857.65/0/perl-Text-ParseWords-3.30-395.el8.src.rpm-cosi-expand-archive-hLfeekCO/perl-Text-ParseWords.spec

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1.1457 karrick-godirwalk 1.16.1

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1.1458 otel-sdk-export-metric 0.20.0

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1.1459 golang-genproto 0.0.0- 
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1.1460 unboundid-ldap-sdk 4.0.8

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<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

1.1469 gpgme 1.13.1-9.el8
1.1469.1 Available under license:

hkp4py
requests
\input texinfo \c -*- texinfo -*-
@c %**start of header
@setfilename what-was-new.info
@settitle What Was New in the GPGME Python Bindings and Documentation
@documentencoding utf-8
@documentlanguage en
@c %**end of header

@finalout
@titlepage
@title What Was New in the GPGME Python Bindings and Documentation
@author Ben McGinnes
@end titlepage

@contents

@ifnottex
@node Top
@top What Was New in the GPGME Python Bindings and Documentation
@end ifnottex

@menu

* What Was New::

@end menu

What Was New

* What Was New in GPGME 1120::
What Was New in GPGME 1120

* New in GPGME 1120::

@end detailmenu
@end menu

@node What Was New
@chapter What Was New

@multitable {aaaaaaaaaaaaaaa} {aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa}
@item Version:
@tab 0.0.1
@item GPGME Version:
@tab 1.13.0
@item Author:
@tab Ben McGinnes <ben@gnupg.org>
@item Author GPG Key:
@tab DB4724E6FA4286C92B4E55C4321E4E2373590E5D
@item Language:
@tab Australian English, British English
@item xml:lang:
@tab en-AU, en-GB, en
@end multitable

The following are all the past @emph{What's New} sections for the Python Bindings HOWTO and other documentation.

@menu
* What Was New in GPGME 1120::
@end menu

@node What Was New in GPGME 1120
@section What Was New in GPGME 1120

The most obviously new point for those reading this guide is this section on other new things, but thats hardly important. Not given all the other things which spurred the need for adding this section and its subsections.

@menu
* New in GPGME 1120::
@end menu

@node New in GPGME 1120
@subsection New in GPGME 1120

There have been quite a number of additions to GPGME and the Python
bindings to it since the last release of GPGME with versions 1.11.0 and 1.11.1 in April, 2018.

The bullet points of new additions are:

- an expanded section on @uref{gpgme-python-howto#installation, installing} and @uref{gpgme-python-howto#snafu, troubleshooting} the Python bindings.
- The release of Python 3.7.0; which appears to be working just fine with our bindings, in spite of intermittent reports of problems for many other Python projects with that new release.
- Python 3.7 has been moved to the head of the specified python versions list in the build process.
- In order to fix some other issues, there are certain underlying functions which are more exposed through the @uref{gpgme-python-howto#howto-get-context, gpg.Context()}, but ongoing documentation ought to clarify that or otherwise provide the best means of using the bindings. Some additions to @samp{gpg.core} and the @samp{Context()}, however, were intended (see below).
- Continuing work in identifying and confirming the cause of oft-reported @uref{gpgme-python-howto#snafu-runtime-not-funtime, problems installing the Python bindings on Windows}.
- GSOC: Google's Surrpeptitiously Ordered Conscription @dots{} erm @dots{} oh, right; Google's Summer of Code. Though there were two hopeful candidates this year; only one ended up involved with the GnuPG Project directly, the other concentrated on an unrelated third party project with closer ties to one of the GNU/Linux distributions than to the GnuPG Project. Thus the Python bindings benefited from GSOC participant Jacob Adams, who added the key@math{_import} function; building on prior work by Tobias Mueller.
- Several new methods functions were added to the gpg.Context(), including: @uref{gpgme-python-howto#howto-import-key, key@math{_import}}), @uref{gpgme-python-howto#howto-export-key, key@math{_export}}), @uref{gpgme-python-howto#howto-export-public-key, key@math{_export}@math[_minimal]} and @uref{gpgme-python-howto#howto-export-secret-key, key@math{_export}@math[_secret]}.
- Importing and exporting examples include versions integrated with Marcel Fest's recently released @uref{https://github.com/Selfnet/hkp4py, HKP for Python} module. Some @uref{gpgme-python-howto#hkp4py, additional notes on this module} are included at the end of the HOWTO.
- Instructions for dealing with semi-walled garden implementations
like ProtonMail are also included. This is intended to make things a little easier when communicating with users of ProtonMail's services and should not be construed as an endorsement of said service. The GnuPG Project neither favours, nor disfavours ProtonMail and the majority of this deals with interacting with the ProtonMail keyserv.

@item

Semi-formalised the location where @uref{gpgme-python-howto#draft-editions, draft versions} of this HOWTO may periodically be accessible. This is both for the reference of others and testing the publishing of the document itself. Renamed this file at around the same time.

@item

The Texinfo documentation build configuration has been replicated from the parent project in order to make to maintain consistency with that project (and actually ship with each release).

@item

a reStructuredText (@samp{.rst}) version is also generated for Python developers more used to and comfortable with that format as it is the standard Python documentation format and Python developers may wish to use it with Sphinx. Please note that there has been no testing of the reStructuredText version with Sphinx at all. The reST file was generated by the simple expedient of using @uref{https://pandoc.org/, Pandoc}.

@item

Added a new section for @uref{gpgme-python-howto#advanced-use, advanced or experimental use}.

@item

Began the advanced use cases with @uref{gpgme-python-howto#cython, a section} on using the module with @uref{https://cython.org/, Cython}.

@item

Added a number of new scripts to the @samp{example/howto/} directory; some of which may be in advance of their planned sections of the HOWTO (and some are just there because it seemed like a good idea at the time).

@item

Cleaned up a lot of things under the hood.

@end itemize

@bye

This is gpgme.info, produced by makeinfo version 6.3 from gpgme.texi.

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INFO-DIR-SECTION GNU Libraries

START-INFO-DIR-ENTRY

* GPGME: (gpgme). Adding support for cryptography to your program.

END-INFO-DIR-ENTRY

This file documents the GPGME library.

This is Edition 1.12.1-beta100, last updated 3 December 2018, of The

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File: gpgme.info, Node: Top, Next: Introduction, Up: (dir)

Main Menu

*********

This is Edition 1.12.1-beta100, last updated 3 December 2018, of The
GnuPG Made Easy Reference Manual, for Version 1.12.1-beta100 of the
GPGME library.

* Menu:

  * Introduction:: How to use this manual.
  * Preparation:: What you should do before using the library.
  * Protocols and Engines:: Supported crypto protocols.
  * Algorithms:: Supported algorithms.
  * Error Handling:: Error numbers and their meanings.
  * Exchanging Data:: Passing data to and from GPGME.
  * Contexts:: Handling GPGME contexts.

Appendices
* Debugging:: How to solve problems.
* Deprecated Functions:: Documentation of deprecated functions.

* Library Copying:: The GNU Lesser General Public License says how you can copy and share GnuPG Made Easy.
* Copying:: The GNU General Public License says how you can copy and share this manual.

Indices

* Concept Index:: Index of concepts and programs.
* Function and Data Index:: Index of functions, variables and data types.

The Detailed Node Listing

Introduction

* Getting Started:: Purpose of the manual, and how to use it.
* Features:: Reasons to install and use GPGME.
* Overview:: Basic architecture of the GPGME library.

Preparation

* Header:: What header file you need to include.
* Building the Source:: Compiler options to be used.
* Largefile Support (LFS):: How to use GPGME with LFS.
* Using Automake:: Compiler options to be used the easy way.
* Using Libtool:: Avoiding compiler options entirely.
* Library Version Check:: Getting and verifying the library version.
* Signal Handling:: How GPGME affects signal handling.
* Multi-Threading:: How GPGME can be used in an MT environment.

Protocols and Engines

* Engine Version Check:: Verifying the engine version.
* Engine Information:: Obtaining more information about the engines.
* Engine Configuration:: Changing the engine configuration.
* OpenPGP:: Support for the OpenPGP protocol.
* Cryptographic Message Syntax:: Support for the CMS.

Algorithms

* Public Key Algorithms:: A list of all public key algorithms.
* Hash Algorithms:: A list of all hash algorithms.

Error Handling
* Error Values:: The error value and what it means.
* Error Codes:: A list of important error codes.
* Error Sources:: A list of important error sources.
* Error Strings:: How to get a descriptive string from a value.

Exchanging Data

* Creating Data Buffers:: Creating new data buffers.
* Destroying Data Buffers:: Releasing data buffers.
* Manipulating Data Buffers:: Operations on data buffers.

Creating Data Buffers

* Memory Based Data Buffers:: Creating memory based data buffers.
* File Based Data Buffers:: Creating file based data buffers.
* Callback Based Data Buffers:: Creating callback based data buffers.

Manipulating Data Buffers

* Data Buffer I/O Operations:: I/O operations on data buffers.
* Data Buffer Meta-Data:: Meta-data manipulation of data buffers.
* Data Buffer Convenience:: Convenience function for data buffers.

Contexts

* Creating Contexts:: Creating new GPGME contexts.
* Destroying Contexts:: Releasing GPGME contexts.
* Result Management:: Managing the result of crypto operations.
* Context Attributes:: Setting properties of a context.
* Key Management:: Managing keys with GPGME.
* Trust Item Management:: Managing trust items with GPGME.
* Crypto Operations:: Using a context for cryptography.
* Miscellaneous:: Miscellaneous operations.
* Run Control:: Controlling how operations are run.

Context Attributes

* Protocol Selection:: Selecting the protocol used by a context.
* Crypto Engine:: Configuring the crypto engine.
* Setting the Sender:: How to tell the engine the sender.
* ASCII Armor:: Requesting ASCII armored output.
* Text Mode:: Choosing canonical text mode.
* Offline Mode:: Choosing offline mode.
* Included Certificates:: Including a number of certificates.
* Key Listing Mode:: Selecting key listing mode.
* Passphrase Callback:: Getting the passphrase from the user.
* Progress Meter Callback:: Being informed about the progress.
* Status Message Callback:: Status messages received from gpg.
* Locale:: Setting the locale of a context.

Key Management

* Key objects:: Description of the key structures.
* Listing Keys:: Browsing the list of available keys.
* Information About Keys:: Requesting detailed information about keys.
* Manipulating Keys:: Operations on keys.
* Generating Keys:: Creating new key pairs.
* Signing Keys:: Adding key signatures to public keys.
* Exporting Keys:: Retrieving key data from the key ring.
* Importing Keys:: Adding keys to the key ring.
* Deleting Keys:: Removing keys from the key ring.
* Changing Passphrases:: Change the passphrase of a key.
* Changing TOFU Data:: Changing data pertaining to TOFU.
* Advanced Key Editing:: Advanced key edit operation.

Trust Item Management

* Listing Trust Items:: Browsing the list of available trust items.
* Manipulating Trust Items:: Operations on trust items.

Crypto Operations

* Decrypt:: Decrypting a ciphertext.
* Verify:: Verifying a signature.
* Decrypt and Verify:: Decrypting a signed ciphertext.
* Sign:: Creating a signature.
* Encrypt:: Encrypting a plaintext.

Sign

* Selecting Signers:: How to choose the keys to sign with.
* Creating a Signature:: How to create a signature.
* Signature Notation Data:: How to add notation data to a signature.

Encrypt

* Encrypting a Plaintext:: How to encrypt a plaintext.

Miscellaneous

* Running other Programs:: Running other Programs.
* Using the Assuan protocol:: Using the Assuan protocol.
* Checking for updates:: How to check for software updates.

Run Control

Open Source Used In BGP TE Controller Version 4.3.0 16055
1 Introduction
***************

GnuPG Made Easy (GPGME) is a C language library that allows to add support for

cryptography to a program. It is designed to make access to public key crypto

ingines like GnuPG or GpgSM easier for applications. GPGME provides a high-level

crypto API for encryption, decryption, signing, signature verification and key

management.

GPGME uses GnuPG and GpgSM as its backends to support OpenPGP and the

Cryptographic Message Syntax (CMS).

* Menu:

* Getting Started:: Purpose of the manual, and how to use it.
* Features:: Reasons to install and use GPGME.
* Overview:: Basic architecture of the GPGME library.

1.1 Getting Started
====================

This manual documents the GPGME library programming interface. All functions
and data types provided by the library are explained.

The reader is assumed to possess basic knowledge about cryptography in

general, and public key cryptography in particular. The underlying

cryptographic engines that are used by the library are not explained,
but where necessary, special features or requirements by an engine are mentioned as far as they are relevant to GPGME or its users.

This manual can be used in several ways. If read from the beginning to the end, it gives a good introduction into the library and how it can be used in an application. Forward references are included where necessary. Later on, the manual can be used as a reference manual to get just the information needed about any particular interface of the library. Experienced programmers might want to start looking at the examples at the end of the manual, and then only read up those parts of the interface which are unclear.

The documentation for the language bindings is currently not included in this manual. Those languages bindings follow the general programming model of GPGME but may provide some extra high level abstraction on top of the GPGME style API. For now please see the README files in the lang/ directory of the source distribution.


1.2 Features
============

GPGME has a couple of advantages over other libraries doing a similar job, and over implementing support for GnuPG or other crypto engines into your application directly.

its free software
Anybody can use, modify, and redistribute it under the terms of the GNU Lesser General Public License (*note Library Copying:.*).

its flexible
GPGME provides transparent support for several cryptographic protocols by different engines. Currently, GPGME supports the OpenPGP protocol using GnuPG as the backend, and the Cryptographic Message Syntax using GpgSM as the backend.

its easy
GPGME hides the differences between the protocols and engines from the programmer behind an easy-to-use interface. This way the programmer can focus on the other parts of the program, and still integrate strong cryptography in his application. Once support for GPGME has been added to a program, it is easy to add support for other crypto protocols once GPGME backends provide them.

its language friendly
GPGME comes with languages bindings for several common programming
1.3 Overview

GPGME provides a data abstraction that is used to pass data to the crypto engine, and receive returned data from it. Data can be read from memory or from files, but it can also be provided by a callback function.

The actual cryptographic operations are always set within a context. A context provides configuration parameters that define the behaviour of all operations performed within it. Only one operation per context is allowed at any time, but when one operation is finished, you can run the next operation in the same context. There can be more than one context, and all can run different operations at the same time.

Furthermore, GPGME has rich key management facilities including listing keys, querying their attributes, generating, importing, exporting and deleting keys, and acquiring information about the trust path.

With some precautions, GPGME can be used in a multi-threaded environment, although it is not completely thread safe and thus needs the support of the application.

2 Preparation

To use GPGME, you have to perform some changes to your sources and the build system. The necessary changes are small and explained in the following sections. At the end of this chapter, it is described how the library is initialized, and how the requirements of the library are verified.

* Menu:
  * Header:: What header file you need to include.
  * Building the Source:: Compiler options to be used.
  * Largefile Support (LFS):: How to use GPGME with LFS.
  * Using Automake:: Compiler options to be used the easy way.
  * Using Libtool:: Avoiding compiler options entirely.
2.1 Header

All interfaces (data types and functions) of the library are defined in the header file `gpgme.h`. You must include this in all programs using the library, either directly or through some other header file, like this:

```c
#include <gpgme.h>
```

The namespace of GPGME is `gpgme_*` for function names and data types and `GPGME_*` for other symbols. Symbols internal to GPGME take the form `_gpgme_*` and `_GPGME_*`.

Because GPGME makes use of the GPG Error library, using GPGME will also use the `GPG_ERR_*` name space directly, and the `gpg_err_*`, `gpg_str_*`, and `gpgrt_*` name space indirectly.

2.2 Building the Source

If you want to compile a source file including the `gpgme.h` header file, you must make sure that the compiler can find it in the directory hierarchy. This is accomplished by adding the path to the directory in which the header file is located to the compiler's include file search path (via the `-I` option).

However, the path to the include file is determined at the time the source is configured. To solve this problem, gpgme ships with a small helper program `gpgme-config` that knows about the path to the include file and other configuration options. The options that need to be added to the compiler invocation at compile time are output by the `--cflags` option to `gpgme-config`. The following example shows how it can be used at the command line:

```bash
gcc -c foo.c `gpgme-config --cflags`
```

Adding the output of `gpgme-config --cflags` to the compiler command
A similar problem occurs when linking the program with the library. Again, the compiler has to find the library files. For this to work, the path to the library files has to be added to the library search path (via the -L option). For this, the option --libs to gpgme-config can be used. For convenience, this option also outputs all other options that are required to link the program with GPGME (in particular, the -lgpgme option). The example shows how to link foo.o with the GPGME library to a program foo.

```
gcc -o foo foo.o `gpgme-config --libs`
```

Of course you can also combine both examples to a single command by specifying both options to gpgme-config:

```
gcc -o foo foo.c `gpgme-config --cflags --libs`
```

If you need to detect the installed language bindings you can use list them using:

```
gpgme-config --print-lang
```

or test for the availability using

```
gpgme-config --have-lang=python && echo 'Bindings for Pythons available'
```


2.3 Largefile Support (LFS)
================================

GPGME is compiled with largefile support by default, if it is available on the system. This means that GPGME supports files larger than two gigabyte in size, if the underlying operating system can. On some systems, largefile support is already the default. On such systems, nothing special is required. However, some systems provide only support for files up to two gigabyte in size by default. Support for larger file sizes has to be specifically enabled.

To make a difficult situation even more complex, such systems provide two different types of largefile support. You can either get all relevant functions replaced with alternatives that are largefile capable, or you can get new functions and data types for largefile support added. Those new functions have the same name as their smallfile counterparts, but with a suffix of 64.
An example: The data type off_t is 32 bit wide on GNU/Linux PC systems. To address offsets in large files, you can either enable largefile support add-on. Then a new data type off64_t is provided, which is 64 bit wide. Or you can replace the existing off_t data type with its 64 bit wide counterpart. All occurrences of off_t are then automagically replaced.

As if matters were not complex enough, there are also two different types of file descriptors in such systems. This is important because if file descriptors are exchanged between programs that use a different maximum file size, certain errors must be produced on some file descriptors to prevent subtle overflow bugs from occurring.

As you can see, supporting two different maximum file sizes at the same time is not at all an easy task. However, the maximum file size does matter for GPGME, because some data types it uses in its interfaces are affected by that. For example, the off_t data type is used in the gpgme_data_seek function, to match its POSIX counterpart. This affects the call-frame of the function, and thus the ABI of the library. Furthermore, file descriptors can be exchanged between GPGME and the application.

For you as the user of the library, this means that your program must be compiled in the same file size mode as the library. Luckily, there is absolutely no valid reason for new programs to not enable largefile support by default and just use that. The compatibility modes (small file sizes or dual mode) can be considered an historic artefact, only useful to allow for a transitional period.

On POSIX platforms GPGME is compiled using largefile support by default. This means that your application must do the same, at least as far as it is relevant for using the gpgme.h header file. All types in this header files refer to their largefile counterparts, if they are different from any default types on the system.

On 32 and 64 bit Windows platforms off_t is declared as 32 bit signed integer. There is no specific support for LFS in the C library. The recommendation from Microsoft is to use the native interface (CreateFile et al.) for large files. Released binary versions of GPGME (libgpgme-11.dll) have always been build with a 32 bit off_t. To avoid an ABI break we stick to this convention for 32 bit Windows by using long there. GPGME versions for 64 bit Windows have never been released and thus we are able to use int64_t instead of off_t there. For easier migration the typedef gpgme_off_t has been defined. The reason we cannot use off_t directly is that some toolchains (e.g. mingw64) introduce a POSIX compatible hack for off_t. Some widely used toolkits make use of this hack and in turn GPGME would need to use
it also. However, this would introduce an ABI break and existing software making use of libgpgme might suffer from a severe break. Thus with version 1.4.2 we redefined all functions using off_t to use gpgme_off_t which is defined as explained above. This way we keep the ABI well defined and independent of any toolchain hacks. The bottom line is that LFS support in GPGME is only available on 64 bit versions of Windows.

On POSIX platforms you can enable largefile support, if it is different from the default on the system the application is compiled on, by using the Autoconf macro AC_SYS_LARGEFILE. If you do this, then you don't need to worry about anything else: It will just work. In this case you might also want to use AC_FUNC_FSEEKO to take advantage of some new interfaces, and AC_TYPE_OFF_T (just in case).

If you do not use Autoconf, you can define the preprocessor symbol _FILE_OFFSET_BITS to 64 before including any header files, for example by specifying the option -D_FILE_OFFSET_BITS=64 on the compiler command line. You will also want to define the preprocessor symbol LARGEFILE_SOURCE to 1 in this case, to take advantage of some new interfaces.

If you do not want to do either of the above, you probably know enough about the issue to invent your own solution. Just keep in mind that the GPGME header file expects that largefile support is enabled, if it is available. In particular, we do not support dual mode (_LARGEFILE64_SOURCE).


2.4 Using Automake

It is much easier if you use GNU Automake instead of writing your own Makefiles. If you do that you do not have to worry about finding and invoking the gpgme-config script at all. GPGME provides an extension to Automake that does all the work for you.

-- Macro: AM_PATH_GPGME ([MINIMUM-VERSION], [ACTION-IF-FOUND], [ACTION-IF-NOT-FOUND])
-- Macro: AM_PATH_GPGME_PTH ([MINIMUM-VERSION], [ACTION-IF-FOUND], [ACTION-IF-NOT-FOUND])
-- Macro: AM_PATH_GPGME_PTHREAD ([MINIMUM-VERSION], [ACTION-IF-FOUND], [ACTION-IF-NOT-FOUND])
Check whether GPGME (at least version MINIMUM-VERSION, if given) exists on the host system. If it is found, execute ACTION-IF-FOUND, otherwise do ACTION-IF-NOT-FOUND, if given.
Additionally, the function defines `GPGME_CFLAGS` to the flags needed for compilation of the program to find the `gpgme.h` header file, and `GPGME_LIBS` to the linker flags needed to link the program to the GPGME library. If the used helper script does not match the target type you are building for a warning is printed and the string `libgcrypt` is appended to the variable `gpg_config_script_warn`.

`AM_PATH_GPGME_PTH` checks for the version of GPGME that can be used with GNU Pth, and defines `GPGME_PTH_CFLAGS` and `GPGME_PTH_LIBS`.

`AM_PATH_GPGME_PTHREAD` checks for the version of GPGME that can be used with the native pthread implementation, and defines `GPGME_PTHREAD_CFLAGS` and `GPGME_PTHREAD_LIBS`. Since version 1.8.0 this is no longer required to `GPGME_PTHREAD` as GPGME itself is thread safe.

This macro searches for `gpgme-config` along the PATH. If you are cross-compiling, it is useful to set the environment variable `SYSROOT` to the top directory of your target. The macro will then first look for the helper program in the bin directory below that top directory. An absolute directory name must be used for `SYSROOT`. Finally, if the configure command line option `--with-gpgme-prefix` is used, only its value is used for the top directory below which the helper script is expected.

You can use the defined Autoconf variables like this in your Makefile.am:

```
AM_CPPFLAGS = $(GPGME_CFLAGS)
LDADD = $(GPGME_LIBS)
```

The easiest way is to just use GNU Libtool. If you use libtool, and link to `libgpgme.la`, `libgpgme-pth.la` or `libgpgme-pthread.la` respectively, everything will be done automatically by Libtool.
-- Function: const char * gpgme_check_version
    (const char *REQUIRED_VERSION)
The function gpgme_check_version has four purposes. It can be
used to retrieve the version number of the library. In addition it
can verify that the version number is higher than a certain
required version number. In either case, the function initializes
some sub-systems, and for this reason alone it must be invoked
early in your program, before you make use of the other functions
in GPGME. The last purpose is to run selftests.

As a side effect for W32 based systems, the socket layer will get
initialized.

If REQUIRED_VERSION is NULL, the function returns a pointer to a
statically allocated string containing the version number of the
library.

If REQUIRED_VERSION is not NULL, it should point to a string
containing a version number, and the function checks that the
version of the library is at least as high as the version number
provided. In this case, the function returns a pointer to a
statically allocated string containing the version number of the
library. If REQUIRED_VERSION is not a valid version number, or if
the version requirement is not met, the function returns NULL.

If you use a version of a library that is backwards compatible with
older releases, but contains additional interfaces which your
program uses, this function provides a run-time check if the
necessary features are provided by the installed version of the
library.

If a selftest fails, the function may still succeed. Selftest
errors are returned later when invoking gpgme_new or
gpgme-data_new, so that a detailed error code can be returned
(historically, gpgme_check_version does not return a detailed
error code).

-- Function: int gpgme_set_global_flag (const char *NAME,
    const char *VALUE)

SINCE: 1.4.0

On some systems it is not easy to set environment variables and
thus hard to use GPGMEs internal trace facility for debugging.
This function has been introduced as an alternative way to enable
debugging and for a couple of other rarely used tweaks. It is
important to assure that only one thread accesses GPGME functions between a call to this function and after the return from the call to gpgme_check_version.

All currently supported features require that this function is called as early as possible even before gpgme_check_version. The features are identified by the following values for NAME:

debug
To enable debugging use the string debug for NAME and VALUE identical to the value used with the environment variable GPGME_DEBUG.

disable-gpgconf
Using this feature with any VALUE disables the detection of the gpgconf program and thus forces GPGME to fallback into the simple OpenPGP only mode. It may be used to force the use of GnuPG-1 on systems which have both GPG versions installed. Note that in general the use of gpgme_set_engine_info is a better way to select a specific engine version.

gpgconf-name
gpg-name
Set the name of the gpgconf respective gpg binary. The defaults are GNU/GnuPG/gpgconf and GNU/GnuPG/gpg. Under Unix the leading directory part is ignored. Under Windows the leading directory part is used as the default installation directory; the .exe suffix is added by GPGME. Use forward slashed even under Windows.

require-gnupg
Set the minimum version of the required GnuPG engine. If that version is not met, GPGME fails early instead of trying to use the existent version. The given version must be a string with major, minor, and micro number. Example: "2.1.0".

w32-inst-dir
On Windows GPGME needs to know its installation directory to find its spawn helper. This is in general no problem because a DLL has this information. Some applications however link statically to GPGME and thus GPGME can only figure out the installation directory of this application which may be wrong in certain cases. By supplying an installation directory as value to this flag, GPGME will assume that that directory is the installation directory. This flag has no effect on non-Windows platforms.

This function returns 0 on success. In contrast to other
functions the non-zero return value on failure does not convey any error code. For setting debug the only possible error cause is an out of memory condition; which would exhibit itself later anyway. Thus the return value may be ignored.

After initializing GPGME, you should set the locale information to the locale required for your output terminal. This locale information is needed for example for the curses and Gtk pinentry. Here is an example of a complete initialization:

```c
#include <locale.h>
#include <gpgme.h>

void
init_gpgme (void)
{
    /* Initialize the locale environment. */
    setlocale (LC_ALL, "");
    gpgme_check_version (NULL);
    gpgme_set_locale (NULL, LC_CTYPE, setlocale (LC_CTYPE, NULL));
    #ifdef LC_MESSAGES
    gpgme_set_locale (NULL, LC_MESSAGES, setlocale (LC_MESSAGES, NULL));
    #endif
}
```

Note that you are highly recommended to initialize the locale settings like this. GPGME can not do this for you because it would not be thread safe. The conditional on LC_MESSAGES is only necessary for portability to W32 systems.


2.7 Signal Handling

The GPGME library communicates with child processes (the crypto engines). If a child process dies unexpectedly, for example due to a bug, or system problem, a SIGPIPE signal will be delivered to the application. The default action is to abort the program. To protect against this, gpgme_check_version sets the SIGPIPE signal action to SIG_IGN, which means that the signal will be ignored.

GPGME will only do that if the signal action for SIGPIPE is SIG_DEF at the time gpgme_check_version is called. If it is something different, GPGME will take no action.

This means that if your application does not install any signal
handler for SIGPIPE, you don't need to take any precautions. If you
do install a signal handler for SIGPIPE, you must be prepared to
handle any SIGPIPE events that occur due to GPGME writing to a defunct
pipe. Furthermore, if your application is multi-threaded, and you
install a signal action for SIGPIPE, you must make sure you do this
either before gpgme_check_version is called or afterwards.


2.8 Multi-Threading
===================

The GPGME library is mostly thread-safe, and can be used in a
multi-threaded environment but there are some requirements for
multi-threaded use:

The function gpgme_check_version must be called before any other
function in the library, because it initializes the thread support
subsystem in GPGME. To achieve this in multi-threaded programs,
you must synchronize the memory with respect to other threads that
also want to use GPGME. For this, it is sufficient to call
gpgme_check_version before creating the other threads using
GPGME(1).

Any gpgme_data_t and gpgme_ctx_t object must only be accessed
by one thread at a time. If multiple threads want to deal with the
same object, the caller has to make sure that operations on that
object are fully synchronized.

Only one thread at any time is allowed to call gpgme_wait. If
multiple threads call this function, the caller must make sure that
all invocations are fully synchronized. It is safe to start
asynchronous operations while a thread is running in gpgme_wait.

The function gpgme_strerror is not thread safe. You have to use
gpgme_strerror_r instead.

-------- Footnotes --------

(1) At least this is true for POSIX threads, as pthread_create is a
function that synchronizes memory with respects to other threads. There
are many functions which have this property, a complete list can be
found in POSIX, IEEE Std 1003.1-2003, Base Definitions, Issue 6, in the
definition of the term Memory Synchronization. For other thread
packages other, more relaxed or more strict rules may apply.
3 Protocols and Engines

GPGME supports several cryptographic protocols, however, it does not implement them. Rather it uses backends (also called engines) which implement the protocol. GPGME uses inter-process communication to pass data back and forth between the application and the backend, but the details of the communication protocol and invocation of the backend is completely hidden by the interface. All complexity is handled by GPGME. Where an exchange of information between the application and the backend is necessary, GPGME provides the necessary callback function hooks and further interfaces.

-- Data type: enum gpgme_protocol_t
The gpgme_protocol_t type specifies the set of possible protocol values that are supported by GPGME. The following protocols are supported:

GPGME_PROTOCOL_OpenPGP
GPGME_PROTOCOL_OPENPGP
This specifies the OpenPGP protocol.

GPGME_PROTOCOL_CMS
This specifies the Cryptographic Message Syntax.

GPGME_PROTOCOL_GPGCONF
Under development. Please ask on <gnupg-devel@gnupg.org> for help.

GPGME_PROTOCOL_ASSUAN
SINCE: 1.2.0
This specifies the raw Assuan protocol.

GPGME_PROTOCOL_G13
SINCE: 1.3.0
Under development. Please ask on <gnupg-devel@gnupg.org> for help.

GPGME_PROTOCOL_UISERVER
Under development. Please ask on <gnupg-devel@gnupg.org> for help.

GPGME_PROTOCOL_SPAWN
SINCE: 1.5.0
Special protocol for use with gpgme_op_spawn.

GPGME_PROTOCOL_UNKNOWN
Reserved for future extension. You may use this to indicate
that the used protocol is not known to the application.
Currently, GPGME does not accept this value in any operation,
though, except for gpgme_get_protocol_name.

-- Function: const char * gpgme_get_protocol_name
         (gpgme_protocol_t PROTOCOL)
The function gpgme_get_protocol_name returns a statically
allocated string describing the protocol PROTOCOL, or NULL if the
protocol number is not valid.

* Menu:

* Engine Version Check::   Verifying the engine version.
* Engine Information::     Obtaining more information about the engines.
* Engine Configuration::   Changing the engine configuration.
* OpenPGP::               Support for the OpenPGP protocol.
* Cryptographic Message Syntax:: Support for the CMS.
* Assuan::                 Support for the raw Assuan protocol.


3.1 Engine Version Check
========================

-- Function: const char * gpgme_get_dirinfo (cons char *WHAT)
SINCE: 1.5.0

The function gpgme_get_dirinfo returns a statically allocated
string with the value associated to WHAT. The returned values are
the defaults and wont change even after gpgme_set_engine_info
has been used to configure a different engine. NULL is returned
if no value is available. Commonly supported values for WHAT are:

homedir
    Return the default home directory.

sysconfdir
    Return the name of the system configuration directory

bindir
    Return the name of the directory with GnuPG program files.
libdir
   Return the name of the directory with GnuPG related library files.

libexecdir
   Return the name of the directory with GnuPG helper program files.

datadir
   Return the name of the directory with GnuPG shared data.

localedir
   Return the name of the directory with GnuPG locale data.

agent-socket
   Return the name of the socket to connect to the gpg-agent.

agent-ssh-socket
   Return the name of the socket to connect to the ssh-agent component of gpg-agent.

dirmngr-socket
   Return the name of the socket to connect to the dirmngr.

uiserver-socket
   Return the name of the socket to connect to the user interface server.

gpgconf-name
   Return the file name of the engine configuration tool.

gpg-name
   Return the file name of the OpenPGP engine.

gpgsm-name
   Return the file name of the CMS engine.

g13-name
   Return the name of the file container encryption engine.

gpg-wks-client-name
   Return the name of the Web Key Service tool.

-- Function: gpgme_error_t gpgme_engine_check_version
   (gpgme_protocol_t PROTOCOL)
   The function gpgme_engine_check_version verifies that the engine implementing the protocol PROTOCOL is installed in the expected path and meets the version requirement of GPGME.
This function returns the error code GPG_ERR_NO_ERROR if the engine is available and GPG_ERR_INV_ENGINE if it is not.


3.2 Engine Information
======================

-- Data type: gpgme_engine_info_t
The gpgme_engine_info_t type specifies a pointer to a structure describing a crypto engine. The structure contains the following elements:

gpgme_engine_info_t next
This is a pointer to the next engine info structure in the linked list, or NULL if this is the last element.

gpgme_protocol_t protocol
This is the protocol for which the crypto engine is used. You can convert this to a string with gpgme_get_protocol_name for printing.

const char *file_name
This is a string holding the file name of the executable of the crypto engine. Currently, it is never NULL, but using NULL is reserved for future use, so always check before you use it.

const char *home_dir
This is a string holding the directory name of the crypto engines configuration directory. If it is NULL, then the default directory is used. See gpgme_get_dirinfo on how to get the default directory.

const char *version
This is a string containing the version number of the crypto engine. It might be NULL if the version number can not be determined, for example because the executable doesn't exist or is invalid.

const char *req_version
This is a string containing the minimum required version number of the crypto engine for GPGME to work correctly. This is the version number that gpgme_engine_check_version verifies against. Currently, it is never NULL, but using
NULL is reserved for future use, so always check before you use it.

-- Function: gpgme_error_t gpgme_get_engine_info
  (gpgme_engine_info_t *INFO)

The function gpgme_get_engine_info returns a linked list of engine info structures in INFO. Each info structure describes the defaults of one configured backend.

The memory for the info structures is allocated the first time this function is invoked, and must not be freed by the caller.

This function returns the error code GPG_ERR_NO_ERROR if successful, and a system error if the memory could not be allocated.

Here is an example how you can provide more diagnostics if you receive an error message which indicates that the crypto engine is invalid.

```c
... 
if (gpgme_err_code (err) == GPG_ERR_INV_ENGINE) 
{ 
gpgme_engine_info_t info; 
err = gpgme_get_engine_info (&info); 
if (!err) 
{ 
  while (info && info->protocol != gpgme_get_protocol (ctx)) 
    info = info->next; 
  if (!info) 
    fprintf (stderr, "GPGME compiled without support for protocol %s", 
              gpgme_get_protocol_name (info->protocol)); 
  else if (info->file_name && !info->version) 
    fprintf (stderr, "Engine %s not installed properly", 
              info->file_name); 
  else if (info->file_name && info->version && info->req_version) 
    fprintf (stderr, "Engine %s version %s installed, but at least version %s required", 
              info->file_name, info->version, info->req_version); 
  else 
    fprintf (stderr, "Unknown problem with engine for protocol %s", 
              gpgme_get_protocol_name (info->protocol)); 
} 
}
```
3.3 Engine Configuration

You can change the configuration of a backend engine, and thus change the executable program and configuration directory to be used. You can make these changes the default or set them for some contexts individually.

-- Function: gpgme_error_t gpgme_set_engine_info

    (gpgme_protocol_t PROTO, const char *FILE_NAME,
     const char *HOME_DIR)

SINCE: 1.1.0

The function gpgme_set_engine_info changes the default configuration of the crypto engine implementing the protocol PROTO.

FILE_NAME is the file name of the executable program implementing this protocol, and HOME_DIR is the directory name of the configuration directory for this crypto engine. If HOME_DIR is NULL, the engines default will be used.

The new defaults are not applied to already created GPGME contexts.

This function returns the error code GPG_ERR_NO_ERROR if successful, or an error code on failure.

The functions gpgme_ctx_get_engine_info and gpgme_ctx_set_engine_info can be used to change the engine configuration per context. *Note Crypto Engine::.

3.4 OpenPGP

OpenPGP is implemented by GnuPG, the GNU Privacy Guard. This is the first protocol that was supported by GPGME.

The OpenPGP protocol is specified by GPGME_PROTOCOL_OpenPGP.
3.5 Cryptographic Message Syntax
================================

CMS is implemented by GpgSM, the S/MIME implementation for GnuPG.

The CMS protocol is specified by GPGME_PROTOCOL_CMS.

3.6 Assuan
==========

Assuan is the RPC library used by the various GnuPG components. The Assuan protocol allows one to talk to arbitrary Assuan servers using GPGME. *Note Using the Assuan protocol:.*

The ASSUAN protocol is specified by GPGME_PROTOCOL_ASSUAN.

4 Algorithms
*************

The crypto backends support a variety of algorithms used in public key cryptography.(1) The following sections list the identifiers used to denote such an algorithm.

* Menu:

* Public Key Algorithms:: A list of all public key algorithms.
* Hash Algorithms:: A list of all hash algorithms.

-------- Footnotes --------

(1) Some engines also provide symmetric only encryption; see the description of the encryption function on how to use this.
Public key algorithms are used for encryption, decryption, signing and verification of signatures.

-- Data type: enum gpgme_pubkey_algo_t
The gpgme_pubkey_algo_t type specifies the set of all public key algorithms that are supported by GPGME. Possible values are:

GPGME_PK_RSA
This value indicates the RSA (Rivest, Shamir, Adleman) algorithm.

GPGME_PK_RSA_E
Deprecated. This value indicates the RSA (Rivest, Shamir, Adleman) algorithm for encryption and decryption only.

GPGME_PK_RSA_S
Deprecated. This value indicates the RSA (Rivest, Shamir, Adleman) algorithm for signing and verification only.

GPGME_PK_DSA
This value indicates DSA, the Digital Signature Algorithm.

GPGME_PK_ELG
This value indicates ElGamal.

GPGME_PK_ELG_E
This value also indicates ElGamal and is used specifically in GnuPG.

GPGME_PK_ECC
SINCE: 1.5.0
This value is a generic indicator for elliptic curve algorithms.

GPGME_PK_ECDSA
SINCE: 1.3.0
This value indicates ECDSA, the Elliptic Curve Digital Signature Algorithm as defined by FIPS 186-2 and RFC-6637.

GPGME_PK_ECDH
SINCE: 1.3.0
This value indicates ECDH, the Elliptic Curve Diffie-Hellmann encryption algorithm as defined by RFC-6637.

GPGME_PK_EDDSA
This value indicates the EdDSA algorithm.

-- Function: const char * gpgme_pubkey_algo_name
   (gpgme_pubkey_algo_t ALGO)
   The function gpgme_pubkey_algo_name returns a pointer to a
   statically allocated string containing a description of the public
   key algorithm ALGO. This string can be used to output the name of
   the public key algorithm to the user.

   If ALGO is not a valid public key algorithm, NULL is returned.

-- Function: char * gpgme_pubkey_algo_string (gpgme_subkey_t KEY)
   SINCE: 1.7.0

   The function gpgme_pubkey_algo_string is a convenience function
   to build and return an algorithm string in the same way GnuPG does
   (e.g. rsa2048 or ed25519). The caller must free the result
   using gpgme_free. On error (e.g. invalid argument or memory
   exhausted), the function returns NULL and sets ERRNO.


4.2 Hash Algorithms
====================

Hash (message digest) algorithms are used to compress a long message to
make it suitable for public key cryptography.

-- Data type: enum gpgme_hash_algo_t
   The gpgme_hash_algo_t type specifies the set of all hash
   algorithms that are supported by GPGME. Possible values are:

   GPGME_MD_MD5
   GPGME_MD_SHA1
   GPGME_MD_RMD160
   GPGME_MD_MD2
   GPGME_MD_TIGER
   GPGME_MD_HAVAL
   GPGME_MD_SHA256
   GPGME_MD_SHA384
   GPGME_MD_SHA512
   GPGME_MD_SHA224
      SINCE: 1.5.0

   GPGME_MD_MD4
-- Function: const char * gpgme_hash_algo_name (gpgme_hash_algo_t ALGO)
The function gpgme_hash_algo_name returns a pointer to a
statically allocated string containing a description of the hash
algorithm ALGO. This string can be used to output the name of the
hash algorithm to the user.

If ALGO is not a valid hash algorithm, NULL is returned.

5 Error Handling
 ****************

Many functions in GPGME can return an error if they fail. For this
reason, the application should always catch the error condition and take
appropriate measures, for example by releasing the resources and passing
the error up to the caller, or by displaying a descriptive message to
the user and cancelling the operation.

Some error values do not indicate a system error or an error in the
operation, but the result of an operation that failed properly. For
example, if you try to decrypt a tempered message, the decryption will
fail. Another error value actually means that the end of a data buffer
or list has been reached. The following descriptions explain for many
error codes what they mean usually. Some error values have specific
meanings if returned by a certain functions. Such cases are described
in the documentation of those functions.

GPGME uses the libgpg-error library. This allows to share the
error codes with other components of the GnuPG system, and thus pass
error values transparently from the crypto engine, or some helper
application of the crypto engine, to the user. This way no information
is lost. As a consequence, GPGME does not use its own identifiers for
error codes, but uses those provided by libgpg-error. They usually
start with GPG_ERR_.

However, GPGME does provide aliases for the functions defined in
libgpg-error, which might be preferred for name space consistency.

* Menu:

* Error Values:: The error value and what it means.
* Error Sources:: A list of important error sources.
* Error Codes:: A list of important error codes.
* Error Strings:: How to get a descriptive string from a value.

File: gpgme.info, Node: Error Values, Next: Error Sources, Up: Error Handling

5.1 Error Values

-- Data type: gpgme_err_code_t
The gpgme_err_code_t type is an alias for the libgpg-error type gpg_err_code_t. The error code indicates the type of an error, or the reason why an operation failed.

A list of important error codes can be found in the next section.

-- Data type: gpgme_err_source_t
The gpgme_err_source_t type is an alias for the libgpg-error type gpg_err_source_t. The error source has not a precisely defined meaning. Sometimes it is the place where the error happened, sometimes it is the place where an error was encoded into an error value. Usually the error source will give an indication to where to look for the problem. This is not always true, but it is attempted to achieve this goal.

A list of important error sources can be found in the next section.

-- Data type: gpgme_error_t
The gpgme_error_t type is an alias for the libgpg-error type gpg_error_t. An error value like this has always two components, an error code and an error source. Both together form the error value.

Thus, the error value cannot be directly compared against an error code, but the accessor functions described below must be used. However, it is guaranteed that only 0 is used to indicate success (GPG_ERR_NO_ERROR), and that in this case all other parts of the error value are set to 0, too.

Note that in GPGME, the error source is used purely for diagnostical purposes. Only the error code should be checked to test for a certain outcome of a function. The manual only documents the error code part of an error value. The error source is left unspecified and might be anything.

-- Function: static inline gpgme_err_code_t gpgme_err_code
gpgme_error_t ERR)
The static inline function gpgme_err_code returns the
gpgme_err_code_t component of the error value ERR. This function
must be used to extract the error code from an error value in order
to compare it with the GPG_ERR_* error code macros.

-- Function: static inline gpgme_err_source_t gpgme_err_source
      (gpgme_error_t ERR)
The static inline function gpgme_err_source returns the
gpgme_err_source_t component of the error value ERR. This
function must be used to extract the error source from an error
value in order to compare it with the GPG_ERR_SOURCE_* error
source macros.

-- Function: static inline gpgme_error_t gpgme_err_make
      (gpgme_err_source_t SOURCE, gpgme_err_code_t CODE)
The static inline function gpgme_err_make returns the error value
consisting of the error source SOURCE and the error code CODE.

This function can be used in callback functions to construct an
error value to return it to the library.

-- Function: static inline gpgme_error_t gpgme_error
      (gpgme_err_code_t CODE)
The static inline function gpgme_error returns the error value
consisting of the default error source and the error code CODE.

For GPGME applications, the default error source is
GPG_ERR_SOURCE_USER_1. You can define GPGME_ERR_SOURCE_DEFAULT
before including gpgme.h to change this default.

This function can be used in callback functions to construct an
error value to return it to the library.

The libgpg-error library provides error codes for all system error
numbers it knows about. If ERR is an unknown error number, the error
code GPG_ERR_UNKNOWN_ERRNO is used. The following functions can be
used to construct error values from system error numbers.

-- Function: gpgme_error_t gpgme_err_make_from_errno
      (gpgme_err_source_t SOURCE, int ERR)
The function gpgme_err_make_from_errno is like gpgme_err_make,
but it takes a system error like errno instead of a
gpgme_err_code_t error code.

-- Function: gpgme_error_t gpgme_error_from_errno (int ERR)
The function gpgme_error_from_errno is like gpgme_error, but it
takes a system error like errno instead of a gpgme_err_code_t
error code.
Sometimes you might want to map system error numbers to error codes directly, or map an error code representing a system error back to the system error number. The following functions can be used to do that.

-- Function: gpgme_err_code_t gpgme_err_code_from_errno (int ERR)
The function gpgme_err_code_from_errno returns the error code for the system error ERR. If ERR is not a known system error, the function returns GPG_ERR_UNKNOWN_ERRNO.

-- Function: int gpgme_err_code_to_errno (gpgme_err_code_t ERR)
The function gpgme_err_code_to_errno returns the system error for the error code ERR. If ERR is not an error code representing a system error, or if this system error is not defined on this system, the function returns 0.

5.2 Error Sources
================

The library libgpg-error defines an error source for every component of the GnuPG system. The error source part of an error value is not well defined. As such it is mainly useful to improve the diagnostic error message for the user.

If the error code part of an error value is 0, the whole error value will be 0. In this case the error source part is of course GPG_ERR_SOURCE_UNKNOWN.

The list of error sources that might occur in applications using GPGME is:

GPG_ERR_SOURCE_UNKNOWN
The error source is not known. The value of this error source is 0.

GPG_ERR_SOURCE_GPGME
The error source is GPGME itself. This is the default for errors that occur in the GPGME library.

GPG_ERR_SOURCE_GPG
The error source is GnuPG, which is the crypto engine used for the OpenPGP protocol.

GPG_ERR_SOURCE_GPGSM
The error source is GPGSM, which is the crypto engine used for the CMS protocol.
The error source is libgcrypt, which is used by crypto engines to perform cryptographic operations.

The error source is gpg-agent, which is used by crypto engines to perform operations with the secret key.

The error source is pinentry, which is used by gpg-agent to query the passphrase to unlock a secret key.

The error source is the SmartCard Daemon, which is used by gpg-agent to delegate operations with the secret key to a SmartCard.

The error source is libkbx, a library used by the crypto engines to manage local keyrings.

These error sources are not used by any GnuPG component and can be used by other software. For example, applications using GPGME can use them to mark error values coming from callback handlers. Thus GPG_ERR_SOURCE_USER_1 is the default for errors created with gpgme_error and gpgme_error_from_errno, unless you define GPGME_ERR_SOURCE_DEFAULT before including gpgme.h.

The library libgpg-error defines many error values. Most of them are not used by GPGME directly, but might be returned by GPGME because it received them from the crypto engine. The below list only includes such error codes that have a specific meaning in GPGME, or which are so common that you should know about them.

This value indicates the end of a list, buffer or file.
GPG_ERR_NO_ERROR
This value indicates success. The value of this error code is 0.
Also, it is guaranteed that an error value made from the error code 0 will be 0 itself (as a whole). This means that the error source information is lost for this error code, however, as this error code indicates that no error occurred, this is generally not a problem.

GPG_ERR_GENERAL
This value means that something went wrong, but either there is not enough information about the problem to return a more useful error value, or there is no separate error value for this type of problem.

GPG_ERR_ENOMEM
This value means that an out-of-memory condition occurred.

GPG_ERR_E...
System errors are mapped to GPG_ERR_FOO where FOO is the symbol for the system error.

GPG_ERR_INV_VALUE
This value means that some user provided data was out of range.
This can also refer to objects. For example, if an empty gpgme_data_t object was expected, but one containing data was provided, this error value is returned.

GPG_ERR_UNUSABLE_PUBKEY
This value means that some recipients for a message were invalid.

GPG_ERR_UNUSABLE_SECKEY
This value means that some signers were invalid.

GPG_ERR_NO_DATA
This value means that a gpgme_data_t object which was expected to have content was found empty.

GPG_ERR_CONFLICT
This value means that a conflict of some sort occurred.

GPG_ERR_NOT_IMPLEMENTED
This value indicates that the specific function (or operation) is not implemented. This error should never happen. It can only occur if you use certain values or configuration options which do not work, but for which we think that they should work at some later time.

GPG_ERR_DECRYPT_FAILED
This value indicates that a decryption operation was unsuccessful.

GPG_ERR_BAD_PASSPHRASE
This value means that the user did not provide a correct passphrase when requested.

GPG_ERR_CANCELED
This value means that the operation was canceled.

GPG_ERR_INV_ENGINE
This value means that the engine that implements the desired protocol is currently not available. This can either be because the sources were configured to exclude support for this engine, or because the engine is not installed properly.

GPG_ERR_AMBIGUOUS_NAME
This value indicates that a user ID or other specifier did not specify a unique key.

GPG_ERR_WRONG_KEY_USAGE
This value indicates that a key is not used appropriately.

GPG_ERR_CERT_REVOKED
This value indicates that a key signature was revoked.

GPG_ERR_CERT_EXPIRED
This value indicates that a key signature expired.

GPG_ERR_NO_CRL_KNOWN
This value indicates that no certificate revocation list is known for the certificate.

GPG_ERR_NO_POLICY_MATCH
This value indicates that a policy issue occurred.

GPG_ERR_NO_SECKEY
This value indicates that no secret key for the user ID is available.

GPG_ERR_MISSING_CERT
This value indicates that a key could not be imported because the issuer certificate is missing.

GPG_ERR_BAD_CERT_CHAIN
This value indicates that a key could not be imported because its certificate chain is not good, for example it could be too long.

GPG_ERR_UNSUPPORTED_ALGORITHM
This value means a verification failed because the cryptographic algorithm is not supported by the crypto backend.

GPG_ERR_BAD_SIGNATURE
This value means a verification failed because the signature is bad.

GPG_ERR_NO_PUBKEY
This value means a verification failed because the public key is not available.

GPG_ERR_USER_1
GPG_ERR_USER_2
...
GPG_ERR_USER_16
These error codes are not used by any GnuPG component and can be freely used by other software. Applications using GPGME might use them to mark specific errors returned by callback handlers if no suitable error codes (including the system errors) for these errors exist already.

File: gpgme.info, Node: Error Strings, Prev: Error Codes, Up: Error Handling

5.4 Error Strings
=================

-- Function: const char * gpgme_strerror (gpgme_error_t ERR)
The function gpgme_strerror returns a pointer to a statically allocated string containing a description of the error code contained in the error value ERR. This string can be used to output a diagnostic message to the user.

This function is not thread safe. Use gpgme_strerror_r in multi-threaded programs.

-- Function: int gpgme_strerror_r (gpgme_error_t ERR, char *BUF, size_t BUFLEN)
The function gpgme_strerror_r returns the error string for ERR in the user-supplied buffer BUF of size BUFLEN. This function is, in contrast to gpgme_strerror, thread-safe if a thread-safe strerror_r function is provided by the system. If the function succeeds, 0 is returned and BUF contains the string describing the error. If the buffer was not large enough, ERANGE is returned and BUF contains as much of the beginning of the error string as fits into the buffer.

-- Function: const char * gpgme_strsource (gpgme_error_t ERR)
The function gpgme_strerror returns a pointer to a statically allocated string containing a description of the error source contained in the error value ERR. This string can be used to output a diagnostic message to the user.

The following example illustrates the use of gpgme_strerror:

```c

gpgme_ctx_t ctx;
gpgme_error_t err = gpgme_new (&ctx);
if (err)
{
    fprintf (stderr, "%s: creating GpgME context failed: %s: %s\n",
            argv[0], gpgme_strsource (err), gpgme_strerror (err));
    exit (1);
}
```

File: gpgme.info, Node: Exchanging Data, Next: Contexts, Prev: Error Handling, Up: Top

6 Exchanging Data

A lot of data has to be exchanged between the user and the crypto engine, like plaintext messages, ciphertext, signatures and information about the keys. The technical details about exchanging the data information are completely abstracted by GPGME. The user provides and receives the data via gpgme_data_t objects, regardless of the communication protocol between GPGME and the crypto engine in use.

-- Data type: gpgme_data_t

The gpgme_data_t type is a handle for a container for generic data, which is used by GPGME to exchange data with the user.

gpgme_data_t objects do not provide notifications on events. It is assumed that read and write operations are blocking until data is available. If this is undesirable, the application must ensure that all GPGME data operations always have data available, for example by using memory buffers or files rather than pipes or sockets. This might be relevant, for example, if the external event loop mechanism is used.

-- Data type: gpgme_off_t

\textbf{SINCE:} 1.4.1

On POSIX platforms the gpgme_off_t type is an alias for off_t; it may be used interchangeable. On Windows platforms gpgme_off_t is defined as a long (i.e. 32 bit) for 32 bit Windows and as a 64 bit signed integer for 64 bit Windows.
The gpgme_ssize_t type is an alias for ssize_t. It has only been introduced to overcome portability problems pertaining to the declaration of ssize_t by different toolchains.

6.1 Creating Data Buffers

Data objects can be based on memory, files, or callback functions provided by the user. Not all operations are supported by all objects.

6.1.1 Memory Based Data Buffers

Memory based data objects store all data in allocated memory. This is convenient, but only practical for an amount of data that is a fraction of the available physical memory. The data has to be copied from its source and to its destination, which can often be avoided by using one of the other data object

-- Function: gpgme_error_t gpgme_data_new (gpgme_data_t *DH)

The function gpgme_data_new creates a new gpgme_data_t object and returns a handle for it in DH. The data object is memory based and initially empty.

The function returns the error code GPG_ERR_NO_ERROR if the data object was successfully created, GPG_ERR_INV_VALUE if DH is not a valid pointer, and GPG_ERR_ENOMEM if not enough memory is available.
-- Function: gpgme_error_t gpgme_data_new_from_mem (gpgme_data_t *DH,
            const char *BUFFER, size_t SIZE, int COPY)
    The function gpgme_data_new_from_mem creates a new gpgme_data_t
    object and fills it with SIZE bytes starting from BUFFER.

    If COPY is not zero, a private copy of the data is made. If COPY
    is zero, the data is taken from the specified buffer as needed, and
    the user has to ensure that the buffer remains valid for the whole
    life span of the data object.

    The function returns the error code GPG_ERR_NO_ERROR if the data
    object was successfully created, GPG_ERR_INV_VALUE if DH or
    BUFFER is not a valid pointer, and GPG_ERR_ENOMEM if not enough
    memory is available.

-- Function: gpgme_error_t gpgme_data_new_from_file (gpgme_data_t *DH,
            const char *FILENAME, int COPY)
    The function gpgme_data_new_from_file creates a new
    gpgme_data_t object and fills it with the content of the file
    FILENAME.

    If COPY is not zero, the whole file is read in at initialization
    time and the file is not used anymore after that. This is the only
    mode supported currently. Later, a value of zero for COPY might
    cause all reads to be delayed until the data is needed, but this is
    not yet implemented.

    The function returns the error code GPG_ERR_NO_ERROR if the data
    object was successfully created, GPG_ERR_INV_VALUE if DH or
    FILENAME is not a valid pointer, GPG_ERR_NOT_IMPLEMENTED if CODE
    is zero, and GPG_ERR_ENOMEM if not enough memory is available.

-- Function: gpgme_error_t gpgme_data_new_from_filepart
            (gpgme_data_t *DH, const char *FILENAME, FILE *FP,
            off_t OFFSET, size_t LENGTH)
    The function gpgme_data_new_from_filepart creates a new
    gpgme_data_t object and fills it with a part of the file
    specified by FILENAME or FP.

    Exactly one of FILENAME and FP must be non-zero, the other must be
    zero. The argument that is not zero specifies the file from which
    LENGTH bytes are read into the data object, starting from OFFSET.

    The function returns the error code GPG_ERR_NO_ERROR if the data
    object was successfully created, GPG_ERR_INV_VALUE if DH and
    exactly one of FILENAME and FP is not a valid pointer, and
    GPG_ERR_ENOMEM if not enough memory is available.
6.1.2 File Based Data Buffers

File based data objects operate directly on file descriptors or streams. Only a small amount of data is stored in core at any time, so the size of the data objects is not limited by GPGME.

-- Function: gpgme_error_t gpgme_data_new_from_fd (gpgme_data_t *DH, int FD)

The function gpgme_data_new_from_fd creates a new gpgme_data_t object and uses the file descriptor FD to read from (if used as an input data object) and write to (if used as an output data object).

When using the data object as an input buffer, the function might read a bit more from the file descriptor than is actually needed by the crypto engine in the desired operation because of internal buffering.

Note that GPGME assumes that the file descriptor is set to blocking mode. Errors during I/O operations, except for EINTR, are usually fatal for crypto operations.

The function returns the error code GPG_ERR_NO_ERROR if the data object was successfully created, and GPG_ERR_ENOMEM if not enough memory is available.

-- Function: gpgme_error_t gpgme_data_new_from_stream (gpgme_data_t *DH, FILE *STREAM)

The function gpgme_data_new_from_stream creates a new gpgme_data_t object and uses the I/O stream STREAM to read from (if used as an input data object) and write to (if used as an output data object).

When using the data object as an input buffer, the function might read a bit more from the stream than is actually needed by the crypto engine in the desired operation because of internal buffering.

Note that GPGME assumes that the stream is in blocking mode. Errors during I/O operations, except for EINTR, are usually fatal for crypto operations.

The function returns the error code GPG_ERR_NO_ERROR if the data object was successfully created, and GPG_ERR_ENOMEM if not enough memory is available.
memory is available.

-- Function: gpgme_error_t gpgme_data_new_from_estream
    (gpgme_data_t *DH, gpgrt_stream_t STREAM)
The function gpgme_data_new_from_estream creates a new
gpgme_data_t object and uses the gpgrt stream STREAM to read from
(if used as an input data object) and write to (if used as an
output data object).

When using the data object as an input buffer, the function might
read a bit more from the stream than is actually needed by the
crypto engine in the desired operation because of internal
buffering.

Note that GPGME assumes that the stream is in blocking mode.
Errors during I/O operations, except for EINTR, are usually fatal
for crypto operations.

The function returns the error code GPG_ERR_NO_ERROR if the data
object was successfully created, and GPG_ERR_ENOMEM if not enough
memory is available.

File: gpgme.info, Node: Callback Based Data Buffers, Prev: File Based Data Buffers, Up: Creating Data Buffers

6.1.3 Callback Based Data Buffers
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If neither memory nor file based data objects are a good fit for your
application, you can implement the functions a data object provides
yourself and create a data object from these callback functions.

-- Data type: ssize_t (*gpgme_data_read_cb_t) (void *HANDLE,
    void *BUFFER, size_t SIZE)
The gpgme_data_read_cb_t type is the type of functions which
GPGME calls if it wants to read data from a user-implemented data
object. The function should read up to SIZE bytes from the current
read position into the space starting at BUFFER. The HANDLE is
provided by the user at data object creation time.

Note that GPGME assumes that the read blocks until data is
available. Errors during I/O operations, except for EINTR, are
usually fatal for crypto operations.

The function should return the number of bytes read, 0 on EOF, and
-1 on error. If an error occurs, ERRNO should be set to describe
the type of the error.
-- Data type: ssize_t (*gpgme_data_write_cb_t) (void *HANDLE, const void *BUFFER, size_t SIZE)

The gpgme_data_write_cb_t type is the type of functions which GPGME calls if it wants to write data to a user-implemented data object. The function should write up to SIZE bytes to the current write position from the space starting at BUFFER. The HANDLE is provided by the user at data object creation time.

Note that GPGME assumes that the write blocks until data is available. Errors during I/O operations, except for EINTR, are usually fatal for crypto operations.

The function should return the number of bytes written, and -1 on error. If an error occurs, ERRNO should be set to describe the type of the error.

-- Data type: off_t (*gpgme_data_seek_cb_t) (void *HANDLE, off_t OFFSET, int WHENCE)

The gpgme_data_seek_cb_t type is the type of functions which GPGME calls if it wants to change the current read/write position in a user-implemented data object, just like the lseek function.

The function should return the new read/write position, and -1 on error. If an error occurs, ERRNO should be set to describe the type of the error.

-- Data type: void (*gpgme_data_release_cb_t) (void *HANDLE)

The gpgme_data_release_cb_t type is the type of functions which GPGME calls if it wants to destroy a user-implemented data object. The HANDLE is provided by the user at data object creation time.

-- Data type: struct gpgme_data_cbs

This structure is used to store the data callback interface functions described above. It has the following members:

gpgme_data_read_cb_t read
This is the function called by GPGME to read data from the data object. It is only required for input data object.

gpgme_data_write_cb_t write
This is the function called by GPGME to write data to the data object. It is only required for output data object.

gpgme_data_seek_cb_t seek
This is the function called by GPGME to change the current read/write pointer in the data object (if available). It is optional.
gpgme_data_release_cb_t release
This is the function called by GPGME to release a data object.
It is optional.

-- Function: gpgme_error_t gpgme_data_new_from_cbs (gpgme_data_t *DH,
gpgme_data_cbs_t CBS, void *HANDLE)
The function gpgme_data_new_from_cbs creates a new gpgme_data_t
object and uses the user-provided callback functions to operate on
the data object.

The handle HANDLE is passed as first argument to the callback
functions. This can be used to identify this data object.

The function returns the error code GPG_ERR_NO_ERROR if the data
object was successfully created, and GPG_ERR_ENOMEM if not enough
memory is available.

File: gpgme.info, Node: Destroying Data Buffers, Next: Manipulating Data Buffers, Prev: Creating Data Buffers,
Up: Exchanging Data

6.2 Destroying Data Buffers
=================================

-- Function: void gpgme_data_release (gpgme_data_t DH)
The function gpgme_data_release destroys the data object with the
handle DH. It releases all associated resources that were not
provided by the user in the first place.

-- Function: char * gpgme_data_release_and_get_mem (gpgme_data_t DH,
size_t *LENGTH)
The function gpgme_data_release_and_get_mem is like
gpgme_data_release, except that it returns the data buffer and
its length that was provided by the object.

The user has to release the buffer with gpgme_free. In case the
user provided the data buffer in non-copy mode, a copy will be made
for this purpose.

In case an error returns, or there is no suitable data buffer that
can be returned to the user, the function will return NULL. In
any case, the data object DH is destroyed.

-- Function: void gpgme_free (void *BUFFER)
SINCE: 1.1.1

The function gpgme_free releases the memory returned by
gpgme_data_release_and_get_mem and gpgme_pubkey_algo_string.
It should be used instead of the system libraries free function in case different allocators are used by a program. This is often the case if gpgme is used under Windows as a DLL.

File: gpgme.info, Node: Manipulating Data Buffers, Prev: Destroying Data Buffers, Up: Exchanging Data

6.3 Manipulating Data Buffers
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Data buffers contain data and meta-data. The following operations can be used to manipulate both.

* Menu:

* Data Buffer I/O Operations:: I/O operations on data buffers.
* Data Buffer Meta-Data:: Meta-data manipulation of data buffers.
* Data Buffer Convenience:: Convenience function for data buffers.

File: gpgme.info, Node: Data Buffer I/O Operations, Next: Data Buffer Meta-Data, Up: Manipulating Data Buffers

6.3.1 Data Buffer I/O Operations
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-- Function: ssize_t gpgme_data_read (gpgme_data_t DH, void *BUFFER, size_t LENGTH)
The function gpgme_data_read reads up to LENGTH bytes from the data object with the handle DH into the space starting at BUFFER.

If no error occurs, the actual amount read is returned. If the end of the data object is reached, the function returns 0.

In all other cases, the function returns -1 and sets ERRNO.

-- Function: ssize_t gpgme_data_write (gpgme_data_t DH, const void *BUFFER, size_t SIZE)
The function gpgme_data_write writes up to SIZE bytes starting from BUFFER into the data object with the handle DH at the current write position.

The function returns the number of bytes actually written, or -1 if an error occurs. If an error occurs, ERRNO is set.

-- Function: off_t gpgme_data_seek (gpgme_data_t DH, off_t OFFSET, int WHENCE)
The function gpgme_data_seek changes the current read/write
position.

The WHENCE argument specifies how the OFFSET should be interpreted. It must be one of the following symbolic constants:

SEEK_SET
   Specifies that OFFSET is a count of characters from the beginning of the data object.

SEEK_CUR
   Specifies that OFFSET is a count of characters from the current file position. This count may be positive or negative.

SEEK_END
   Specifies that OFFSET is a count of characters from the end of the data object. A negative count specifies a position within the current extent of the data object; a positive count specifies a position past the current end. If you set the position past the current end, and actually write data, you will extend the data object with zeros up to that position.

If successful, the function returns the resulting file position, measured in bytes from the beginning of the data object. You can use this feature together with SEEK_CUR to read the current read/write position.

If the function fails, -1 is returned and ERRNO is set.

File: gpgme.info, Node: Data Buffer Meta-Data, Next: Data Buffer Convenience, Prev: Data Buffer I/O Operations, Up: Manipulating Data Buffers

6.3.2 Data Buffer Meta-Data
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-- Function: char * gpgme_data_get_file_name (gpgme_data_t DH)
   SINCE: 1.1.0

The function gpgme_data_get_file_name returns a pointer to a string containing the file name associated with the data object. The file name will be stored in the output when encrypting or signing the data and will be returned to the user when decrypting or verifying the output data.

If no error occurs, the string containing the file name is returned. Otherwise, NULL will be returned.
-- Function: gpgme_error_t gpgme_data_set_file_name (gpgme_data_t DH,
    const char *FILE_NAME)

SINCE: 1.1.0

The function gpgme_data_set_file_name sets the file name
associated with the data object. The file name will be stored in
the output when encrypting or signing the data and will be returned
to the user when decrypting or verifying the output data.

The function returns the error code GPG_ERR_INV_VALUE if DH is
not a valid pointer and GPG_ERR_ENOMEM if not enough memory is
available.

-- Data type: enum gpgme_data_encoding_t

The gpgme_data_encoding_t type specifies the encoding of a
gpgme_data_t object. For input data objects, the encoding is
useful to give the backend a hint on the type of data. For output
data objects, the encoding can specify the output data format on
certain operations. Please note that not all backends support all
encodings on all operations. The following data types are
available:

GPGME_DATA_ENCODING_NONE
    This specifies that the encoding is not known. This is the
default for a new data object. The backend will try its best
to detect the encoding automatically.

GPGME_DATA_ENCODING_BINARY
    This specifies that the data is encoding in binary form; i.e.
    there is no special encoding.

GPGME_DATA_ENCODING_BASE64
    This specifies that the data is encoded using the Base-64
    encoding scheme as used by MIME and other protocols.

GPGME_DATA_ENCODING_ARMOR
    This specifies that the data is encoded in an armored form as
    used by OpenPGP and PEM.

GPGME_DATA_ENCODING_MIME
    SINCE: 1.7.0

    This specifies that the data is encoded as a MIME part.

GPGME_DATA_ENCODING_URL
    SINCE: 1.2.0

    The data is a list of linefeed delimited URLs. This is only
useful with gpgme_op_import.

GPGME_DATA_ENCODING_URL0
SINCE: 1.2.0

The data is a list of binary zero delimited URLs. This is only useful with gpgme_op_import.

GPGME_DATA_ENCODING_URLESC
SINCE: 1.2.0

The data is a list of linefeed delimited URLs with all control and space characters percent escaped. This mode is is not yet implemented.

-- Function: gpgme_data_encoding_t gpgme_data_get_encoding
                  (gpgme_data_t DH)

The function gpgme_data_get_encoding returns the encoding of the data object with the handle DH. If DH is not a valid pointer (e.g. NULL) GPGME_DATA_ENCODING_NONE is returned.

-- Function: gpgme_error_t gpgme_data_set_encoding
                  (gpgme_data_t DH, gpgme_data_encoding_t ENC)

The function gpgme_data_set_encoding changes the encoding of the data object with the handle DH to ENC.

-- Function: gpgme_error_t gpgme_data_set_flag (gpgme_data_t DH, const char *NAME, const char *VALUE)

SINCE: 1.7.0

Some minor properties of the data object can be controlled with flags set by this function. The properties are identified by the following values for NAME:

size-hint
The value is a decimal number with the length gpgme shall assume for this data object. This is useful if the data is provided by callbacks or via file descriptors but the applications knows the total size of the data. If this is set the OpenPGP engine may use this to decide on buffer allocation strategies and to provide a total value for its progress information.

This function returns 0 on success.
6.3.3 Data Buffer Convenience Functions
---------------------------------------

-- Data type: enum gpgme_data_type_t
   SINCE: 1.4.3

   The gpgme_data_type_t type is used to return the detected type of
   the content of a data buffer.

   GPGME_DATA_TYPE_INVALID
       This is returned by gpgme_data_identify if it was not possible to
       identify the data. Reasons for this might be a non-seekable stream
       or a memory problem. The value is 0.

   GPGME_DATA_TYPE_UNKNOWN
       The type of the data is not known.

   GPGME_DATA_TYPE_PGP_SIGNED
       The data is an OpenPGP signed message. This may be a binary
       signature, a detached one or a cleartext signature.

   GPGME_DATA_TYPE_PGP_ENCRYPTED
       SINCE: 1.7.0

       The data is an OpenPGP encrypted message.

   GPGME_DATA_TYPE_PGP_SIGNATURE
       SINCE: 1.7.0

       The data is an OpenPGP detached signature.

   GPGME_DATA_TYPE_PGP_OTHER
       This is a generic OpenPGP message. In most cases this will be
       encrypted data.

   GPGME_DATA_TYPE_PGP_KEY
       This is an OpenPGP key (private or public).

   GPGME_DATA_TYPE_CMS_SIGNED
       This is a CMS signed message.

   GPGME_DATA_TYPE_CMS_ENCRYPTED
       This is a CMS encrypted (enveloped data) message.

   GPGME_DATA_TYPE_CMS_OTHER
       This is used for other CMS message types.

   GPGME_DATA_TYPE_X509_CERT
       The data is a X.509 certificate

   GPGME_DATA_TYPE_PKCS12
       The data is a PKCS#12 message. This is commonly used to exchange
       private keys for X.509.

-- Function: gpgme_data_type_t gpgme_data_identify (gpgme_data_t DH)
   SINCE: 1.4.3

   The function gpgme_data_identify returns the type of the data
with the handle DH. If it is not possible to perform the identification, the function returns zero (GPGME_DATA_TYPE_INVALID). Note that depending on how the data object has been created the identification may not be possible or the data object may change its internal state (file pointer moved). For file or memory based data object, the state should not change.


7 Contexts
**********

All cryptographic operations in GPGME are performed within a context, which contains the internal state of the operation as well as configuration parameters. By using several contexts you can run several cryptographic operations in parallel, with different configuration.

-- Data type: gpgme_ctx_t

The gpgme_ctx_t type is a handle for a GPGME context, which is used to hold the configuration, status and result of cryptographic operations.

* Menu:

* Creating Contexts:: Creating new GPGME contexts.
* Destroying Contexts:: Releasing GPGME contexts.
* Result Management:: Managing the result of crypto operations.
* Context Attributes:: Setting properties of a context.
* Key Management:: Managing keys with GPGME.
* Trust Item Management:: Managing trust items with GPGME.
* Crypto Operations:: Using a context for cryptography.
* Miscellaneous:: Miscellaneous operations
* Run Control:: Controlling how operations are run.

File: gpgme.info, Node: Creating Contexts, Next: Destroying Contexts, Up: Contexts

7.1 Creating Contexts
----------------------

-- Function: gpgme_error_t gpgme_new (gpgme_ctx_t *CTX)

The function gpgme_new creates a new gpgme_ctx_t object and returns a handle for it in CTX.

The function returns the error code GPG_ERR_NO_ERROR if the context was successfully created, GPG_ERR_INV_VALUE if CTX is not a valid pointer, and GPG_ERR_ENOMEM if not enough memory is
available. Also, it returns GPG_ERR_NOT_OPERATIONAL if

gpgme_check_version was not called to initialize GPGME, and
GPG_ERR_SELFTEST_FAILED if a selftest failed. Currently, the
only selftest is for Windows MingW32 targets to see if
-mms-bitfields was used (as required).

7.2 Destroying Contexts

-- Function: void gpgme_release (gpgme_ctx_t CTX)

The function gpgme_release destroys the context with the handle
CTX and releases all associated resources.

7.3 Result Management

The detailed result of an operation is returned in operation-specific
structures such as gpgme_decrypt_result_t. The corresponding
retrieval functions such as gpgme_op_decrypt_result provide static
access to the results after an operation completes. Those structures
shall be considered read-only and an application must not allocate such
a structure on its own. The following interfaces make it possible to
detach a result structure from its associated context and give it a
lifetime beyond that of the current operation or context.

-- Function: void gpgme_result_ref (void *RESULT)

SINCE: 1.2.0

The function gpgme_result_ref acquires an additional reference
for the result RESULT, which may be of any type gpgme_*_result_t.
As long as the user holds a reference, the result structure is
guaranteed to be valid and unmodified.

-- Function: void gpgme_result_unref (void *RESULT)

SINCE: 1.2.0

The function gpgme_result_unref releases a reference for the
result RESULT. If this was the last reference, the result
structure will be destroyed and all resources associated to it will
be released.

Note that a context may hold its own references to result structures,
typically until the context is destroyed or the next operation is started. In fact, these references are accessed through the gpgme_op_*_result functions.

File: gpgme.info, Node: Context Attributes, Next: Key Management, Prev: Result Management, Up: Contexts

7.4 Context Attributes
=================================

* Menu:

* Protocol Selection:: Selecting the protocol used by a context.
* Crypto Engine:: Configuring the crypto engine.
* Setting the Sender:: How to tell the engine the sender.
* ASCII Armor:: Requesting ASCII armored output.
* Text Mode:: Choosing canonical text mode.
* Offline Mode:: Choosing offline mode.
* Pinentry Mode:: Choosing the pinentry mode.
* Included Certificates:: Including a number of certificates.
* Key Listing Mode:: Selecting key listing mode.
* Passphrase Callback:: Getting the passphrase from the user.
* Progress Meter Callback:: Being informed about the progress.
* Status Message Callback:: Status messages received from gpg.
* Context Flags:: Additional flags for a context.
* Locale:: Setting the locale of a context.
* Additional Logs:: Additional logs of a context.


7.4.1 Protocol Selection
-------------------------------

-- Function: gpgme_error_t gpgme_set_protocol (gpgme_ctx_t CTX, gpgme_protocol_t PROTO)
The function gpgme_set_protocol sets the protocol used within the context CTX to PROTO. All crypto operations will be performed by the crypto engine configured for that protocol. *Note Protocols and Engines:::

Setting the protocol with gpgme_set_protocol does intentionally not check if the crypto engine for that protocol is available and installed correctly. *Note Engine Version Check:::

The function returns the error code GPG_ERR_NO_ERROR if the protocol could be set successfully, and GPG_ERR_INV_VALUE if PROTOCOL is not a valid protocol.
-- Function: gpgme_proto_t gpgme_get_protocol (gpgme_ctx_t CTX)

The function gpgme_get_protocol retrieves the protocol currently
use with the context CTX.

Attributes

7.4.2 Crypto Engine

---------------

The following functions can be used to set and retrieve the
configuration of the crypto engines of a specific context. The default
can also be retrieved without any particular context. *Note Engine
Information::: The default can also be changed globally. *Note Engine
Configuration:::

-- Function: gpgme_engine_info_t gpgme_ctx_get_engine_info
                (gpgme_ctx_t CTX)

SINCE: 1.1.0

The function gpgme_ctx_get_engine_info returns a linked list of
engine info structures. Each info structure describes the
configuration of one configured backend, as used by the context
CTX.

The result is valid until the next invocation of
gpgme_ctx_set_engine_info for this particular context.

This function can not fail.

-- Function: gpgme_error_t gpgme_ctx_set_engine_info (gpgme_ctx_t CTX,
        gpgme_proto_t PROTO, const char *FILE_NAME,
        const char *HOME_DIR)

SINCE: 1.1.0

The function gpgme_ctx_set_engine_info changes the configuration
of the crypto engine implementing the protocol PROTO for the
context CTX.

FILE_NAME is the file name of the executable program implementing
this protocol, and HOME_DIR is the directory name of the
configuration directory for this crypto engine. If HOME_DIR is
NULL, the engines default will be used.

Currently this function must be used before starting the first
crypto operation. It is unspecified if and when the changes will
take effect if the function is called after starting the first
operation on the context CTX.

This function returns the error code GPG_ERR_NO_ERROR if
successful, or an error code on failure.

Some engines can make use of the senders address, for example to figure
out the best user id in certain trust models. For verification and
signing of mails, it is thus suggested to let the engine know the sender
("From:" address. GPGME provides two functions to accomplish that.
Note that the esoteric use of multiple "From:" addresses is not
supported.

-- Function: gpgme_error_t gpgme_set_sender (gpgme_ctx_t CTX,
        int ADDRESS)

SINCE: 1.8.0

The function gpgme_set_sender specifies the sender address for
use in sign and verify operations. ADDRESS is expected to be the
addr-spec part of an address but my also be a complete mailbox
address, in which case this function extracts the addr-spec from
it. Using NULL for ADDRESS clears the sender address.

The function returns 0 on success or an error code on failure. The
most likely failure is that no valid addr-spec was found in
ADDRESS.

-- Function: const char * gpgme_get_sender (gpgme_ctx_t CTX)

SINCE: 1.8.0

The function gpgme_get_sender returns the current sender address
from the context, or NULL if none was set. The returned value is
valid as long as the CTX is valid and gpgme_set_sender has not
been called again.
-- Function: void gpgme_set_armor (gpgme_ctx_t CTX, int YES)
The function gpgme_set_armor specifies if the output should be
ASCII armored. By default, output is not ASCII armored.

ASCII armored output is disabled if YES is zero, and enabled
otherwise.

-- Function: int gpgme_get_armor (gpgme_ctx_t CTX)
The function gpgme_get_armor returns 1 if the output is ASCII
armored, and 0 if it is not, or if CTX is not a valid pointer.


7.4.5 Text Mode
--------------

-- Function: void gpgme_set_textmode (gpgme_ctx_t CTX, int YES)
The function gpgme_set_textmode specifies if canonical text mode
should be used. By default, text mode is not used.

Text mode is for example used for the RFC2015 signatures; note that
the updated RFC 3156 mandates that the mail user agent does some
preparations so that text mode is not needed anymore.

This option is only relevant to the OpenPGP crypto engine, and
ignored by all other engines.

Canonical text mode is disabled if YES is zero, and enabled
otherwise.

-- Function: int gpgme_get_textmode (gpgme_ctx_t CTX)
The function gpgme_get_textmode returns 1 if canonical text mode
is enabled, and 0 if it is not, or if CTX is not a valid pointer.


7.4.6 Offline Mode
----------------

-- Function: void gpgme_set_offline (gpgme_ctx_t CTX, int YES)
SINCE: 1.6.0

The function gpgme_set_offline specifies if offline mode should
be used. Offline mode is disabled if YES is zero, and enabled
otherwise. By default, offline mode is disabled.
The details of the offline mode depend on the used protocol and its backend engine. It may eventually be extended to be more stricter and for example completely disable the use of Dirmngr for any engine.

For the CMS protocol the offline mode specifies whether Dirmngr shall be used to do additional validation that might require connecting external services (e.g. CRL / OCSP checks). Here the offline mode only affects the keylist mode GPGME_KEYLIST_MODE_VALIDATE.

For the OpenPGP protocol offline mode entirely disables the use of the Dirmngr and will thus guarantee that no network connections are done as part of an operation on this context. It has only an effect with GnuPG versions 2.1.23 or later.

For all other protocols the offline mode is currently ignored.

--- Function: int gpgme_get_offline (gpgme_ctx_t CTX)
SINCE: 1.6.0

The function gpgme_get_offline returns 1 if offline mode is enabled, and 0 if it is not, or if CTX is not a valid pointer.

File: gpgme.info, Node: Pinentry Mode, Next: Included Certificates, Prev: Offline Mode, Up: Context Attributes

7.4.7 Pinentry Mode

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--- Function: gpgme_error_t gpgme_set_pinentry_mode (gpgme_ctx_t CTX,
gpgme_pinentry_mode_t MODE)
SINCE: 1.4.0

The function gpgme_set_pinentry_mode specifies the pinentry mode to be used.

For GnuPG >= 2.1 this option is required to be set to GPGME_PINENTRY_MODE_LOOPBACK to enable the passphrase callback mechanism in GPGME through gpgme_set_passphrase_cb.

--- Function: gpgme_pinentry_mode_t gpgme_get_pinentry_mode (gpgme_ctx_t CTX)
SINCE: 1.4.0

The function gpgme_get_pinentry_mode returns the mode set for the
-- Data type: enum gpgme_pinentry_mode_t
SINCE: 1.4.0

The gpgme_pinentry_mode_t type specifies the set of possible pinentry modes that are supported by GPGME if GnuPG >= 2.1 is used. The following modes are supported:

GPGME_PINENTRY_MODE_DEFAULT
SINCE: 1.4.0

Use the default of the agent, which is ask.

GPGME_PINENTRY_MODE_ASK
SINCE: 1.4.0

Force the use of the Pinentry.

GPGME_PINENTRY_MODE_CANCEL
SINCE: 1.4.0

Emulate use of Pinentrys cancel button.

GPGME_PINENTRY_MODE_ERROR
SINCE: 1.4.0

Return a Pinentry error No Pinentry.

GPGME_PINENTRY_MODE_LOOPBACK
SINCE: 1.4.0

Redirect Pinentry queries to the caller. This enables the use of gpgme_set_passphrase_cb because pinentry queries are redirected to gpgme.

Note: For 2.1.0 - 2.1.12 this mode requires allow-loopback-pinentry to be enabled in the gpg-agent.conf or an agent started with that option.

File: gpgme.info, Node: Included Certificates, Next: Key Listing Mode, Prev: Pinentry Mode, Up: Context Attributes

7.4.8 Included Certificates
--------------------------

-- Function: void gpgme_set_include_certs (gpgme_ctx_t CTX,
The function `gpgme_set_include_certs` specifies how many certificates should be included in an S/MIME signed message. By default, only the sender's certificate is included. The possible values of `NR_OF_CERTS` are:

**GPGME_INCLUDE_CERTS_DEFAULT**

Since: 1.0.3

-2
   Include all certificates except the root certificate.

-1
   Include all certificates.

0
   Include no certificates.

1
   Include the sender's certificate only.

n
   Include the first n certificates of the certificates path, starting from the sender's certificate. The number n must be positive.

Values of `NR_OF_CERTS` smaller than -2 are undefined.

This option is only relevant to the CMS crypto engine, and ignored by all other engines.

-- Function: int gpgme_get_include_certs (gpgme_ctx_t CTX)

The function `gpgme_get_include_certs` returns the number of certificates to include into an S/MIME signed message.

File: gpgme.info, Node: Key Listing Mode, Next: Passphrase Callback, Prev: Included Certificates, Up: Context Attributes

7.4.9 Key Listing Mode

------------------------

-- Function: gpgme_error_t gpgme_set_keylist_mode (gpgme_ctx_t CTX, gpgme_keylist_mode_t MODE)

The function `gpgme_set_keylist_mode` changes the default behaviour of the key listing functions. The value in MODE is a bitwise-or combination of one or multiple of the following bit values:

**GPGME_KEYLIST_MODE_LOCAL**

The GPGME_KEYLIST_MODE_LOCAL symbol specifies that the local
keyring should be searched for keys in the keylisting operation. This is the default.

Using only this option results in a --list-keys.

GPGME_KEYLIST_MODE_EXTERN
The GPGME_KEYLIST_MODE_EXTERN symbol specifies that an external source should be searched for keys in the keylisting operation. The type of external source is dependent on the crypto engine used and whether it is combined with GPGME_KEYLIST_MODE_LOCAL. For example, it can be a remote keys server or LDAP certificate server.

Using only this option results in a --search-keys for GPGME_PROTOCOL_OpenPGP and something similar to --list-external-keys for GPGME_PROTOCOL_CMS.

GPGME_KEYLIST_MODE LOCATE
This is a shortcut for the combination of GPGME_KEYLIST_MODE_LOCAL and GPGME_KEYLIST_MODE_EXTERN, which results in a --locate-keys for GPGME_PROTOCOL_OpenPGP.

GPGME_KEYLIST_MODE_SIGS
The GPGME_KEYLIST_MODE_SIGS symbol specifies that the key signatures should be included in the listed keys.

GPGME_KEYLIST_MODE_SIG NOTATIONS
SINCE: 1.1.1

The GPGME_KEYLIST_MODE_SIG_NOTATIONS symbol specifies that the signature notations on key signatures should be included in the listed keys. This only works if GPGME_KEYLIST_MODE_SIGS is also enabled.

GPGME_KEYLIST_MODE WITH TOFU
SINCE: 1.7.0

The GPGME_KEYLIST_MODE_WITH_TOFU symbol specifies that information pertaining to the TOFU trust model should be included in the listed keys.

GPGME_KEYLIST_MODE WITH SECRET
SINCE: 1.5.1

The GPGME_KEYLIST_MODE_WITH_SECRET returns information about the presence of a corresponding secret key in a public key listing. A public key listing with this mode is slower than a
standard listing but can be used instead of a second run to list the secret keys. This is only supported for GnuPG versions >= 2.1.

GPGME_KEYLIST_MODE_EPHEMERAL
SINCE: 1.2.0

The GPGME_KEYLIST_MODE_EPHEMERAL symbol specifies that keys flagged as ephemeral are included in the listing.

GPGME_KEYLIST_MODE_VALIDATE
SINCE: 0.4.5

The GPGME_KEYLIST_MODE_VALIDATE symbol specifies that the backend should do key or certificate validation and not just get the validity information from an internal cache. This might be an expensive operation and is in general not useful. Currently only implemented for the S/MIME backend and ignored for other backends.

At least one of GPGME_KEYLIST_MODE_LOCAL and GPGME_KEYLIST_MODE_EXTERN must be specified. For future binary compatibility, you should get the current mode with gpgme_get_keylist_mode and modify it by setting or clearing the appropriate bits, and then using that calculated value in the gpgme_set_keylisting_mode operation. This will leave all other bits in the mode value intact (in particular those that are not used in the current version of the library).

The function returns the error code GPG_ERR_NO_ERROR if the mode could be set correctly, and GPG_ERR_INV_VALUE if CTX is not a valid pointer or MODE is not a valid mode.

-- Function: gpgme_keylist_mode_t gpgme_get_keylist_mode
     (gpgme_ctx_t CTX)
The function gpgme_get_keylist_mode returns the current key listing mode of the context CTX. This value can then be modified and used in a subsequent gpgme_set_keylist_mode operation to only affect the desired bits (and leave all others intact).

The function returns 0 if CTX is not a valid pointer, and the current mode otherwise. Note that 0 is not a valid mode value.
-- Data type: gpgme_error_t (*gpgme_passphrase_cb_t)(void *HOOK, const
          char *UID_HINT, const char *PASSPHRASE_INFO, int PREV_WAS_BAD,
          int FD)

The gpgme_passphrase_cb_t type is the type of functions usable as
passphrase callback function.

The argument UID_HINT might contain a string that gives an
indication for which user ID the passphrase is required. If this
is not available, or not applicable (in the case of symmetric
encryption, for example), UID_HINT will be NULL.

The argument PASSPHRASE_INFO, if not NULL, will give further
information about the context in which the passphrase is required.
This information is engine and operation specific.

If this is the repeated attempt to get the passphrase, because
previous attempts failed, then PREV_WAS_BAD is 1, otherwise it will
be 0.

The user must write the passphrase, followed by a newline
character, to the file descriptor FD. The function
gpgme_io_writen should be used for the write operation. Note
that if the user returns 0 to indicate success, the user must at
least write a newline character before returning from the callback.

If an error occurs, return the corresponding gpgme_error_t value.
You can use the error code GPG_ERR_CANCELED to abort the
operation. Otherwise, return 0.

Note: The passphrase_cb only works with GnuPG 1.x and 2.1.x and not
with the 2.0.x series. See gpgme_set_pinentry_mode for more
details on 2.1.x usage.

-- Function: void gpgme_set_passphrase_cb (gpgme_ctx_t CTX,
          gpgme_passphrase_cb_t PASSFUNC, void *HOOK_VALUE)

The function gpgme_set_passphrase_cb sets the function that is
used when a passphrase needs to be provided by the user to
PASSFUNC. The function PASSFUNC needs to implemented by the user,
and whenever it is called, it is called with its first argument
being HOOK_VALUE. By default, no passphrase callback function is
set.

Not all crypto engines require this callback to retrieve the
passphrase. It is better if the engine retrieves the passphrase
from a trusted agent (a daemon process), rather than having each
user to implement their own passphrase query. Some engines do not
even support an external passphrase callback at all, in this case the error code GPG_ERR_NOT_SUPPORTED is returned.

For GnuPG >= 2.1 the pinentry mode has to be set to GPGME_PINENTRY_MODE_LOOPBACK to enable the passphrase callback. See gpgme_set_pinentry_mode.

The user can disable the use of a passphrase callback function by calling gpgme_set_passphrase_cb with PASSFUNC being NULL.

-- Function: void gpgme_get_passphrase_cb (gpgme_ctx_t CTX, gpgme_passphrase_cb_t *PASSFUNC, void **HOOK_VALUE)
The function gpgme_get_passphrase_cb returns the function that is used when a passphrase needs to be provided by the user in *PASSFUNC, and the first argument for this function in *HOOK_VALUE. If no passphrase callback is set, or CTX is not a valid pointer, NULL is returned in both variables.

PASSFUNC or HOOK_VALUE can be NULL. In this case, the corresponding value will not be returned.


7.4.11 Progress Meter Callback

-- Data type: void (*gpgme_progress_cb_t)(void *HOOK, const char *WHAT, int TYPE, int CURRENT, int TOTAL)
The gpgme_progress_cb_t type is the type of functions usable as progress callback function.

The arguments are specific to the crypto engine. More information about the progress information returned from the GnuPG engine can be found in the GnuPG source code in the file doc/DETAILS in the section PROGRESS.

-- Function: void gpgme_set_progress_cb (gpgme_ctx_t CTX, gpgme_progress_cb_t PROGFUNC, void *HOOK_VALUE)
The function gpgme_set_progress_cb sets the function that is used when progress information about a cryptographic operation is available. The function PROGFUNC needs to implemented by the user, and whenever it is called, it is called with its first argument being HOOK_VALUE. By default, no progress callback function is set.

Setting a callback function allows an interactive program to
display progress information about a long operation to the user.

The user can disable the use of a progress callback function by calling gpgme_set_progress_cb with PROGFUNC being NULL.

-- Function: void gpgme_get_progress_cb (gpgme_ctx_t CTX,
gpgme_progress_cb_t *PROGFUNC, void **HOOK_VALUE)
The function gpgme_get_progress_cb returns the function that is used to inform the user about the progress made in *PROGFUNC, and the first argument for this function in *HOOK_VALUE. If no progress callback is set, or CTX is not a valid pointer, NULL is returned in both variables.

PROGFUNC or HOOK_VALUE can be NULL. In this case, the corresponding value will not be returned.


7.4.12 Status Message Callback
-----------------------------

-- Data type: gpgme_error_t (*gpgme_status_cb_t)(void *HOOK, const char
*KEYWORD, const char *ARGS)
The gpgme_status_cb_t type is the type of function usable as a status message callback function.

The argument KEYWORD is the name of the status message while the ARGS argument contains any arguments for the status message.

If an error occurs, return the corresponding gpgme_error_t value. Otherwise, return 0.

-- Function: void gpgme_set_status_cb (gpgme_ctx_t CTX,
gpgme_status_cb_t STATUSFUNC, void *HOOK_VALUE)
SINCE: 1.6.0

The function gpgme_set_status_cb sets the function that is used when a status message is received from gpg to STATUSFUNC. The function STATUSFUNC needs to be implemented by the user, and whenever it is called, it is called with its first argument being HOOK_VALUE. By default, no status message callback function is set.

The user can disable the use of a status message callback function by calling gpgme_set_status_cb with STATUSFUNC being NULL.
-- Function: void gpgme_get_status_cb (gpgme_ctx_t CTX,
        gpgme_status_cb_t *STATUSFUNC, void **HOOK_VALUE)
SINCE: 1.6.0

The function gpgme_get_status_cb returns the function that is
used to process status messages from gpg in *STATUSFUNC, and the
first argument for this function in *HOOK_VALUE. If no status
message callback is set, or CTX is not a valid pointer, NULL is
returned in both variables.


7.4.13 Context Flags
---------------------

-- Function: gpgme_error_t gpgme_set_ctx_flag (gpgme_ctx_t CTX,
        const char *NAME, const char *VALUE)
SINCE: 1.7.0

Some minor properties of the context can be controlled with flags
set by this function. The properties are identified by the
following values for NAME:

"redraw"
This flag is normally not changed by the caller because GPGME
sets and clears it automatically: The flag is cleared before
an operation and set if an operation noticed that the engine
has launched a Pinentry. A Curses based application may use
this information to redraw the screen; for example:

    err = gpgme_op_keylist_start (ctx, "foo@example.org", 0);
    while (!err)
        {
            err = gpgme_op_keylist_next (ctx, &key);
            if (err)
                break;
            show_key (key);
            gpgme_key_release (key);
        }
    if ((s = gpgme_get_ctx_flag (ctx, "redraw")) && *s)
        redraw_screen ();
    gpgme_release (ctx);

"full-status"
Using a VALUE of "1" the status callback set by
gpgme_set_status_cb returns all status lines with the
exception of PROGRESS lines. With the default of "0" the status callback is only called in certain situations.

"raw-description"
Setting the VALUE to "1" returns human readable strings in a raw format. For example the non breaking space characters ("~") will not be removed from the description field of the gpgme_tofu_info_t object.

"export-session-key"
Using a VALUE of "1" specifies that the context should try to export the symmetric session key when decrypting data. By default, or when using an empty string or "0" for VALUE, session keys are not exported.

"override-session-key"
The string given in VALUE is passed to the GnuPG engine to override the session key for decryption. The format of that session key is specific to GnuPG and can be retrieved during a decrypt operation when the context flag "export-session-key" is enabled. Please be aware that using this feature with GnuPG < 2.1.16 will leak the session key on many platforms via ps(1).

"auto-key-retrieve"
Setting the VALUE to "1" asks the backend to automatically retrieve a key for signature verification if possible. Note that this option makes a "web bug" like behavior possible. Keyserver or Web Key Directory operators can see which keys you request, so by sending you a message signed by a brand new key (which you naturally will not have on your local keyring), the operator can tell both your IP address and the time when you verified the signature.

"request-origin"
The string given in VALUE is passed to the GnuPG engines to request restrictions based on the origin of the request. Valid values are documented in the GnuPG manual and the gpg man page under the option --request-origin. Requires at least GnuPG 2.2.6 to have an effect.

"no-symkey-cache"
For OpenPGP disable the passphrase cache used for symmetrical en- and decryption. This cache is based on the message specific salt value. Requires at least GnuPG 2.2.7 to have an effect.

"ignore-mdc-error"
This flag passes the option --ignore-mdc-error to gpg. This can be used to force decryption of a message which failed due to a missing integrity check. This flag must be used with great caution and only if it is a known non-corrupted old message and the decryption result of the former try had the decryption result flag legacy_cipher_nomdc set. For failsafe reasons this flag is reset after each operation.

"auto-key-locate"

The string given in VALUE is passed to gpg. This can be used to change the behavior of a GPGME_KEYLIST_MODE_LOCATE keylisting. Valid values are documented in the GnuPG manual and the gpg man page under the option --auto-key-locate. Requires at least GnuPG 2.1.18.

Note: Keys retrieved through auto-key-locate are automatically imported in the keyring.

trust-model

SINCE: 1.11.2

Change the trust-model for all GnuPG engine operations. An empty string sets the trust-model back to the users default. If the trust-model is not supported by GnuPG the behavior is undefined and will likely cause all operations to fail. Example: "tofu+pgp".

This options should be used carefully with a strict version requirement. In some versions of GnuPG setting the trust-model changes the default trust-model for future operations. A change in the trust-model also can have unintended side effects, like rebuilding the trust-db.

This function returns 0 on success.

-- Function: const char * gpgme_get_ctx_flag (gpgme_ctx_t CTX, const char *NAME)

SINCE: 1.8.0

The value of flags settable by gpgme_set_ctx_flag can be retrieved by this function. If NAME is unknown the function returns NULL. For boolean flags an empty string is returned for False and the string "1" is returned for True; either atoi(3) or a test for an empty string can be used to get the boolean value.

7.4.14 Locale
----------

A locale setting can be associated with a context. This locale is passed to the crypto engine, and used for applications like the PIN entry, which is displayed to the user when entering a passphrase is required.

The default locale is used to initialize the locale setting of all contexts created afterwards.

-- Function: gpgme_error_t gpgme_set_locale (gpgme_ctx_t CTX, int CATEGORY, const char *VALUE)
SINCE: 0.4.3

The function gpgme_set_locale sets the locale of the context CTX, or the default locale if CTX is a null pointer.

The locale settings that should be changed are specified by CATEGORY. Supported categories are LC_CTYPE, LC_MESSAGES, and LC_ALL, which is a wildcard you can use if you want to change all the categories at once.

The value to be used for the locale setting is VALUE, which will be copied to GPGMEs internal data structures. VALUE can be a null pointer, which disables setting the locale, and will make PIN entry and other applications use their default setting, which is usually not what you want.

Note that the settings are only used if the application runs on a text terminal, and that the settings should fit the configuration of the output terminal. Normally, it is sufficient to initialize the default value at startup.

The function returns an error if not enough memory is available.


7.4.15 Additional Logs
----------------------

Additional logs can be associated with a context. These logs are engine specific and can be obtained with gpgme_op_getauditlog.

-- Function: gpgme_error_t gpgme_op_getauditlog (gpgme_ctx_t CTX, gpgme_data_t OUTPUT, unsigned int FLAGS)
SINCE: 1.1.1

The function gpgme_op_getauditlog is used to obtain additional logs as specified by FLAGS into the OUTPUT data. If

The function returns the error code GPG_ERR_NO_ERROR if a log could be queried from the engine, and GPG_ERR_NOT_IMPLEMENTED if the log specified in FLAGS is not available for this engine. If no log is available GPG_ERR_NO_DATA is returned.

The value in FLAGS is a bitwise-or combination of one or multiple of the following bit values:

GPGME_AUDITLOG_DIAG
  SINCE: 1.11.2

  Obtain diagnostic output which would be written to stderr in interactive use of the engine. This can be used to provide additional diagnostic information in case of errors in other operations.

  Note: If log-file has been set in the configuration the log will be empty and GPG_ERR_NO_DATA will be returned.

  Implemented for: GPGME_PROTOCOL_OpenPGP

GPGME_AUDITLOG_DEFAULT
  SINCE: 1.11.2

  This flag has the value 0 for compatibility reasons. Obtains additional information from the engine by issuing the GETAUDITLOG command. For GPGME_PROTOCOL_CMS this provides additional information about the X509 certificate chain.

  Implemented for: GPGME_PROTOCOL_CMS

GPGME_AUDITLOG_HTML
  SINCE: 1.1.1

  Same as GPGME_AUDITLOG_DEFAULT but in HTML.

  Implemented for: GPGME_PROTOCOL_CMS

-- Function: gpgme_error_t gpgme_op_getauditlog_start (gpgme_ctx_t CTX,
          gpgme_data_t OUTPUT, unsigned int FLAGS)
  SINCE: 1.1.1

  This is the asynchronous variant of gpgme_op_getauditlog.
Some of the cryptographic operations require that recipients or signers are specified. This is always done by specifying the respective keys that should be used for the operation. The following section describes how such keys can be selected and manipulated.

* Menu:

- **Key objects**: Description of the key structures.
- **Listing Keys**: Browsing the list of available keys.
- **Information About Keys**: Requesting detailed information about keys.
- **Manipulating Keys**: Operations on keys.
- **Generating Keys**: Creating new key pairs.
- **Signing Keys**: Adding key signatures to public keys.
- **Exporting Keys**: Retrieving key data from the key ring.
- **Importing Keys**: Adding keys to the key ring.
- **Deleting Keys**: Removing keys from the key ring.
- **Changing Passphrases**: Change the passphrase of a key.
- **Changing TOFU Data**: Changing data pertaining to TOFU.
- **Advanced Key Editing**: Advanced key edit operation.

The keys are represented in GPGME by structures which may only be read by the application but never be allocated or changed. They are valid as long as the key object itself is valid.

-- Data type: gpgme_key_t

The gpgme_key_t type is a pointer to a key object. It has the following members:

```
gpgme_keylist_mode_t keylist_mode
SINCE: 0.9.0
```

The keylist mode that was active when the key was retrieved.

```
unsigned int revoked : 1
```
This is true if the key is revoked.

unsigned int expired : 1
This is true if the key is expired.

unsigned int disabled : 1
This is true if the key is disabled.

unsigned int invalid : 1
This is true if the key is invalid. This might have several reasons, for example for the S/MIME backend, it will be set during key listings if the key could not be validated due to missing certificates or unmatched policies.

unsigned int can_encrypt : 1
This is true if the key (ie one of its subkeys) can be used for encryption.

unsigned int can_sign : 1
This is true if the key (ie one of its subkeys) can be used to create data signatures.

unsigned int can_certify : 1
This is true if the key (ie one of its subkeys) can be used to create key certificates.

unsigned int can_authenticate : 1
SINCE: 0.4.5
This is true if the key (ie one of its subkeys) can be used for authentication.

unsigned int is_qualified : 1
SINCE: 1.1.0
This is true if the key can be used for qualified signatures according to local government regulations.

unsigned int secret : 1
This is true if the key is a secret key. Note, that this will always be true even if the corresponding subkey flag may be false (offline/stub keys). This is only set if a listing of secret keys has been requested or if GPGME_KEYLIST_MODE_WITH_SECRET is active.

unsigned int origin : 5
SINCE: 1.8.0
Reserved for the origin of this key.

`gpgme_protocol_t protocol`
This is the protocol supported by this key.

`char *issuer_serial`
If protocol is `GPGME_PROTOCOL_CMS`, then this is the issuer serial.

`char *issuer_name`
If protocol is `GPGME_PROTOCOL_CMS`, then this is the issuer name.

`char *chain_id`
If protocol is `GPGME_PROTOCOL_CMS`, then this is the chain ID, which can be used to built the certificate chain.

`gpgme_validity_t owner_trust`
If protocol is `GPGME_PROTOCOL_OpenPGP`, then this is the owner trust.

`gpgme_subkey_t subkeys`
This is a linked list with the subkeys of the key. The first subkey in the list is the primary key and usually available.

`gpgme_user_id_t uids`
This is a linked list with the user IDs of the key. The first user ID in the list is the main (or primary) user ID.

`char *fpr`
SINCE: 1.7.0

This field gives the fingerprint of the primary key. Note that this is a copy of the fingerprint of the first subkey. For an incomplete key (for example from a verification result) a subkey may be missing but this field may be set nevertheless.

`unsigned long last_update`
SINCE: 1.8.0

Reserved for the time of the last update of this key.

-- Data type: gpgme_subkey_t
SINCE: 1.5.0

The gpgme_subkey_t type is a pointer to a subkey structure. Subkeys are one component of a gpgme_key_t object. In fact,
subkeys are those parts that contains the real information about
the individual cryptographic keys that belong to the same key
object. One gpgme_key_t can contain several subkeys. The first
subkey in the linked list is also called the primary key.

The subkey structure has the following members:

    gpgme_subkey_t next
        This is a pointer to the next subkey structure in the linked
        list, or NULL if this is the last element.

    unsigned int revoked : 1
        This is true if the subkey is revoked.

    unsigned int expired : 1
        This is true if the subkey is expired.

    unsigned int disabled : 1
        This is true if the subkey is disabled.

    unsigned int invalid : 1
        This is true if the subkey is invalid.

    unsigned int can_encrypt : 1
        This is true if the subkey can be used for encryption.

    unsigned int can_sign : 1
        This is true if the subkey can be used to create data
        signatures.

    unsigned int can_certify : 1
        This is true if the subkey can be used to create key
        certificates.

    unsigned int can_authenticate : 1
        SINCE: 0.4.5
        This is true if the subkey can be used for authentication.

    unsigned int is_qualified : 1
        SINCE: 1.1.0
        This is true if the subkey can be used for qualified
        signatures according to local government regulations.

    unsigned int is_de_vs : 1
        SINCE: 1.8.0
This is true if the subkey complies with the rules for classified information in Germany at the restricted level (VS-NfD). This are currently RSA keys of at least 2048 bits or ECDH/ECDSA keys using a Brainpool curve.

unsigned int secret : 1
This is true if the subkey is a secret key. Note that it will be false if the key is actually a stub key; i.e. a secret key operation is currently not possible (offline-key). This is only set if a listing of secret keys has been requested or if GPGME_KEYLIST_MODE_WITH_SECRET is active.

gpgme_pubkey_algo_t pubkey_algo
This is the public key algorithm supported by this subkey.

unsigned int length
This is the length of the subkey (in bits).

char *keyid
This is the key ID of the subkey in hexadecimal digits.

char *fpr
This is the fingerprint of the subkey in hexadecimal digits, if available.

char *keygrip
SINCE: 1.7.0
The keygrip of the subkey in hex digit form or NULL if not available.

long int timestamp
This is the creation timestamp of the subkey. This is -1 if the timestamp is invalid, and 0 if it is not available.

long int expires
This is the expiration timestamp of the subkey, or 0 if the subkey does not expire.

unsigned int is_cardkey : 1
SINCE: 1.2.0
True if the secret key is stored on a smart card.

char *card_number
SINCE: 1.2.0
The serial number of a smart card holding this key or NULL.
char *curve
   For ECC algorithms the name of the curve.

-- Data type: gpgme_user_id_t

A user ID is a component of a gpgme_key_t object. One key can have many user IDs. The first one in the list is the main (or primary) user ID.

The user ID structure has the following members.

gpgme_user_id_t next
   This is a pointer to the next user ID structure in the linked list, or NULL if this is the last element.

unsigned int revoked : 1
   This is true if the user ID is revoked.

unsigned int invalid : 1
   This is true if the user ID is invalid.

gpgme_validity_t validity
   This specifies the validity of the user ID.

char *uid
   This is the user ID string.

char *name
   This is the name component of uid, if available.

char *comment
   This is the comment component of uid, if available.

char *email
   This is the email component of uid, if available.

char *address;
   The mail address (addr-spec from RFC-5322) of the user ID string. This is general the same as the email part of this structure but might be slightly different. If no mail address is available NULL is stored.

gpgme_tofu_info_t tofu
   SINCE: 1.7.0

   If not NULL information from the TOFU database pertaining to this user id.
gpgme_key_sig_t signatures
   This is a linked list with the signatures on this user ID.

unsigned int origin : 5
   SINCE: 1.8.0

   Reserved for the origin of this user ID.

unsigned long last_update
   SINCE: 1.8.0

   Reserved for the time of the last update of this user ID.

-- Data type: gpgme_tofu_info_t

   SINCE: 1.7.0

   The gpgme_tofu_info_t type is a pointer to a tofu info structure.
   Tofu info structures are one component of a gpgme_user_id_t
   object, and provide information from the TOFU database pertaining
   to the user ID.

   The tofu info structure has the following members:

   gpgme_key_sig_t next
      This is a pointer to the next tofu info structure in the
      linked list, or NULL if this is the last element.

   unsigned int validity : 3
      This is the TOFU validity. It can have the following values:

      0
         The value 0 indicates a conflict.

      1
         The value 1 indicates a key without history.

      2
         The value 2 indicates a key with too little history.

      3
         The value 3 indicates a key with enough history for
         basic trust.

      4
         The value 4 indicates a key with a lot of history.
unsigned int policy : 4
    This is the TOFU policy, see gpgme_tofu_policy_t.

unsigned short signcount
    This is the number of signatures seen for this binding (or
    USHRT_MAX if there are more than that).

unsigned short encrcount
    This is the number of encryptions done with this binding (or
    USHRT_MAX if there are more than that).

unsigned long signfirst
    Number of seconds since Epoch when the first signature was
    seen with this binding.

unsigned long signlast
    Number of seconds since Epoch when the last signature was seen
    with this binding.

unsigned long encrfirst
    Number of seconds since Epoch when the first encryption was
    done with this binding.

unsigned long encrlast
    Number of seconds since Epoch when the last encryption was
    done with this binding.

cchar *description
    A human-readable string summarizing the TOFU data (or NULL).

-- Data type: gpgme_key_sig_t

The gpgme_key_sig_t type is a pointer to a key signature
structure. Key signatures are one component of a gpgme_key_t
object, and validate user IDs on the key in the OpenPGP protocol.

The signatures on a key are only available if the key was retrieved
via a listing operation with the GPGME_KEYLIST_MODE_SIGS mode
enabled, because it can be expensive to retrieve all signatures of
a key.

The signature notations on a key signature are only available if
the key was retrieved via a listing operation with the
GPGME_KEYLIST_MODE_SIG_NOTATIONS mode enabled, because it can be
expensive to retrieve all signature notations.

The key signature structure has the following members:
gpgme_key_sig_t next
   This is a pointer to the next key signature structure in the
   linked list, or NULL if this is the last element.

unsigned int revoked : 1
   This is true if the key signature is a revocation signature.

unsigned int expired : 1
   This is true if the key signature is expired.

unsigned int invalid : 1
   This is true if the key signature is invalid.

unsigned int exportable : 1
   This is true if the key signature is exportable.

gpgme_pubkey_algo_t pubkey_algo
   This is the public key algorithm used to create the signature.

char *keyid
   This is the key ID of the key (in hexadecimal digits) used to
   create the signature.

long int timestamp
   This is the creation timestamp of the key signature. This is
   -1 if the timestamp is invalid, and 0 if it is not available.

long int expires
   This is the expiration timestamp of the key signature, or 0 if
   the key signature does not expire.

gpgme_error_t status
   This is the status of the signature and has the same meaning
   as the member of the same name in a gpgme_signature_t
   object.

unsigned int sig_class
   This specifies the signature class of the key signature. The
   meaning is specific to the crypto engine.

char *uid
   This is the main user ID of the key used to create the
   signature.

char *name
   This is the name component of uid, if available.

char *comment
This is the comment component of uid, if available.

char *email
This is the email component of uid, if available.

gpgme_sig_notation_t notations
This is a linked list with the notation data and policy URLs.

File: gpgme.info, Node: Listing Keys, Next: Information About Keys, Prev: Key objects, Up: Key Management

7.5.2 Listing Keys
------------------

-- Function: gpgme_error_t gpgme_op_keylist_start (gpgme_ctx_t CTX,
const char *PATTERN, int SECRET_ONLY)

The function gpgme_op_keylist_start initiates a key listing
operation inside the context CTX. It sets everything up so that
subsequent invocations of gpgme_op_keylist_next return the keys
in the list.

If PATTERN is NULL, all available keys are returned. Otherwise,
PATTERN contains an engine specific expression that is used to
limit the list to all keys matching the pattern. Note that the
total length of the pattern is restricted to an engine-specific
maximum (a couple of hundred characters are usually accepted). The
pattern should be used to restrict the search to a certain common
name or user, not to list many specific keys at once by listing
their fingerprints or key IDs.

If SECRET_ONLY is not 0, the list is restricted to secret keys
only.

The context will be busy until either all keys are received (and
gpgme_op_keylist_next returns GPG_ERR_EOF), or
gpgme_op_keylist_end is called to finish the operation.

The function returns the error code GPG_ERR_INV_VALUE if CTX is
not a valid pointer, and passes through any errors that are
reported by the crypto engine support routines.

-- Function: gpgme_error_t gpgme_op_keylist_ext_start (gpgme_ctx_t CTX,
const char *PATTERN[], int SECRET_ONLY, int RESERVED)

The function gpgme_op_keylist_ext_start initiates an extended key
listing operation inside the context CTX. It sets everything up so
that subsequent invocations of gpgme_op_keylist_next return the
keys in the list.

If PATTERN or *PATTERN is NULL, all available keys are returned. Otherwise, PATTERN is a NULL terminated array of strings that are used to limit the list to all keys matching at least one of the patterns verbatim. Note that the total length of all patterns is restricted to an engine-specific maximum (the exact limit also depends on the number of patterns and amount of quoting required, but a couple of hundred characters are usually accepted). Patterns should be used to restrict the search to a certain common name or user, not to list many specific keys at once by listing their fingerprints or key IDs.

If SECRET_ONLY is not 0, the list is restricted to secret keys only.

The value of RESERVED must be 0.

The context will be busy until either all keys are received (and gpgme_op_keylist_next returns GPG_ERR_EOF), or gpgme_op_keylist_end is called to finish the operation.

The function returns the error code GPG_ERR_INV_VALUE if CTX is not a valid pointer, and passes through any errors that are reported by the crypto engine support routines.

-- Function: gpgme_error_t gpgme_op_keylist_from_data_start
   (gpgme_ctx_t CTX, gpgme_data_t DATA, int RESERVED)

SINCE: 1.8.0

The function gpgme_op_keylist_from_data_start initiates a key listing operation inside the context CTX. In contrast to the other key listing operation the keys are read from the supplied DATA and not from the local key database. The keys are also not imported into the local key database. The function sets everything up so that subsequent invocations of gpgme_op_keylist_next return the keys from DATA.

The value of RESERVED must be 0.

This function requires at least GnuPG version 2.1.14 and currently works only with OpenPGP keys.

The context will be busy until either all keys are received (and gpgme_op_keylist_next returns GPG_ERR_EOF), or gpgme_op_keylist_end is called to finish the operation. While the context is busy DATA may not be released.
The function returns the error code GPG_ERR_INV_VALUE if CTX is not a valid pointer, and passes through any errors that are reported by the crypto engine support routines.

-- Function: gpgme_error_t gpgme_op_keylist_next (gpgme_ctx_t CTX, gpgme_key_t *R_KEY)

The function gpgme_op_keylist_next returns the next key in the list created by a previous gpgme_op_keylist_start operation in the context CTX. The key will have one reference for the user.

*Note Manipulating Keys:.

This is the only way to get at gpgme_key_t objects in GPGME.

If the last key in the list has already been returned, gpgme_op_keylist_next returns GPG_ERR_EOF.

The function returns the error code GPG_ERR_INV_VALUE if CTX or R_KEY is not a valid pointer, and GPG_ERR_ENOMEM if there is not enough memory for the operation.

-- Function: gpgme_error_t gpgme_op_keylist_end (gpgme_ctx_t CTX)

The function gpgme_op_keylist_end ends a pending key list operation in the context CTX.

After the operation completed successfully, the result of the key listing operation can be retrieved with gpgme_op_keylist_result.

The function returns the error code GPG_ERR_INV_VALUE if CTX is not a valid pointer, and GPG_ERR_ENOMEM if at some time during the operation there was not enough memory available.

The following example illustrates how all keys containing a certain string (g10code) can be listed with their key ID and the name and email address of the main user ID:

```c

gpgme_ctx_t ctx;
gpgme_key_t key;
gpgme_error_t err = gpgme_new (&ctx);

if (!err)
{
    err = gpgme_op_keylist_start (ctx, "g10code", 0);
    while (!err)
    {
        err = gpgme_op_keylist_next (ctx, &key);
    }
}
```
if (err)
    break;
printf ("%s", key->subkeys->keyid);
if (key->uids && key->uids->name)
    printf (" %s", key->uids->name);
if (key->uids && key->uids->email)
    printf (" <%s>", key->uids->email);
putchar ('
');
gpgme_key_release (key);
}
gpgme_release (ctx);
}
if (gpg_err_code (err) != GPG_ERR_EOF)
{
    fprintf (stderr, "can not list keys: %s\n", gpgme_strerror (err));
    exit (1);
}

-- Data type: gpgme_keylist_result_t

This is a pointer to a structure used to store the result of a
gpgme_op_keylist_* operation. After successfully ending a key
listing operation, you can retrieve the pointer to the result with
gpgme_op_keylist_result. The structure contains the following
member:

    unsigned int truncated : 1

    This is true if the crypto backend had to truncate the result,
    and less than the desired keys could be listed.

-- Function: gpgme_keylist_result_t gpgme_op_keylist_result
    (gpgme_ctx_t CTX)

The function gpgme_op_keylist_result returns a
gpgme_keylist_result_t pointer to a structure holding the result
of a gpgme_op_keylist_* operation. The pointer is only valid if
the last operation on the context was a key listing operation, and
if this operation finished successfully. The returned pointer is
only valid until the next operation is started on the context.

In a simple program, for which a blocking operation is acceptable,
the following function can be used to retrieve a single key.

-- Function: gpgme_error_t gpgme_get_key (gpgme_ctx_t CTX,
    const char *FPR, gpgme_key_t *R_KEY, int SECRET)

The function gpgme_get_key gets the key with the fingerprint (or
key ID) FPR from the crypto backend and return it in R_KEY. If
SECRET is true, get the secret key. The currently active keylist
mode is used to retrieve the key. The key will have one reference
for the user.
If the key is not found in the keyring, gpgme_get_key returns the error code GPG_ERR_EOF and *R_KEY will be set to NULL.

The function returns the error code GPG_ERR_INV_VALUE if CTX or R_KEY is not a valid pointer or FPR is not a fingerprint or key ID, GPG_ERR_AMBIGUOUS_NAME if the key ID was not a unique specifier for a key, and GPG_ERR_ENOMEM if at some time during the operation there was not enough memory available.


7.5.3 Information About Keys
-------------------------

Please see the beginning of this section for more information about gpgme_key_t objects.

-- Data type: gpgme_validity_t
The gpgme_validity_t type is used to specify the validity of a user ID in a key. The following validities are defined:

GPGME_VALIDITY_UNKNOWN
  The user ID is of unknown validity. The string representation of this validity is ?.

GPGME_VALIDITY_UNDEFINED
  The validity of the user ID is undefined. The string representation of this validity is q.

GPGME_VALIDITY_NEVER
  The user ID is never valid. The string representation of this validity is n.

GPGME_VALIDITY_MARGINAL
  The user ID is marginally valid. The string representation of this validity is m.

GPGME_VALIDITY_FULL
  The user ID is fully valid. The string representation of this validity is f.

GPGME_VALIDITY_ULTIMATE
  The user ID is ultimately valid. The string representation of this validity is u.
7.5.4 Manipulating Keys

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-- Function: void gpgme_key_ref (gpgme_key_t KEY)
The function gpgme_key_ref acquires an additional reference for the key KEY.

-- Function: void gpgme_key_unref (gpgme_key_t KEY)
The function gpgme_key_unref releases a reference for the key KEY. If this was the last reference, the key will be destroyed and all resources associated to it will be released.

7.5.5 Generating Keys

---------------------

GPGME provides a set of functions to create public key pairs. Most of these functions require the use of GnuPG 2.1 and later; for older GnuPG versions the gpgme_op_genkey function can be used. Existing code which wants to update to the new functions or new code which shall supports older GnuPG versions may try the new functions first and provide a fallback to the old function if the error code GPG_ERR_NOT_SUPPORTED is received.

-- Function: gpgme_error_t gpgme_op_createkey (gpgme_ctx_t CTX, const char *USERID, const char *ALGO, unsigned long RESERVED, unsigned long EXPIRES, gpgme_key_t EXTRAKEY, unsigned int FLAGS);

SINCE: 1.7.0

The function gpgme_op_createkey generates a new key for the protocol active in the context CTX. As of now this function does only work for OpenPGP and requires at least version 2.1.13 of GnuPG.

USERID is commonly the mail address associated with the key. GPGME does not require a specific syntax but if more than a mail address is given, RFC-822 style format is suggested. The value is expected to be in UTF-8 encoding (i.e. no IDN encoding for mail addresses). This is a required parameter.
ALGO specifies the algorithm for the new key (actually a keypair of public and private key). For a list of supported algorithms, see the GnuPG manual. If ALGO is NULL or the string "default", the key is generated using the default algorithm of the engine. If the string "future-default" is used the engine may use an algorithm which is planned to be the default in a future release of the engine; however existing implementation of the protocol may not be able to already handle such future algorithms. For the OpenPGP protocol, the specification of a default algorithm, without requesting a non-default usage via FLAGS, triggers the creation of a primary key plus a secondary key (subkey).

RESERVED must be set to zero.

EXPIRES specifies the expiration time in seconds. If you supply 0, a reasonable expiration time is chosen. Use the flag GPGME_CREATE_NOEXPRIE to create keys that do not expire. Note that this parameter takes an unsigned long value and not a time_t to avoid problems on systems which use a signed 32 bit time_t. Note further that the OpenPGP protocol uses 32 bit values for timestamps and thus can only encode dates up to the year 2106.

EXTRAKEY is currently not used and must be set to NULL. A future version of GPGME may use this parameter to create X.509 keys.

FLAGS can be set to the bit-wise OR of the following flags:

GPGME_CREATE_SIGN
GPGME_CREATE_ENCR
GPGME_CREATE_CERT
GPGME_CREATE_AUTH

SINE: 1.7.0

Do not create the key with the default capabilities (key usage) of the requested algorithm but use those explicitly given by these flags: signing, encryption, certification, or authentication. The allowed combinations depend on the algorithm.

If any of these flags are set and a default algorithm has been selected only one key is created in the case of the OpenPGP protocol.

GPGME_CREATE_NOPASSWD

SINE: 1.7.0

Request generation of the key without password protection.
GPGME_CREATE_SELF SIGNED
SINCE: 1.7.0

For an X.509 key do not create a CSR but a self-signed certificate. This has not yet been implemented.

GPGME_CREATE_NOSTORE
SINCE: 1.7.0

Do not store the created key in the local key database. This has not yet been implemented.

GPGME_CREATE_WANT PUB
GPGME_CREATE_WANT SEC
SINCE: 1.7.0

Return the public or secret key as part of the result structure. This has not yet been implemented.

GPGME_CREATE_FORCE
SINCE: 1.7.0

The engine does not allow the creation of a key with a user ID already existing in the local key database. This flag can be used to override this check.

GPGME_CREATE_NOEXPIRE
SINCE: 1.8.0

Request generation of keys that do not expire.

After the operation completed successfully, information about the created key can be retrieved with gpgme_op_genkey_result.

The function returns zero on success, GPG_ERR_NOT_SUPPORTED if the engine does not support the command, or a bunch of other error codes.

-- Function: gpgme_error_t gpgme_op_createkey_start (gpgme_ctx_t CTX,
const char *USERID, const char *ALGO, unsigned long RESERVED,
unsigned long EXPIRES, gpgme_key_t EXTRAKEY,
unsigned int FLAGS);

SINCE: 1.7.0

The function gpgme_op_createkey_start initiates a gpgme_op_createkey operation; see there for details. It must be completed by calling gpgme_wait on the context. *Note Waiting
The function `gpgme_op_createsubkey` creates and adds a new subkey to the primary OpenPGP key given by `KEY`. The only allowed protocol in `CTX` is `GPGME_PROTOCOL_OPENPGP`. Subkeys (aka secondary keys) are a concept in the OpenPGP protocol to bind several keys to a primary key. As of now this function requires at least version 2.1.13 of GnuPG.

`KEY` specifies the key to operate on.

`ALGO` specifies the algorithm for the new subkey. For a list of supported algorithms, see the GnuPG manual. If `ALGO` is `NULL` or the string "default", the subkey is generated using the default algorithm for an encryption subkey of the engine. If the string "future-default" is used the engine may use an encryption algorithm which is planned to be the default in a future release of the engine; however existing implementation of the protocol may not be able to already handle such future algorithms.

`RESERVED` must be set to zero.

`EXPIRES` specifies the expiration time in seconds. If you supply 0, a reasonable expiration time is chosen. Use the flag `GPGME_CREATE_NOEXPIRE` to create keys that do not expire. Note that this parameter takes an unsigned long value and not a `time_t` to avoid problems on systems which use a signed 32 bit `time_t`. Note further that the OpenPGP protocol uses 32 bit values for timestamps and thus can only encode dates up to the year 2106.

`FLAGS` takes the same values as described above for `gpgme_op_createkey`.

After the operation completed successfully, information about the created key can be retrieved with `gpgme_op_genkey_result`.

The function returns zero on success, `GPG_ERR_NOT_SUPPORTED` if the engine does not support the command, or a bunch of other error codes.
unsigned long RESERVED, unsigned long EXPIRES,
unsigned int FLAGS);

SINCE: 1.7.0

The function gpgme_op_createsubkey_start initiates a
gpgme_op_createsubkey operation; see there for details. It must
be completed by calling gpgme_wait on the context. *Note Waiting
For Completion::.

-- Function: gpgme_error_t gpgme_op_adduid (gpgme_ctx_t CTX,
gpgme_key_t KEY, const char *USERID, unsigned int FLAGS);

SINCE: 1.7.0

The function gpgme_op_adduid adds a new user ID to the OpenPGP
key given by KEY. Adding additional user IDs after key creation is
a feature of the OpenPGP protocol and thus the protocol for the
context CTX must be set to OpenPGP. As of now this function
requires at least version 2.1.13 of GnuPG.

KEY specifies the key to operate on.

USERID is the user ID to add to the key. A user ID is commonly the
mail address to be associated with the key. GPGME does not require
a specific syntax but if more than a mail address is given, RFC-822
style format is suggested. The value is expected to be in UTF-8
encoding (i.e. no IDN encoding for mail addresses). This is a
required parameter.

FLAGS are currently not used and must be set to zero.

The function returns zero on success, GPG_ERR_NOT_SUPPORTED if
the engine does not support the command, or a bunch of other error
codes.

-- Function: gpgme_error_t gpgme_op_adduid_start (gpgme_ctx_t CTX,
gpgme_key_t KEY, const char *USERID, unsigned int FLAGS);

SINCE: 1.7.0

The function gpgme_op_adduid_start initiates a gpgme_op_adduid
operation; see there for details. It must be completed by calling
gpgme_wait on the context. *Note Waiting For Completion::.

-- Function: gpgme_error_t gpgme_op_revuid (gpgme_ctx_t CTX,
gpgme_key_t KEY, const char *USERID, unsigned int FLAGS);
The function gpgme_op_revuid revokes a user ID from the OpenPGP key given by KEY. Revoking user IDs after key creation is a feature of the OpenPGP protocol and thus the protocol for the context CTX must be set to OpenPGP. As of now this function requires at least version 2.1.13 of GnuPG.

KEY specifies the key to operate on.

USERID is the user ID to be revoked from the key. The user ID must be given verbatim because the engine does an exact and case sensitive match. Thus the uid field from the user ID object (gpgme_user_id_t) is to be used. This is a required parameter.

FLAGS are currently not used and must be set to zero.

Note that the engine wont allow to revoke the last valid user ID. To change a user ID is better to first add the new user ID, then revoke the old one, and finally publish the key.

The function returns zero on success, GPG_ERR_NOT_SUPPORTED if the engine does not support the command, or a bunch of other error codes.

-- Function: gpgme_error_t gpgme_op_revuid_start (gpgme_ctx_t CTX, gpgme_key_t KEY, const char *USERID, unsigned int FLAGS);

The function gpgme_op_revuid_start initiates a gpgme_op_revuid operation; see there for details. It must be completed by calling gpgme_wait on the context. *Note Waiting For Completion:.*

-- Function: gpgme_error_t gpgme_op_set_ui_flag (gpgme_ctx_t CTX, gpgme_key_t KEY, const char *USERID, cons char * NAME, cons char * VALUE);

The function gpgme_op_set_uid_flag is used to set flags on a user ID from the OpenPGP key given by KEY. Setting flags on user IDs after key creation is a feature of the OpenPGP protocol and thus the protocol for the context CTX must be set to OpenPGP.

KEY specifies the key to operate on. This parameters is required.

USERID is the user ID of the key to be manipulated. This user ID
must be given verbatim because the engine does an exact and case
sensitive match. Thus the uid field from the user ID object
(gpgme_user_id_t) is to be used. This is a required parameter.

NAME names the flag which is to be changed. The only currently
supported flag is:

primary
This sets the primary key flag on the given user ID. All other
primary key flag on other user IDs are removed. VALUE must be
given as NULL. For technical reasons this function bumps the
creation timestamp of all affected self-signatures up by one
second. At least GnuPG version 2.1.20 is required.

The function returns zero on success, GPG_ERR_NOT_SUPPORTED if
the engine does not support the command, or a bunch of other error
codes.

-- Function: gpgme_error_t gpgme_op_set_uid_flag_start
   (gpgme_ctx_t CTX, gpgme_key_t KEY, const char *USERID,
    cons char * NAME, cons char * VALUE);

SINCE: 1.8.0

The function gpgme_op_set_uid_flag_start initiates a
gpgme_op_set_uid_flag operation; see there for details. It must
be completed by calling gpgme_wait on the context. *Note Waiting
For Completion::.

-- Function: gpgme_error_t gpgme_op_genkey (gpgme_ctx_t CTX,
   const char *PARMS, gpgme_data_t PUBLIC, gpgme_data_t SECRET)

The function gpgme_op_genkey generates a new key pair in the
context CTX. The meaning of PUBLIC and SECRET depends on the
crypto backend.

GPG does not support PUBLIC and SECRET, they should be NULL.
GnuPG will generate a key pair and add it to the standard key ring.
The fingerprint of the generated key is available with
gpgme_op_genkey_result.

GpgSM requires PUBLIC to be a writable data object. GpgSM will
generate a secret key (which will be stored by gpg-agent, and
return a certificate request in PUBLIC, which then needs to be
signed by the certification authority and imported before it can be
used. GpgSM does not make the fingerprint available.

The argument PARMS specifies parameters for the key in an string
that looks something like XML. The details about the format of PARMS are specific to the crypto engine used by CTX. The first line of the parameters must be `<GnupgKeyParams format="internal">` and the last line must be `</GnupgKeyParams>`. Every line in between the first and last lines is treated as a Header: Value pair. In particular, no XML escaping is necessary if you need to include the characters <, >, or &.

Here is an example for GnuPG as the crypto engine (all parameters of OpenPGP key generation are documented in the GPG manual):

```xml
<GnupgKeyParms format="internal">
    Key-Type: default
    Subkey-Type: default
    Name-Real: Joe Tester
    Name-Comment: with stupid passphrase
    Name-Email: joe@foo.bar
    Expire-Date: 0
    Passphrase: abc
</GnupgKeyParms>
```

Here is an example for GpgSM as the crypto engine (all parameters of OpenPGP key generation are documented in the GPGSM manual):

```xml
<GnupgKeyParms format="internal">
    Key-Type: RSA
    Key-Length: 1024
    Name-DN: C=de,O=g10 code,OU=Testlab,CN=Joe 2 Tester
    Name-Email: joe@foo.bar
</GnupgKeyParms>
```

Strings should be given in UTF-8 encoding. The only format supported for now is internal. The content of the GnupgKeyParms container is passed verbatim to the crypto backend. Control statements are not allowed.

After the operation completed successfully, the result can be retrieved with `gpgme_op_genkey_result`.

The function returns the error code GPG_ERR_NO_ERROR if the operation could be started successfully, GPG_ERR_INV_VALUE if PARMS is not a well-formed string (e.g. does not have the expected tag-like headers and footers), GPG_ERR_NOT_SUPPORTED if PUBLIC or SECRET is not valid, and GPG_ERR_GENERAL if no key was created by the backend.

---

Function: `gpgme_error_t gpgme_op_genkey_start (gpgme_ctx_t CTX, const char *PARMS, gpgme_data_t PUBLIC, gpgme_data_t SECRET)`
The function `gpgme_op_genkey_start` initiates a `gpgme_op_genkey` operation. It can be completed by calling `gpgme_wait` on the context. *Note Waiting For Completion::*

The function returns the error code `GPG_ERR_NO_ERROR` if the operation could be started successfully, `GPG_ERR_INV_VALUE` if `PARMS` is not a valid XML string, and `GPG_ERR_NOT_SUPPORTED` if `PUBLIC` or `SECRET` is not NULL.

-- Data type: `gpgme_genkey_result_t`

This is a pointer to a structure used to store the result of a `gpgme_op_genkey` operation. After successfully generating a key, you can retrieve the pointer to the result with `gpgme_op_genkey_result`. The structure contains the following members:

- `unsigned int primary : 1`
  This flag is set to 1 if a primary key was created and to 0 if not.

- `unsigned int sub : 1`
  This flag is set to 1 if a subkey was created and to 0 if not.

- `unsigned int uid : 1`
  This flag is set to 1 if a user ID was created and to 0 if not.

- `char *fpr`
  This is the fingerprint of the key that was created. If both a primary and a subkey were generated, the fingerprint of the primary key will be returned. If the crypto engine does not provide the fingerprint, `fpr` will be a null pointer.

- `gpgme_data_t pubkey`
  SINCE: 1.7.0
  This will eventually be used to return the public key. It is currently not used.

- `gpgme_data_t seckey`
  SINCE: 1.7.0
  This will eventually be used to return the secret key. It is currently not used.

-- Function: `gpgme_genkey_result_t gpgme_op_genkey_result`
The function `gpgme_op_genkey_result` returns a `gpgme_genkey_result_t` pointer to a structure holding the result of a `gpgme_op_genkey` operation. The pointer is only valid if the last operation on the context was a `gpgme_op_genkey` or `gpgme_op_genkey_start` operation, and if this operation finished successfully. The returned pointer is only valid until the next operation is started on the context.


7.5.6 Signing Keys

Key signatures are a unique concept of the OpenPGP protocol. They can be used to certify the validity of a key and are used to create the Web-of-Trust (WoT). Instead of using the `gpgme_op_interact` function along with a finite state machine, GPGME provides a convenient function to create key signatures when using modern GnuPG versions.

```
-- Function: gpgme_error_t gpgme_op_keysign (gpgme_ctx_t CTX,
   , gpgme_key_t KEY, const char *USERID, unsigned long EXPIRES,
   , unsigned int FLAGS);

SINCE: 1.7.0
```

The function `gpgme_op_keysign` adds a new key signature to the public key `KEY`. This function requires at least version 2.1.12 of GnuPG.

`CTX` is the usual context which describes the protocol to use (which must be OpenPGP) and has also the list of signer keys to be used for the signature. The common case is to use the default key for signing other keys. If another key or more than one key shall be used for a key signature, `gpgme_signers_add` can be used. *Note Selecting Signers:.*

`KEY` specifies the key to operate on.

`USERID` selects the user ID or user IDs to be signed. If `USERID` is set to NULL all valid user IDs are signed. The user ID must be given verbatim because the engine does an exact and case sensitive match. Thus the uid field from the user ID object (gpgme_user_id_t) is to be used. To select more than one user ID put them all into one string separated by linefeeds characters (`\n`) and set the flag GPGME_KEYSIGN_LFSEP.
EXPIRES specifies the expiration time of the new signature in seconds. The common case is to use 0 to not set an expiration date. However, if the configuration of the engine defines a default expiration for key signatures, that is still used unless the flag GPGME_KEYSIGN_NOEXPIRE is used. Note that this parameter takes an unsigned long value and not a time_t to avoid problems on systems which use a signed 32 bit time_t. Note further that the OpenPGP protocol uses 32 bit values for timestamps and thus can only encode dates up to the year 2106.

FLAGS can be set to the bit-wise OR of the following flags:

GPGME_KEYSIGN_LOCAL
   SINCE: 1.7.0

   Instead of creating an exportable key signature, create a key signature which is marked as non-exportable.

GPGME_KEYSIGN_LFSEP
   SINCE: 1.7.0

   Although linefeeds are uncommon in user IDs this flag is required to explicitly declare that USERID may contain several linefeed separated user IDs.

GPGME_KEYSIGN_NOEXPIRE
   Force the creation of a key signature without an expiration date. This overrides EXPIRE and any local configuration of the engine.

The function returns zero on success, GPG_ERR_NOT_SUPPORTED if the engine does not support the command, or a bunch of other error codes.

-- Function: gpgme_error_t gpgme_op_keysign_start (gpgme_ctx_t CTX, gpgme_key_t KEY, const char *USERID, unsigned long EXPIRES, unsigned int FLAGS);

   SINCE: 1.7.0

   The function gpgme_op_keysign_start initiates a gpgme_op_keysign operation; see there for details. It must be completed by calling gpgme_wait on the context. *Note Waiting For Completion::.

7.5.7 Exporting Keys

Exporting keys means the same as running gpg with the command --export. However, a mode flag can be used to change the way the export works. The available mode flags are described below, they may be or-ed together.

GPGME_EXPORT_MODE_EXTERN
If this bit is set, the output is send directly to the default keyservver. This is currently only allowed for OpenPGP keys. It is good practise to not send more than a few dozens key to a keyservver at one time. Using this flag requires that the KEYDATA argument of the export function is set to NULL.

GPGME_EXPORT_MODE_MINIMAL
SINCE: 1.3.1

If this bit is set, the smallest possible key is exported. For OpenPGP keys it removes all signatures except for the latest self-signatures. For X.509 keys it has no effect.

GPGME_EXPORT_MODE_SECRET
SINCE: 1.6.0

Instead of exporting the public key, the secret key is exported. This may not be combined with GPGME_EXPORT_MODE_EXTERN. For X.509 the export format is PKCS#8.

GPGME_EXPORT_MODE_RAW
SINCE: 1.6.0

If this flag is used with GPGME_EXPORT_MODE_SECRET for an X.509 key the export format will be changed to PKCS#1. This flag may not be used with OpenPGP.

GPGME_EXPORT_MODE_PKCS12
SINCE: 1.6.0

If this flag is used with GPGME_EXPORT_MODE_SECRET for an X.509 key the export format will be changed to PKCS#12 which also includes the certificate. This flag may not be used with OpenPGP.

GPGME_EXPORT_MODE_NOUID
SINCE: 1.12.0 - experimental Do not export user ids. Works only with certain gpg version.
The function `gpgme_op_export` extracts public keys and returns them in the data buffer `KEYDATA`. The output format of the key data returned is determined by the ASCII armor attribute set for the context `CTX`, or, if that is not set, by the encoding specified for `KEYDATA`.

If `PATTERN` is NULL, all available keys are returned. Otherwise, `PATTERN` contains an engine specific expression that is used to limit the list to all keys matching the pattern.

`MODE` is usually 0; other values are described above.

The function returns the error code `GPG_ERR_NO_ERROR` if the operation completed successfully, `GPG_ERR_INV_VALUE` if `KEYDATA` is not a valid empty data buffer, and passes through any errors that are reported by the crypto engine support routines.

The function `gpgme_op_export_start` initiates a `gpgme_op_export` operation. It can be completed by calling `gpgme_wait` on the context. *Note Waiting For Completion::*

The function returns the error code `GPG_ERR_NO_ERROR` if the operation could be started successfully, and `GPG_ERR_INV_VALUE` if `KEYDATA` is not a valid empty data buffer.

The function `gpgme_op_export_ext` extracts public keys and returns them in the data buffer `KEYDATA`. The output format of the key data returned is determined by the ASCII armor attribute set for the context `CTX`, or, if that is not set, by the encoding specified for `KEYDATA`.

If `PATTERN` or `*PATTERN` is NULL, all available keys are returned. Otherwise, `PATTERN` is a NULL terminated array of strings that are used to limit the list to all keys matching at least one of the patterns verbatim.

`MODE` is usually 0; other values are described above.

The function returns the error code `GPG_ERR_NO_ERROR` if the
operation completed successfully, GPG_ERR_INV_VALUE if KEYDATA is not a valid empty data buffer, and passes through any errors that are reported by the crypto engine support routines.

-- Function: gpgme_error_t gpgme_op_export_ext_start (gpgme_ctx_t CTX,
   const char *PATTERN[], gpgme_export_mode_t MODE,
   gpgme_data_t KEYDATA)
The function gpgme_op_export_ext_start initiates a gpgme_op_export_ext operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion.::

The function returns the error code GPG_ERR_NO_ERROR if the operation could be started successfully, and GPG_ERR_INV_VALUE if KEYDATA is not a valid empty data buffer.

-- Function: gpgme_error_t gpgme_op_export_keys (gpgme_ctx_t CTX,
   gpgme_key_t keys[], gpgme_export_mode_t MODE,
   gpgme_data_t KEYDATA)
SINCE: 1.2.0

The function gpgme_op_export_keys extracts public keys and returns them in the data buffer KEYDATA. The output format of the key data returned is determined by the ASCII armor attribute set for the context CTX, or, if that is not set, by the encoding specified for KEYDATA.

The keys to export are taken form the NULL terminated array KEYS. Only keys of the currently selected protocol of CTX which do have a fingerprint set are considered for export. Other keys specified by the KEYS are ignored. In particular OpenPGP keys retrieved via an external key listing are not included.

MODE is usually 0; other values are described above.

The function returns the error code GPG_ERR_NO_ERROR if the operation completed successfully, GPG_ERR_INV_VALUE if KEYDATA is not a valid empty data buffer, GPG_ERR_NO_DATA if no useful keys are in KEYS and passes through any errors that are reported by the crypto engine support routines.

-- Function: gpgme_error_t gpgme_op_export_keys_start (gpgme_ctx_t CTX,
   gpgme_key_t KEYS[], gpgme_export_mode_t MODE,
   gpgme_data_t KEYDATA)
SINCE: 1.2.0

The function gpgme_op_export_keys_start initiates a gpgme_op_export_ext operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion.::
The function returns the error code GPG_ERR_NO_ERROR if the operation could be started successfully, and GPG_ERR_INV_VALUE if KEYDATA is not a valid empty data buffer, GPG_ERR_NO_DATA if no useful keys are in KEYS and passes through any errors that are reported by the crypto engine support routines.


7.5.8 Importing Keys

---------------------

Importing keys means the same as running gpg with the command --import.

-- Function: gpgme_error_t gpgme_op_import (gpgme_ctx_t CTX,
gpgme_data_t KEYDATA)
The function gpgme_op_import adds the keys in the data buffer KEYDATA to the key ring of the crypto engine used by CTX. The format of KEYDATA can be ASCII armored, for example, but the details are specific to the crypto engine.

After the operation completed successfully, the result can be retrieved with gpgme_op_import_result.

The function returns the error code GPG_ERR_NO_ERROR if the import was completed successfully, GPG_ERR_INV_VALUE if KEYDATA if CTX or KEYDATA is not a valid pointer, and GPG_ERR_NO_DATA if KEYDATA is an empty data buffer.

-- Function: gpgme_error_t gpgme_op_import_start (gpgme_ctx_t CTX,
gpgme_data_t KEYDATA)
The function gpgme_op_import_start initiates a gpgme_op_import operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion::*

The function returns the error code GPG_ERR_NO_ERROR if the import could be started successfully, GPG_ERR_INV_VALUE if CTX or KEYDATA is not a valid pointer, and GPG_ERR_NO_DATA if KEYDATA is an empty data buffer.

-- Function: gpgme_error_t gpgme_op_import_keys (gpgme_ctx_t CTX,
gpgme_key_t *KEYS)
The function gpgme_op_import_keys adds the keys described by the NULL terminated array KEYS to the key ring of the crypto engine

SINCE: 1.2.0
used by CTX. It is used to actually import and make keys permanent which have been retrieved from an external source (i.e. using GPGME_KEYLIST_MODE_EXTERN) earlier. The external keylisting must have been made with the same context configuration (in particular the same home directory). (1) Note that for OpenPGP this may require another access to the keyserver over the network.

Only keys of the currently selected protocol of CTX are considered for import. Other keys specified by the KEYS are ignored. As of now all considered keys must have been retrieved using the same method, i.e. the used key listing mode must be identical.

After the operation completed successfully, the result can be retrieved with gpgme_op_import_result.

To move keys from one home directory to another, export and import the keydata using gpgme_op_export and gpgme_op_import.

The function returns the error code GPG_ERR_NO_ERROR if the import was completed successfully, GPG_ERR_INV_VALUE if CTX is not a valid pointer, GPG_ERR_CONFLICT if the key listing mode does not match, and GPG_ERR_NO_DATA if no keys are considered for export.

-- Function: gpgme_error_t gpgme_op_import_keys_start (gpgme_ctx_t CTX, gpgme_key_t *KEYS)

SINCE: 1.2.0

The function gpgme_op_import_keys_start initiates a gpgme_op_import_keys operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion::.

The function returns the error code GPG_ERR_NO_ERROR if the import was completed successfully, GPG_ERR_INV_VALUE if KEYDATA if CTX or KEYDATA is not a valid pointer, GPG_ERR_CONFLICT if the key listing mode does not match, and GPG_ERR_NO_DATA if no keys are considered for export.

-- Data type: gpgme_import_status_t

This is a pointer to a structure used to store a part of the result of a gpgme_op_import operation. For each considered key one status is added that contains information about the result of the import. The structure contains the following members:

  gpgme_import_status_t next
    This is a pointer to the next status structure in the linked list, or NULL if this is the last element.
char *fpr
    This is the fingerprint of the key that was considered.

gpgme_error_t result
    If the import was not successful, this is the error value that
    caused the import to fail. Otherwise the error code is
    GPG_ERR_NO_ERROR.

unsigned int status
    This is a bit-wise OR of the following flags that give more
    information about what part of the key was imported. If the
    key was already known, this might be 0.

    GPGME_IMPORT_NEW
        The key was new.

    GPGME_IMPORT_UID
        The key contained new user IDs.

    GPGME_IMPORT_SIG
        The key contained new signatures.

    GPGME_IMPORT_SUBKEY
        The key contained new sub keys.

    GPGME_IMPORT_SECRET
        The key contained a secret key.

-- Data type: gpgme_import_result_t
    This is a pointer to a structure used to store the result of a
    gpgme_op_import operation. After a successful import operation,
    you can retrieve the pointer to the result with
    gpgme_op_import_result. The structure contains the following
    members:

    int considered
        The total number of considered keys.

    int no_user_id
        The number of keys without user ID.

    int imported
        The total number of imported keys.

    int imported_rsa
        The number of imported RSA keys.

    int unchanged
int new_user_ids
The number of new user IDs.

int new_sub_keys
The number of new sub keys.

int new_signatures
The number of new signatures.

int new_revocations
The number of new revocations.

int secret_read
The total number of secret keys read.

int secret_imported
The number of imported secret keys.

int secret_unchanged
The number of unchanged secret keys.

int not_imported
The number of keys not imported.

gpgme_import_status_t imports
A list of gpgme_import_status_t objects which contain more
information about the keys for which an import was attempted.

int skipped_v3_keys
For security reasons modern versions of GnuPG do not anymore
support v3 keys (created with PGP 2.x) and ignores them on
import. This counter provides the number of such skipped v3
keys.

-- Function: gpgme_import_result_t gpgme_op_import_result
(gpgme_ctx_t CTX)
The function gpgme_op_import_result returns a
gpgme_import_result_t pointer to a structure holding the result
of a gpgme_op_import operation. The pointer is only valid if the
last operation on the context was a gpgme_op_import or
gpgme_op_import_start operation, and if this operation finished
successfully. The returned pointer is only valid until the next
operation is started on the context.

---------- Footnotes ----------
Thus it is a replacement for the usual workaround of exporting and then importing a key to make an X.509 key permanent.


7.5.9 Deleting Keys

---

-- Function: gpgme_error_t gpgme_op_delete_ext (gpgme_ctx_t CTX, const gpgme_key_t KEY, unsigned int FLAGS)
SINCE: 1.9.1

The function gpgme_op_delete_ext deletes the key KEY from the key ring of the crypto engine used by CTX.

FLAGS can be set to the bit-wise OR of the following flags:

GPGME_DELETE_ALLOW_SECRET
SINCE: 1.9.1

If not set, only public keys are deleted. If set, secret keys are deleted as well, if that is supported.

GPGME_DELETE_FORCE
SINCE: 1.9.1

If set, the user is not asked to confirm the deletion.

The function returns the error code GPG_ERR_NO_ERROR if the key was deleted successfully, GPG_ERR_INV_VALUE if CTX or KEY is not a valid pointer, GPG_ERR_NO_PUBKEY if KEY could not be found in the keyring, GPG_ERR_AMBIGUOUS_NAME if the key was not specified unambiguously, and GPG_ERR_CONFLICT if the secret key for KEY is available, but ALLOW_SECRET is zero.

-- Function: gpgme_error_t gpgme_op_delete_ext_start (gpgme_ctx_t CTX, const gpgme_key_t KEY, unsigned int FLAGS)
SINCE: 1.9.1

The function gpgme_op_delete_ext_start initiates a gpgme_op_delete operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion:::

The function returns the error code GPG_ERR_NO_ERROR if the operation was started successfully, and GPG_ERR_INV_VALUE if CTX or KEY is not a valid pointer.
The following functions allow only to use one particular flag.

-- Function: gpgme_error_t gpgme_op_delete (gpgme_ctx_t CTX,  
    const gpgme_key_t KEY, int ALLOW_SECRET)  
Similar to gpgme_op_delete_ext, but only the flag  
GPGME_DELETE_ALLOW_SECRET can be provided.

-- Function: gpgme_error_t gpgme_op_delete_start (gpgme_ctx_t CTX,  
    const gpgme_key_t KEY, int ALLOW_SECRET)  
Similar to gpgme_op_delete_ext_start, but only the flag  
GPGME_DELETE_ALLOW_SECRET can be provided.


7.5.10 Changing Passphrases

--------------

-- Function: gpgme_error_t gpgme_op_passwd (gpgme_ctx_t CTX,  
    const gpgme_key_t KEY, unsigned int FLAGS)  

SINCE: 1.3.0

The function gpgme_op_passwd changes the passphrase of the  
private key associated with KEY. The only allowed value for FLAGS  
is 0. The backend engine will usually popup a window to ask for  
the old and the new passphrase. Thus this function is not useful  
in a server application (where passphrases are not required  
anyway).

Note that old gpg engines (before version 2.0.15) do not support  
this command and will silently ignore it.

-- Function: gpgme_error_t gpgme_op_passwd_start (gpgme_ctx_t CTX,  
    const gpgme_key_t KEY, unsigned int FLAGS)  

SINCE: 1.3.0

The function gpgme_op_passwd_start initiates a gpgme_op_passwd  
operation. It can be completed by calling gpgme_wait on the  
context. *Note Waiting For Completion:*

The function returns 0 if the operation was started successfully,  
and an error code if one of the arguments is not valid or the  
operation could not be started.
The OpenPGP engine features a Trust-On-First-Use (TOFU) key validation model. For resolving conflicts it is necessary to declare the policy for a key. See the GnuPG manual for details on the TOFU implementation.

-- Data type: enum gpgme_tofu_policy_t

Since: 1.7.0

The gpgme_tofu_policy_t type specifies the set of possible policy values that are supported by GPGME:

GPGME_TOFU_POLICY_AUTO
   Set the policy to auto.
GPGME_TOFU_POLICY_GOOD
   Set the policy to good.
GPGME_TOFU_POLICY_BAD
   Set the policy to bad.
GPGME_TOFU_POLICY_ASK
   Set the policy to ask.
GPGME_TOFU_POLICY_UNKNOWN
   Set the policy to unknown.

To change the policy for a key the following functions can be used:

-- Function: gpgme_error_t gpgme_op_tofu_policy (gpgme_ctx_t CTX,
       const gpgme_key_t KEY, gpgme_tofu_policy_t POLICY)

Since: 1.7.0

The function gpgme_op_tofu_policy changes the TOFU policy of KEY. The valid values for POLICY are listed above. As of now this function does only work for OpenPGP and requires at least version 2.1.10 of GnuPG.

The function returns zero on success, GPG_ERR_NOT_SUPPORTED if the engine does not support the command, or a bunch of other error codes.

-- Function: gpgme_error_t gpgme_op_tofu_policy_start (gpgme_ctx_t CTX,
       const gpgme_key_t KEY, gpgme_tofu_policy_t POLICY)

Since: 1.7.0
The function `gpgme_op_tofu_policy_start` initiates a `gpgme_op_tofu_policy` operation. It can be completed by calling `gpgme_wait` on the context. *Note Waiting For Completion:*

The function returns 0 if the operation was started successfully, and an error code if one of the arguments is not valid or the operation could not be started.

File: gpgme.info, Node: Advanced Key Editing, Prev: Changing TOFU Data, Up: Key Management

7.5.12 Advanced Key Editing

-----------------------------

-- Data type: `gpgme_error_t (*gpgme_interact_cb_t) (void *HANDLE, const char *STATUS, const char *ARGS, int FD)`

SINCE: 1.7.0

The `gpgme_interact_cb_t` type is the type of functions which GPGME calls if it a key interact operation is on-going. The status keyword `STATUS` and the argument line `ARGS` are passed through by GPGME from the crypto engine. An empty string represents EOF. The file descriptor `FD` is -1 for normal status messages. If `STATUS` indicates a command rather than a status message, the response to the command should be written to `FD`. The `HANDLE` is provided by the user at start of operation.

The function should return `GPG_ERR_FALSE` if it did not handle the status code, 0 for success, or any other error value.

-- Function: `gpgme_error_t gpgme_op_interact (gpgme_ctx_t CTX, gpgme_key_t KEY, unsigned int FLAGS, gpgme_interact_cb_t FNC, void *HANDLE, gpgme_data_t OUT)`

SINCE: 1.7.0

The function `gpgme_op_interact` processes the key `KEY` interactively, using the interact callback function `FNC` with the handle `HANDLE`. The callback is invoked for every status and command request from the crypto engine. The output of the crypto engine is written to the data object `OUT`.

Note that the protocol between the callback function and the crypto engine is specific to the crypto engine and no further support in implementing this protocol correctly is provided by GPGME.
FLAGS modifies the behaviour of the function; the only defined bit value is:

GPGME_INTERACT_CARD
   SINCE: 1.7.0

   This is used for smartcard based keys and uses gpgs
   --card-edit command.

The function returns 0 if the edit operation completes
successfully, GPG_ERR_INV_VALUE if CTX or KEY is not a valid
pointer, and any error returned by the crypto engine or the edit
callback handler.

-- Function: gpgme_error_t gpgme_op_interact_start (gpgme_ctx_t CTX,
gpgme_key_t KEY, unsigned int FLAGS, gpgme_interact_cb_t FNC,
void *HANDLE, gpgme_data_t OUT)

   SINCE: 1.7.0

   The function gpgme_op_interact_start initiates a
gpgme_op_interact operation. It can be completed by calling
gpgme_wait on the context. *Note Waiting For Completion:::

   The function returns 0 if the operation was started successfully,
   and GPG_ERR_INV_VALUE if CTX or KEY is not a valid pointer.


7.6 Trust Item Management
   =========================

   *Caution:* The trust items interface is experimental.

   -- Data type: gpgme_trust_item_t

   The gpgme_trust_item_t type is a pointer to a trust item object.
   It has the following members:

   char *keyid
      This is a string describing the key to which this trust items
      belongs.

   int type
      This is the type of the trust item. A value of 1 refers to a
      key, a value of 2 refers to a user ID.

   int level
This is the trust level.

```c
char *owner_trust
The owner trust if type is 1.
```

```c
char *validity
The calculated validity.
```

```c
char *name
The user name if type is 2.
```

* Menu:

* Listing Trust Items:: Browsing the list of available trust items.
* Manipulating Trust Items:: Operations on trust items.

File: gpgme.info, Node: Listing Trust Items, Next: Manipulating Trust Items, Up: Trust Item Management

7.6.1 Listing Trust Items
------------------------

```c
-- Function: gpgme_error_t gpgme_op_trustlist_start (gpgme_ctx_t CTX,
    const char *PATTERN, int MAX_LEVEL)
The function gpgme_op_trustlist_start initiates a trust item
listing operation inside the context CTX. It sets everything up so
that subsequent invocations of gpgme_op_trustlist_next return the
trust items in the list.

The string PATTERN contains an engine specific expression that is
used to limit the list to all trust items matching the pattern. It
can not be the empty string.

The argument MAX_LEVEL is currently ignored.

The context will be busy until either all trust items are received
(and gpgme_op_trustlist_next returns GPG_ERR_EOF), or
gpgme_op_trustlist_end is called to finish the operation.

The function returns the error code GPG_ERR_INV_VALUE if CTX is
not a valid pointer, and passes through any errors that are
reported by the crypto engine support routines.

-- Function: gpgme_error_t gpgme_op_trustlist_next (gpgme_ctx_t CTX,
    gpgme_trust_item_t *R_ITEM)
The function gpgme_op_trustlist_next returns the next trust item
in the list created by a previous gpgme_op_trustlist_start
operation in the context CTX. The trust item can be destroyed with
This is the only way to get at gpgme_trust_item_t objects in GPGME.

If the last trust item in the list has already been returned, gpgme_op_trustlist_next returns GPG_ERR_EOF.

The function returns the error code GPG_ERR_INV_VALUE if CTX or R_ITEM is not a valid pointer, and GPG_ERR_ENOMEM if there is not enough memory for the operation.

-- Function: gpgme_error_t gpgme_op_trustlist_end (gpgme_ctx_t CTX)
The function gpgme_op_trustlist_end ends a pending trust list operation in the context CTX.

The function returns the error code GPG_ERR_INV_VALUE if CTX is not a valid pointer, and GPG_ERR_ENOMEM if at some time during the operation there was not enough memory available.

7.6.2 Manipulating Trust Items

-- Function: void gpgme_trust_item_ref (gpgme_trust_item_t ITEM)
The function gpgme_trust_item_ref acquires an additional reference for the trust item ITEM.

-- Function: void gpgme_trust_item_unref (gpgme_trust_item_t ITEM)
The function gpgme_trust_item_unref releases a reference for the trust item ITEM. If this was the last reference, the trust item will be destroyed and all resources associated to it will be released.

7.7 Crypto Operations

Sometimes, the result of a crypto operation returns a list of invalid keys encountered in processing the request. The following structure is used to hold information about such a key.

-- Data type: gpgme_invalid_key_t
This is a pointer to a structure used to store a part of the result
of a crypto operation which takes user IDs as one input parameter.
The structure contains the following members:

gpgme_invalid_key_t next
   This is a pointer to the next invalid key structure in the
   linked list, or NULL if this is the last element.

char *fpr
   The fingerprint or key ID of the invalid key encountered.

gpgme_error_t reason
   An error code describing the reason why the key was found
   invalid.

* Menu:

* Decrypt::                       Decrypting a ciphertext.
* Verify::                        Verifying a signature.
* Decrypt and Verify::            Decrypting a signed ciphertext.
* Sign::                          Creating a signature.
* Encrypt::                       Encrypting a plaintext.

File: gpgme.info, Node: Decrypt, Next: Verify, Up: Crypto Operations

7.7.1 Decrypt
-------------

-- Function: gpgme_error_t gpgme_op_decrypt (gpgme_ctx_t CTX,
       gpgme_data_t CIPHER, gpgme_data_t PLAIN)
The function gpgme_op_decrypt decrypts the ciphertext in the data
object CIPHER and stores it into the data object PLAIN.

The function returns the error code GPG_ERR_NO_ERROR if the
ciphertext could be decrypted successfully, GPG_ERR_INV_VALUE if
CTX, CIPHER or PLAIN is not a valid pointer, GPG_ERR_NO_DATA if
CIPHER does not contain any data to decrypt,
GPG_ERR_DECRYPT_FAILED if CIPHER is not a valid cipher text,
GPG_ERR_BAD_PASSPHRASE if the passphrase for the secret key could
not be retrieved, and passes through some errors that are reported
by the crypto engine support routines.

-- Function: gpgme_error_t gpgme_op_decrypt_start (gpgme_ctx_t CTX,
                                                 gpgme_data_t CIPHER, gpgme_data_t PLAIN)
The function gpgme_op_decrypt_start initiates a
gpgme_op_decrypt operation. It can be completed by calling
gpgme_wait on the context. *Note Waiting For Completion:::
The function returns the error code GPG_ERR_NO_ERROR if the operation could be started successfully, and GPG_ERR_INV_VALUE if CIPHER or PLAIN is not a valid pointer.

-- Function: gpgme_error_t gpgme_op_decrypt_ext ( gpgme_ctx_t CTX,
     gpgme_decrypt_flags_t FLAGS, gpgme_data_t CIPHER,
     gpgme_data_t PLAIN)

SINCE: 1.8.0

The function gpgme_op_decrypt_ext is the same as gpgme_op_decrypt but has an additional argument FLAGS. If FLAGS is 0 both function behave identically.

The value in FLAGS is a bitwise-or combination of one or multiple of the following bit values:

GPGME_DECRYPT_VERIFY
SINCE: 1.8.0

The GPGME_DECRYPT_VERIFY symbol specifies that this function shall exactly act as gpgme_op_decrypt_verify.

GPGME_DECRYPT_UNWRAP
SINCE: 1.8.0

The GPGME_DECRYPT_UNWRAP symbol specifies that the output shall be an OpenPGP message with only the encryption layer removed. This requires GnuPG 2.1.12 and works only for OpenPGP. This is the counterpart to GPGME_ENCRYPT_WRAP.

The function returns the error codes as described for gpgme_op_decrypt respective gpgme_op_encrypt.

-- Function: gpgme_error_t gpgme_op_decrypt_ext_start ( gpgme_ctx_t CTX,
     gpgme_decrypt_flags_t FLAGS, gpgme_data_t CIPHER, gpgme_data_t PLAIN)

SINCE: 1.8.0

The function gpgme_op_decrypt_ext_start initiates a gpgme_op_decrypt_ext operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion:.*

The function returns the error code GPG_ERR_NO_ERROR if the operation could be started successfully, and GPG_ERR_INV_VALUE if CIPHER or PLAIN is not a valid pointer.
-- Data type: gpgme_recipient_t
SINCE: 1.1.0

This is a pointer to a structure used to store information about
the recipient of an encrypted text which is decrypted in a
gpgme_op_decrypt operation. This information (except for the
status field) is even available before the operation finished
successfully, for example in a passphrase callback. The structure
contains the following members:

gpgme_recipient_t next
   This is a pointer to the next recipient structure in the
   linked list, or NULL if this is the last element.

gpgme_pubkey_algo_t
   The public key algorithm used in the encryption.

char *keyid
   This is the key ID of the key (in hexadecimal digits) used as
   recipient.

gpgme_error_t status
   This is an error number with the error code GPG_ERR_NO_SECKEY
   if the secret key for this recipient is not available, and 0
   otherwise.

-- Data type: gpgme_decrypt_result_t
This is a pointer to a structure used to store the result of a
gpgme_op_decrypt operation. After successfully decrypting data,
you can retrieve the pointer to the result with
gpgme_op_decrypt_result. As with all result structures, it this
structure shall be considered read-only and an application must not
allocate such a structure on its own. The structure contains the
following members:

char *unsupported_algorithm
   If an unsupported algorithm was encountered, this string
describes the algorithm that is not supported.

unsigned int wrong_key_usage : 1
   SINCE: 0.9.0 This is true if the key was not used according to
   its policy.

unsigned int legacy_cipher_nomdc : 1
   SINCE: 1.11.2 The message was made by a legacy algorithm
   without any integrity protection. This might be an old but
   legitimate message.
unsigned int is_mime : 1;
SINCE: 1.11.0 The message claims that the content is a MIME object.

unsigned int is_de_vs : 1;
SINCE: 1.10.0 The message was encrypted in a VS-NfD compliant way. This is a specification in Germany for a restricted communication level.

gpgme_recipient_t recipients
SINCE: 1.1.0
This is a linked list of recipients to which this message was encrypted.

char *file_name
This is the filename of the original plaintext message file if it is known, otherwise this is a null pointer.

char *session_key
SINCE: 1.8.0
A textual representation (nul-terminated string) of the session key used in symmetric encryption of the message, if the context has been set to export session keys (see gpgme_set_ctx_flag, "export-session-key"), and a session key was available for the most recent decryption operation. Otherwise, this is a null pointer.

You must not try to access this member of the struct unless gpgme_set_ctx_flag (ctx, "export-session-key") returns success or gpgme_get_ctx_flag (ctx, "export-session-key") returns true (non-empty string).

char *symkey_algo
SINCE: 1.11.0
A string with the symmetric encryption algorithm and mode using the format "<algo>.<mode>". Note that the deprecated non-MDC encryption mode of OpenPGP is given as "PGPCFB".

-- Function: gpgme_decrypt_result_t gpgme_op_decrypt_result (gpgme_ctx_t CTX)
The function gpgme_op_decrypt_result returns a gpgme_decrypt_result_t pointer to a structure holding the result of a gpgme_op_decrypt operation. The pointer is only valid if the last operation on the context was a gpgme_op_decrypt or gpgme_op_decrypt_start operation. If the operation failed this
might be a NULL pointer. The returned pointer is only valid until the next operation is started on the context.


7.7.2 Verify

----------

-- Function: gpgme_error_t gpgme_op_verify (gpgme_ctx_t CTX, gpgme_data_t SIG, gpgme_data_t SIGNED_TEXT, gpgme_data_t PLAIN)

The function gpgme_op_verify verifies that the signature in the data object SIG is a valid signature. If SIG is a detached signature, then the signed text should be provided in SIGNED_TEXT and PLAIN should be a null pointer. Otherwise, if SIG is a normal (or cleartext) signature, SIGNED_TEXT should be a null pointer and PLAIN should be a writable data object that will contain the plaintext after successful verification.

The results of the individual signature verifications can be retrieved with gpgme_op_verify_result.

The function returns the error code GPG_ERR_NO_ERROR if the operation could be completed successfully, GPG_ERR_INV_VALUE if CTX, SIG or PLAIN is not a valid pointer, GPG_ERR_NO_DATA if SIG does not contain any data to verify, and passes through any errors that are reported by the crypto engine support routines.

-- Function: gpgme_error_t gpgme_op_verify_start (gpgme_ctx_t CTX, gpgme_data_t SIG, gpgme_data_t SIGNED_TEXT, gpgme_data_t PLAIN)

The function gpgme_op_verify_start initiates a gpgme_op_verify operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion::.

The function returns the error code GPG_ERR_NO_ERROR if the operation could be started successfully, GPG_ERR_INV_VALUE if CTX, SIG or PLAIN is not a valid pointer, and GPG_ERR_NO_DATA if SIG or PLAIN does not contain any data to verify.

-- Data type: gpgme_sig_notation_t

This is a pointer to a structure used to store a part of the result of a gpgme_op_verify operation. The structure contains the following members:

  gpgme_sig_notation_t next

  This is a pointer to the next new signature notation structure
in the linked list, or NULL if this is the last element.

char *name
The name of the notation field. If this is NULL, then the
member value will contain a policy URL.

int name_len
The length of the name field. For strings the length is
counted without the trailing binary zero.

char *value
The value of the notation field. If name is NULL, then
this is a policy URL.

int value_len
The length of the value field. For strings the length is
counted without the trailing binary zero.

gpgme_sig_notation_flags_t flags
The accumulated flags field. This field contains the flags
associated with the notation data in an accumulated form which
can be used as an argument to the function
gpgme_sig_notation_add. The value flags is a bitwise-or
combination of one or multiple of the following bit values:

GPGME_SIG_NOTATION_HUMAN_READABLE
SINCE: 1.1.0

The GPGME_SIG_NOTATION_HUMAN_READABLE symbol specifies
that the notation data is in human readable form

GPGME_SIG_NOTATION_CRITICAL
SINCE: 1.1.0

The GPGME_SIG_NOTATION_CRITICAL symbol specifies that
the notation data is critical.

unsigned int human_readable : 1
This is true if the GPGME_SIG_NOTATION_HUMAN_READABLE flag
is set and false otherwise. This flag is only valid for
notation data, not for policy URLs.

unsigned int critical : 1
This is true if the GPGME_SIG_NOTATION_CRITICAL flag is set
and false otherwise. This flag is valid for notation data and
policy URLs.

-- Data type: gpgme_signature_t
This is a pointer to a structure used to store a part of the result of a gpgme_op_verify operation. The structure contains the following members:

```c
struct gpgme_signature_t next
    This is a pointer to the next new signature structure in the linked list, or NULL if this is the last element.

struct gpgme_sigsum_t summary
    This is a bit vector giving a summary of the signature status. It provides an easy interface to a defined semantic of the signature status. Checking just one bit is sufficient to see whether a signature is valid without any restrictions. This means that you can check for GPGME_SIGSUM_VALID like this:

    if ((sig.summary & GPGME_SIGSUM_VALID))
        {do stuff if valid..}
    else
        {do stuff if not fully valid..}
```

The defined bits are:

**GPGME_SIGSUM_VALID**
The signature is fully valid.

**GPGME_SIGSUM_GREEN**
The signature is good but one might want to display some extra information. Check the other bits.

**GPGME_SIGSUM_RED**
The signature is bad. It might be useful to check other bits and display more information, i.e. a revoked certificate might not render a signature invalid when the message was received prior to the cause for the revocation.

**GPGME_SIGSUM_KEY_REVOKED**
The key or at least one certificate has been revoked.

**GPGME_SIGSUM_KEY_EXPIRED**
The key or one of the certificates has expired. It is probably a good idea to display the date of the expiration.

**GPGME_SIGSUM_SIG_EXPIRED**
The signature has expired.

GPGME_SIGSUM_KEY_MISSING
   Cant verify due to a missing key or certificate.

GPGME_SIGSUM_CRL_MISSING
   The CRL (or an equivalent mechanism) is not available.

GPGME_SIGSUM_CRL_TOO_OLD
   Available CRL is too old.

GPGME_SIGSUM_BAD_POLICY
   A policy requirement was not met.

GPGME_SIGSUM_SYS_ERROR
   A system error occurred.

GPGME_SIGSUM_TOFU_CONFLICT
   A TOFU conflict was detected.

char *fpr
   This is the fingerprint or key ID of the signature.

gpgme_error_t status
   This is the status of the signature. In particular, the
   following status codes are of interest:

GPG_ERR_NO_ERROR
   This status indicates that the signature is valid. For
   the combined result this status means that all signatures
   are valid.

GPG_ERR_SIG_EXPIRED
   This status indicates that the signature is valid but
   expired. For the combined result this status means that
   all signatures are valid and expired.

GPG_ERR_KEY_EXPIRED
   This status indicates that the signature is valid but the
   key used to verify the signature has expired. For the
   combined result this status means that all signatures are
   valid and all keys are expired.

GPG_ERR_CERT_REVOKED
   This status indicates that the signature is valid but the
   key used to verify the signature has been revoked. For
   the combined result this status means that all signatures
   are valid and all keys are revoked.
GPG_ERR_BAD_SIGNATURE
This status indicates that the signature is invalid. For
the combined result this status means that all signatures
are invalid.

GPG_ERR_NO_PUBKEY
This status indicates that the signature could not be
verified due to a missing key. For the combined result
this status means that all signatures could not be
checked due to missing keys.

GPG_ERR_GENERAL
This status indicates that there was some other error
which prevented the signature verification.

gpgme_sig_notation_t notations
This is a linked list with the notation data and policy URLs.

unsigned long timestamp
The creation timestamp of this signature.

unsigned long exp_timestamp
The expiration timestamp of this signature, or 0 if the
signature does not expire.

unsigned int wrong_key_usage : 1
This is true if the key was not used according to its policy.

unsigned int pka_trust : 2
This is set to the trust information gained by means of the
PKA system. Values are:
0
No PKA information available or verification not
possible.
1
PKA verification failed.
2
PKA verification succeeded.
3
Reserved for future use.
Depending on the configuration of the engine, this metric may
also be reflected by the validity of the signature.

unsigned int chain_model : 1
SINCE: 1.1.6
This is true if the validity of the signature has been checked
using the chain model. In the chain model the time the
signature has been created must be within the validity period
of the certificate and the time the certificate itself has
been created must be within the validity period of the issuing
certificate. In contrast the default validation model checks
the validity of signature as well at the entire certificate
chain at the current time.

gpgme_validity_t validity
The validity of the signature.

gpgme_error_t validity_reason
If a signature is not valid, this provides a reason why.

gpgme_pubkey_algo_t
The public key algorithm used to create this signature.

gpgme_hash_algo_t
The hash algorithm used to create this signature.

char *pka_address
The mailbox from the PKA information or NULL.

gpgme_key_t key
SINCE: 1.7.0

An object describing the key used to create the signature.
This key object may be incomplete in that it only conveys
information available directly with a signature. It may also
be NULL if such information is not readily available.

-- Data type: gpgme_verify_result_t
This is a pointer to a structure used to store the result of a
gpgme_op_verify operation. After verifying a signature, you can
retrieve the pointer to the result with gpgme_op_verify_result.
If the operation failed this might be a NULL pointer. The
structure contains the following member:

gpgme_signature_t signatures
A linked list with information about all signatures for which
a verification was attempted.

char *file_name
This is the filename of the original plaintext message file if
it is known, otherwise this is a null pointer. Warning: The
filename is not covered by the signature.

unsigned int is_mime : 1;
The message claims that the content is a MIME object. 
Warning: This flag is not covered by the signature.

-- Function: gpgme_verify_result_t gpgme_op_verify_result
   (gpgme_ctx_t CTX)
The function gpgme_op_verify_result returns a
   gpgme_verify_result_t pointer to a structure holding the result
   of a gpgme_op_verify operation. The pointer is only valid if the
   last operation on the context was a gpgme_op_verify,
   gpgme_op_verify_start, gpgme_op_decrypt_verify or
   gpgme_op_decrypt_verify_start operation, and if this operation
   finished successfully (for gpgme_op_decrypt_verify and
   gpgme_op_decrypt_verify_start, the error code GPG_ERR_NO_DATA
   counts as successful in this context). The returned pointer is
   only valid until the next operation is started on the context.


7.7.3 Decrypt and Verify

-- Function: gpgme_error_t gpgme_op_decrypt_verify (gpgme_ctx_t CTX,
   gpgme_data_t CIPHER, gpgme_data_t PLAIN)
The function gpgme_op_decrypt_verify decrypts the ciphertext in
the data object CIPHER and stores it into the data object PLAIN.
If CIPHER contains signatures, they will be verified.

After the operation completed, gpgme_op_decrypt_result and
   gpgme_op_verify_result can be used to retrieve more information
about the signatures.

If the error code GPG_ERR_NO_DATA is returned, CIPHER does not
contain any data to decrypt. However, it might still be signed.
The information about detected signatures is available with
   gpgme_op_verify_result in this case.

The function returns the error code GPG_ERR_NO_ERROR if the
ciphertext could be decrypted successfully, GPG_ERR_INV_VALUE if
   CTX, CIPHER or PLAIN is not a valid pointer, GPG_ERR_NO_DATA if
CIPHER does not contain any data to decrypt,
   GPG_ERR_DECRYPT_FAILED if CIPHER is not a valid cipher text,
   GPG_ERR_BAD_PASSPHRASE if the passphrase for the secret key could
not be retrieved, and passes through any errors that are reported
by the crypto engine support routines.
-- Function: gpgme_error_t gpgme_op_decrypt_verify_start
   (gpgme_ctx_t CTX, gpgme_data_t CIPHER, gpgme_data_t PLAIN)
The function gpgme_op_decrypt_verify_start initiates a
   gpgme_op_decrypt_verify operation. It can be completed by
calling gpgme_wait on the context. *Note Waiting For
Completion:::

   The function returns the error code GPG_ERR_NO_ERROR if the
operation could be started successfully, GPG_ERR_INV_VALUE if
CTX, CIPHER, PLAIN or R_STAT is not a valid pointer, and
GPG_ERR_NO_DATA if CIPHER does not contain any data to decrypt.

   When processing mails it is sometimes useful to extract the actual
mail address (the addr-spec) from a string. GPGME provides this
helper function which uses the same semantics as the internal functions
in GPGME and GnuPG:

-- Function: char * gpgme_addrspec_from_uid (const char *UID)

   SINCE: 1.7.1

   Return the mail address (called addr-spec in RFC-5322) from the
string UID which is assumed to be a user id (called address in
RFC-5322). All plain ASCII characters (i.e. those with bit 7
cleared) in the result are converted to lowercase. Caller must
free the result using gpgme_free. Returns NULL if no valid
address was found (in which case ERRNO is set to EINVAL) or for
other errors.


7.7.4 Sign
--------

A signature can contain signatures by one or more keys. The set of keys
used to create a signatures is contained in a context, and is applied to
all following signing operations in this context (until the set is
changed).

* Menu:

  * Selecting Signers:: How to choose the keys to sign with.
  * Creating a Signature:: How to create a signature.
  * Signature Notation Data:: How to add notation data to a signature.
7.7.4.1 Selecting Signers

The key or the keys used to create a signature are stored in the context. The following functions can be used to manipulate this list. If no signer has been set into the context a default key is used for signing.

-- Function: void gpgme_signers_clear (gpgme_ctx_t CTX)
   The function gpgme_signers_clear releases a reference for each key on the signers list and removes the list of signers from the context CTX.

   Every context starts with an empty list.

-- Function: gpgme_error_t gpgme_signers_add (gpgme_ctx_t CTX, const gpgme_key_t KEY)
   The function gpgme_signers_add adds the key KEY to the list of signers in the context CTX.

   Calling this function acquires an additional reference for the key.

-- Function: unsigned int gpgme_signers_count (const gpgme_ctx_t CTX)
   SINCE: 1.4.3

   The function gpgme_signers_count returns the number of signer keys in the context CTX.

-- Function: gpgme_key_t gpgme_signers_enum (const gpgme_ctx_t CTX, int SEQ)
   The function gpgme_signers_enum returns the SEQth key in the list of signers in the context CTX. An additional reference is acquired for the user.

   If SEQ is out of range, NULL is returned.

File: gpgme.info, Node: Creating a Signature, Next: Signature Notation Data, Prev: Selecting Signers, Up: Sign

7.7.4.2 Creating a Signature

-- Data type: enum gpgme_sig_mode_t
   The gpgme_sig_mode_t type is used to specify the desired type of a signature. The following modes are available:

   GPGME_SIG_MODE_NORMAL
A normal signature is made, the output includes the plaintext and the signature.

**GPGME_SIG_MODE_DETACH**

A detached signature is made.

**GPGME_SIG_MODE_CLEAR**

A clear text signature is made. The ASCII armor and text mode settings of the context are ignored.

---

Function: `gpgme_error_t gpgme_op_sign (gpgme_ctx_t CTX, gpgme_data_t PLAIN, gpgme_data_t SIG, gpgme_sig_mode_t MODE)`

The function `gpgme_op_sign` creates a signature for the text in the data object `PLAIN` and returns it in the data object `SIG`. The type of the signature created is determined by the ASCII armor (or, if that is not set, by the encoding specified for `SIG`), the text mode attributes set for the context `CTX` and the requested signature mode `MODE`.

After the operation completed successfully, the result can be retrieved with `gpgme_op_sign_result`.

If an S/MIME signed message is created using the CMS crypto engine, the number of certificates to include in the message can be specified with `gpgme_set_include_certs`. *Note Included Certificates::

The function returns the error code `GPG_ERR_NO_ERROR` if the signature could be created successfully, `GPG_ERR_INV_VALUE` if `CTX`, `PLAIN` or `SIG` is not a valid pointer, `GPG_ERR_NO_DATA` if the signature could not be created, `GPG_ERR_BAD_PASSPHRASE` if the passphrase for the secret key could not be retrieved, `GPG_ERR_UNUSABLE_SECKEY` if there are invalid signers, and passes through any errors that are reported by the crypto engine support routines.

---

Function: `gpgme_error_t gpgme_op_sign_start (gpgme_ctx_t CTX, gpgme_data_t PLAIN, gpgme_data_t SIG, gpgme_sig_mode_t MODE)`

The function `gpgme_op_sign_start` initiates a `gpgme_op_sign` operation. It can be completed by calling `gpgme_wait` on the context. *Note Waiting For Completion::

The function returns the error code `GPG_ERR_NO_ERROR` if the operation could be started successfully, and `GPG_ERR_INV_VALUE` if `CTX`, `PLAIN` or `SIG` is not a valid pointer.

---

Data type: `gpgme_new_signature_t`

This is a pointer to a structure used to store a part of the result.
of a gpgme_op_sign operation. The structure contains the following members:

```c
struct gpgme_new_signature_t {
    struct gpgme_new_signature_t *next; /* This is a pointer to the next new signature structure in the linked list, or NULL if this is the last element. */
    gpgme_sig_mode_t type; /* The type of this signature. */
    gpgme_pubkey_algo_t pubkey_algo; /* The public key algorithm used to create this signature. */
    gpgme_hash_algo_t hash_algo; /* The hash algorithm used to create this signature. */
    unsigned int sig_class; /* The signature class of this signature. */
    long int timestamp; /* The creation timestamp of this signature. */
    char *fpr; /* The fingerprint of the key which was used to create this signature. */
};
```

-- Data type: gpgme_sign_result_t
This is a pointer to a structure used to store the result of a gpgme_op_sign operation. After successfully generating a signature, you can retrieve the pointer to the result with gpgme_op_sign_result. The structure contains the following members:

```c
struct gpgme_sign_result_t {
    struct gpgme_invalid_key_t *invalid_signers; /* A linked list with information about all invalid keys for which a signature could not be created. */
    struct gpgme_new_signature_t *signatures; /* A linked list with information about all signatures created. */
};
```

-- Function: gpgme_sign_result_t gpgme_op_sign_result (gpgme_ctx_t CTX)
The function gpgme_op_sign_result returns a gpgme_sign_result_t pointer to a structure holding the result of a gpgme_op_sign operation. The pointer is only valid if the last operation on the context was a gpgme_op_sign, gpgme_op_sign_start, gpgme_op_encrypt_sign or gpgme_op_encrypt_sign_start operation. If that operation failed, the function might return a NULL pointer. The returned pointer is only valid until the next
operation is started on the context.

File: gpgme.info, Node: Signature Notation Data, Prev: Creating a Signature, Up: Sign

7.7.4.3 Signature Notation Data
...............................

Using the following functions, you can attach arbitrary notation data to a signature. This information is then available to the user when the signature is verified.

-- Function: void gpgme_sig_notation_clear (gpgme_ctx_t CTX)
   SINCE: 1.1.0

   The function gpgme_sig_notation_clear removes the notation data from the context CTX. Subsequent signing operations from this context will not include any notation data.

   Every context starts with an empty notation data list.

-- Function: gpgme_error_t gpgme_sig_notation_add (gpgme_ctx_t CTX,
   const char *NAME, const char *VALUE,
   gpgme_sig_notation_flags_t FLAGS)
   SINCE: 1.1.0

   The function gpgme_sig_notation_add adds the notation data with the name NAME and the value VALUE to the context CTX.

   Subsequent signing operations will include this notation data, as well as any other notation data that was added since the creation of the context or the last gpgme_sig_notation_clear operation.

   The arguments NAME and VALUE must be NUL-terminated strings in human-readable form. The flag GPGME_SIG_NOTATION_HUMAN_READABLE is implied (non-human-readable notation data is currently not supported). The strings must be in UTF-8 encoding.

   If NAME is NULL, then VALUE should be a policy URL.

   The function gpgme_sig_notation_add returns the error code GPG_ERR_NO_ERROR if the notation data could be added successfully, GPG_ERR_INV_VALUE if CTX is not a valid pointer, or if NAME, VALUE and FLAGS are an invalid combination. The function also passes through any errors that are reported by the crypto engine support routines.

-- Function: gpgme_sig_notation_t gpgme_sig_notation_get
The function `gpgme_sig_notation_get` returns the linked list of notation data structures that are contained in the context `CTX`.

If `CTX` is not a valid pointer, or there is no notation data added for this context, NULL is returned.

---

7.7.5 Encrypt

One plaintext can be encrypted for several recipients at the same time. The list of recipients is created independently of any context, and then passed to the encryption operation.

* Menu:

* Encrypting a Plaintext:: How to encrypt a plaintext.

---

---

-- Function: `gpgme_error_t gpgme_op_encrypt (gpgme_ctx_t CTX, gpgme_key_t RECP[], gpgme_encrypt_flags_t FLAGS, gpgme_data_t PLAIN, gpgme_data_t CIPHER)`

The function `gpgme_op_encrypt` encrypts the plaintext in the data object `PLAIN` for the recipients `RECP` and stores the ciphertext in the data object `CIPHER`. The type of the ciphertext created is determined by the ASCII armor (or, if that is not set, by the encoding specified for `CIPHER`) and the text mode attributes set for the context `CTX`.

`RECP` must be a NULL-terminated array of keys. The user must keep references for all keys during the whole duration of the call (but see `gpgme_op_encrypt_start` for the requirements with the asynchronous variant).

The value in `FLAGS` is a bitwise-or combination of one or multiple of the following bit values:

```
GPGME_ENCRYPT_ALWAYS_TRUST
```
The GPGME_ENCRYPT_ALWAYS_TRUST symbol specifies that all the recipients in RECP should be trusted, even if the keys do not have a high enough validity in the keyring. This flag should be used with care; in general it is not a good idea to use any untrusted keys.

**GPGME_ENCRYPT_NO_ENCRIPT_TO**

**SINCE: 1.2.0**

The GPGME_ENCRYPT_NO_ENCRIPT_TO symbol specifies that no default or hidden default recipients as configured in the crypto backend should be included. This can be useful for managing different user profiles.

**GPGME_ENCRYPT_NO_COMPRESS**

**SINCE: 1.5.0**

The GPGME_ENCRYPT_NO_COMPRESS symbol specifies that the plaintext shall not be compressed before it is encrypted. This is in some cases useful if the length of the encrypted message may reveal information about the plaintext.

**GPGME_ENCRYPT_PREPARE**

**GPGME_ENCRYPT_EXPECT_SIGN**

The GPGME_ENCRYPT_PREPARE symbol is used with the UI Server protocol to prepare an encryption (i.e. sending the PREP_ENCRYPT command). With the GPGME_ENCRYPT_EXPECT_SIGN symbol the UI Server is advised to also expect a sign command.

**GPGME_ENCRYPT_SYMMETRIC**

**SINCE: 1.7.0**

The GPGME_ENCRYPT_SYMMETRIC symbol specifies that the output should be additionally encrypted symmetrically even if recipients are provided. This feature is only supported for the OpenPGP crypto engine.

**GPGME_ENCRYPT_THROW_KEYIDS**

**SINCE: 1.8.0**

The GPGME_ENCRYPT_THROW_KEYIDS symbols requests that the identifiers for the decryption keys are not included in the ciphertext. On the receiving side, the use of this flag may slow down the decryption process because all available secret keys must be tried. This flag is only honored for OpenPGP encryption.

**GPGME_ENCRYPT_WRAP**
The GPGME_ENCRYPT_WRAP symbol specifies that the input is an OpenPGP message and not a plain data. This is the counterpart to GPGME_DECRYPT_UNWRAP.

GPGME_ENCRYPT_WANT_ADDRESS
SINCE: 1.11.0

The GPGME_ENCRYPT_WANT_ADDRESS symbol requests that all supplied keys or key specifications include a syntactically valid mail address. If this is not the case the operation is not even tried and the error code GPG_ERR_INV_USER_ID is returned. Only the address part of the key specification is conveyed to the backend. As of now the key must be specified using the RECPSTRING argument of the extended encrypt functions. This feature is currently only supported for the OpenPGP crypto engine.

If GPG_ERR_UNUSABLE_PUBKEY is returned, some recipients in RECP are invalid, but not all. In this case the plaintext might be encrypted for all valid recipients and returned in CIPHER (if this happens depends on the crypto engine). More information about the invalid recipients is available with gpgme_op_encrypt_result.

If RECP is NULL, symmetric rather than public key encryption is performed. Symmetrically encrypted cipher text can be deciphered with gpgme_op_decrypt. Note that in this case the crypto backend needs to retrieve a passphrase from the user. Symmetric encryption is currently only supported for the OpenPGP crypto backend.

The function returns the error code GPG_ERR_NO_ERROR if the ciphertext could be created successfully, GPG_ERR_INV_VALUE if CTX, RECP, PLAIN or CIPHER is not a valid pointer, GPG_ERR_UNUSABLE_PUBKEY if RECP contains some invalid recipients, GPG_ERR_BAD_PASSPHRASE if the passphrase for the symmetric key could not be retrieved, and passes through any errors that are reported by the crypto engine support routines.

-- Function: gpgme_error_t gpgme_op_encrypt_start (gpgme_ctx_t CTX,
gpgme_key_t RECP[], gpgme_encrypt_flags_t FLAGS,
gpgme_data_t PLAIN, gpgme_data_t CIPHER)
The function gpgme_op_encrypt_start initiates a gpgme_op_encrypt operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion:::

References to the keys only need to be held for the duration of this call. The user can release its references to the keys after
this function returns, even if the operation is not yet finished.

The function returns the error code GPG_ERR_NO_ERROR if the operation could be started successfully, GPG_ERR_INV_VALUE if CTX, RSET, PLAIN or CIPHER is not a valid pointer, and GPG_ERR_UNUSABLE_PUBKEY if RSET does not contain any valid recipients.

-- Function: gpgme_error_t gpgme_op_encrypt_ext (gpgme_ctx_t CTX, gpgme_key_t RECP[], const char *RECPSTRING, gpgme_encrypt_flags_t FLAGS, gpgme_data_t PLAIN, gpgme_data_t CIPHER)

SINCE: 1.11.0

This is an extended version of gpgme_op_encrypt with RECPSTRING as additional parameter. If RECP is NULL and RECPSTRING is not NULL, the latter is expected to be a linefeed delimited string with the set of key specifications. In contrast to RECP the keys are given directly as strings and there is no need to first create key objects. Leading and trailing white space is remove from each line in RECPSTRING. The keys are then passed verbatim to the backend engine.

For the OpenPGP backend several special keywords are supported to modify the operation. These keywords are given instead of a key specification. The currently supported keywords are:

--hidden
--no-hidden
These keywords toggle between normal and hidden recipients for all following key specifications. When a hidden recipient is requested the gpg option -R (or -F in file mode) is used instead of -r (-f in file mode).

--file
--no-file
These keywords toggle between regular and file mode for all following key specification. In file mode the option -f or -F is passed to gpg. At least GnuPG version 2.1.14 is required to handle these options. The GPGME_ENCRYPT_WANT_ADDRESS flag is ignored in file mode.

--
This keyword disables all keyword detection up to the end of the string. All keywords are treated as verbatim arguments.

To create a RECPSTRING it is often useful to employ a strconcat
style function. For example this function creates a string to encrypt to two keys:

```c
char *
xbuild_recpstring (const char *key1, const char *key2)
{
  char *result = gpgrt_strconcat ("--\n", key1, "\n", key2, NULL);
  if (!result)
    { perror ("strconcat failed"); exit (2); }
  return result;
}
```

Note the use of the double dash here; unless you want to specify a keyword, it is a good idea to avoid any possible trouble with key specifications starting with a double dash. The used strconcat function is available in Libgpg-error 1.28 and later; Libgpg-error (aka Gpgrt) is a dependency of GPGME. The number of arguments to gpgrt_strconcat is limited to 47 but that should always be sufficient. In case a larger and non-fixed number of keys are to be supplied the following code can be used:

```c
char *
xbuild_long_recpstring (void)
{
  gpgrt_stream_t memfp;
  const char *s;
  void *result;

  memfp = gpgrt_fopenmem (0, "w+b");
  if (!memfp)
    { perror ("fopenmem failed"); exit (2); }
  gpgrt_fputs ("--", memfp);
  while ((s = get_next_keyspec ()))
    {
    gpgrt_fputc ('\n', memfp);
    gpgrt_fputs (s, memfp);
    }
  gpgrt_fputc (0, memfp);
  if (gpgrt_ferror (memfp))
    { perror ("writing to memstream failed"); exit (2); }
  if (gpgrt_fclose_snatch (memfp, &result, NULL))
    { perror ("fclose_snatch failed"); exit (2); }
  return result;
}
```

In this example get_next_keyspec is expected to return the next key to be added to the string. Please take care: Encrypting to a large number of recipients is often questionable due to security
reasons and also for the technicality that all keys are currently
passed on the command line to gpg which has as a platform
specific length limitation.

--- Function: gpgme_error_t gpgme_op_encrypt_ext_start (gpgme_ctx_t CTX,
gpgme_key_t RECP[], const char *RECPSTRING,
gpgme_encrypt_flags_t FLAGS, gpgme_data_t PLAIN,
gpgme_data_t CIPHER)

SINCE: 1.11.0

This is an extended version of gpgme_op_encrypt_start with
RECPSTRING as additional parameter. If RECP is NULL and RECPSTRING
is not NULL, the latter is expected to be a linefeed delimited
string with the set of key specifications. In contrast to RECP the
keys are given directly as strings and there is no need to first
create key objects. The keys are passed verbatim to the backend
engine.

--- Data type: gpgme_encrypt_result_t
This is a pointer to a structure used to store the result of a
gpgme_op_encrypt operation. After successfully encrypting data,
you can retrieve the pointer to the result with
gpgme_op_encrypt_result. The structure contains the following
members:

gpgme_invalid_key_t invalid_recipients
A linked list with information about all invalid keys for
which the data could not be encrypted.

--- Function: gpgme_encrypt_result_t gpgme_op_encrypt_result
(gpgme_ctx_t CTX)
The function gpgme_op_encrypt_result returns a
gpgme_encrypt_result_t pointer to a structure holding the result
of a gpgme_op_encrypt operation. The pointer is only valid if
the last operation on the context was a gpgme_op_encrypt,
gpgme_op_encrypt_start, gpgme_op_sign or gpgme_op_sign_start
operation. If this operation failed, this might be a NULL
pointer. The returned pointer is only valid until the next
operation is started on the context.

--- Function: gpgme_error_t gpgme_op_encrypt_sign (gpgme_ctx_t CTX,
gpgme_key_t RECP[], gpgme_encrypt_flags_t FLAGS,
gpgme_data_t PLAIN, gpgme_data_t CIPHER)
The function gpgme_op_encrypt_sign does a combined encrypt and
sign operation. It is used like gpgme_op_encrypt, but the
ciphertext also contains signatures for the signers listed in CTX.
The combined encrypt and sign operation is currently only available for the OpenPGP crypto engine.

-- Function: gpgme_error_t gpgme_op_encrypt_sign_start
   (gpgme_ctx_t CTX, gpgme_key_t RECP[],
    gpgme_encrypt_flags_t FLAGS, gpgme_data_t PLAIN,
    gpgme_data_t CIPHER)

The function gpgme_op_encrypt_sign_start initiates a gpgme_op_encrypt_sign operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion:::

The function returns the error code GPG_ERR_NO_ERROR if the operation could be started successfully, and GPG_ERR_INV_VALUE if CTX, RSET, PLAIN or CIPHER is not a valid pointer.

-- Function: gpgme_error_t gpgme_op_encrypt_sign_ext (gpgme_ctx_t CTX,
   gpgme_key_t RECP[], const char *RECPSTRING,
   gpgme_encrypt_flags_t FLAGS, gpgme_data_t PLAIN,
   gpgme_data_t CIPHER)

SINCE: 1.11.0

This is an extended version of gpgme_op_encrypt_sign with RECPSTRING as additional parameter. If RECP is NULL and RECPSTRING is not NULL, the latter is expected to be a linefeed delimited string with the set of key specifications. In contrast to RECP the keys are given directly as strings and there is no need to first create the key objects. The keys are passed verbatim to the backend engine.

-- Function: gpgme_error_t gpgme_op_encrypt_sign_ext_start
   (gpgme_ctx_t CTX, gpgme_key_t RECP[], const char *RECPSTRING,
    gpgme_encrypt_flags_t FLAGS, gpgme_data_t PLAIN,
    gpgme_data_t CIPHER)

SINCE: 1.11.0

This is an extended version of gpgme_op_encrypt_sign_start with RECPSTRING as additional parameter. If RECP is NULL and RECPSTRING is not NULL, the latter is expected to be a linefeed delimited string with the set of key specifications. In contrast to RECP the keys are given directly as strings and there is no need to first create the key objects. The keys are passed verbatim to the backend engine.

File: gpgme.info, Node: Miscellaneous, Next: Run Control, Prev: Crypto Operations, Up: Contexts
7.8 Miscellaneous operations
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Here are some support functions which are sometimes useful.

* Menu:
  * Running other Programs:
  * Using the Assuan protocol:
  * Checking for updates:

File: gpgme.info, Node: Running other Programs, Next: Using the Assuan protocol, Up: Miscellaneous

7.8.1 Running other Programs
----------------------------

GPGME features an internal subsystem to run the actual backend engines. Along with data abstraction object this subsystem can be used to run arbitrary simple programs which even need not be related to cryptographic features. It may for example be used to run tools which are part of the GnuPG system but are not directly accessible with the GPGME API.

-- Function: gpgme_error_t gpgme_op_spawn (gpgme_ctx_t CTX,
    const char *FILE, const char *ARGV[],
    gpgme_data_t DATAIN,
    gpgme_data_t DATAOUT,
    gpgme_data_t DATAERR,
    unsigned int FLAGS)

SINCE: 1.5.0

The function gpgme_op_spawn runs the program FILE with the arguments taken from the NULL terminated array ARGV. If no arguments are required ARGV may be given as NULL. In the latter case or if argv[0] is the empty string, GPGME uses the basename of FILE for argv[0]. The file descriptors stdin, stdout, and stderr are connected to the data objects DATAIN, DATAOUT, and DATAERR. If NULL is passed for one of these data objects the corresponding file descriptor is connected to /dev/null.

The value in FLAGS is a bitwise-or combination of one or multiple of the following bit values:

GPGME_SPAWN_DETACHED
   SINCE: 1.5.0

Under Windows this flag inhibits the allocation of a new console for the program. This is useful for a GUI application
which needs to call a command line helper tool.

GPGME_SPAWN_ALLOW_SET_FG
SINCE: 1.5.0

Under Windows this flag allows the called program to put itself into the foreground.

-- Function: gpgme_error_t gpgme_op_spawn_start (gpgme_ctx_t CTX,
   const char *FILE, const char *ARGV[], gpgme_data_t DATAIN,
   gpgme_data_t DATAOUT, gpgme_data_t DATAERR,
   unsigned int FLAGS)
SINCE: 1.5.0

This is the asynchronous variant of gpgme_op_spawn.

File: gpgme.info, Node: Using the Assuan protocol, Next: Checking for updates, Prev: Running other Programs, Up: Miscellaneous

7.8.2 Using the Assuan protocol
-------------------------------

The Assuan protocol can be used to talk to arbitrary Assuan servers. By default it is connected to the GnuPG agent, but it may be connected to arbitrary servers by using gpgme_ctx_set_engine_info, passing the location of the servers socket as FILE_NAME argument, and an empty string as HOME_DIR argument.

The Assuan protocol functions use three kinds of callbacks to transfer data:

-- Data type: gpgme_error_t (*gpgme_assuan_data_cb_t) (void *OPAQUE,
   const void *DATA, size_t DATALEN)
SINCE: 1.2.0

This callback receives any data sent by the server. OPAQUE is the pointer passed to gpgme_op_assuan_transact_start, DATA of length DATALEN refers to the data sent.

-- Data type: gpgme_error_t (*gpgme_assuan_inquire_cb_t) (void *OPAQUE,
   const char *NAME, const char *ARGS, gpgme_data_t *R_DATA)
SINCE: 1.2.0

This callback is used to provide additional data to the Assuan
server. OPAQUE is the pointer passed to
gpgme_op_assuan_transact_start, NAME and ARGS specify what kind
of data the server requested, and R_DATA is used to return the
actual data.

Note: Returning data is currently not implemented in GPGME.

-- Data type: gpgme_error_t (gpgme_assuan_status_cb_t) (void *OPAQUE,
const char *STATUS, const char *ARGS)

SINCE: 1.2.0

This callback receives any status lines sent by the server. OPAQUE
is the pointer passed to gpgme_op_assuan_transact_start, STATUS
and ARGs denote the status update sent.

-- Function: gpgme_error_t gpgme_op_assuan_transact_start
(gpgme_ctx_t CTX, const char *COMMAND,
gpgme_assuan_data_cb_t DATA_CB, void *DATA_CB_VALUE,
gpgme_assuan_inquire_cb_t INQUIRE_CB, void *INQUIRE_CB_VALUE,
gpgme_assuan_status_cb_t STATUS_CB, void *STATUS_CB_VALUE)

SINCE: 1.2.0

Send the Assuan COMMAND and return results via the callbacks. Any
callback may be NULL. The result of the operation may be
retrieved using gpgme_wait_ext.

Asynchronous variant.

-- Function: gpgme_error_t gpgme_op_assuan_transact_ext
(gpgme_ctx_t CTX, const char *COMMAND,
gpgme_assuan_data_cb_t DATA_CB, void *DATA_CB_VALUE,
gpgme_assuan_inquire_cb_t INQUIRE_CB, void *INQUIRE_CB_VALUE,
gpgme_assuan_status_cb_t STATUS_CB, void *STATUS_CB_VALUE,
gpgme_error_t *OP_ERR)

Send the Assuan COMMAND and return results via the callbacks. The
result of the operation is returned in OP_ERR.

Synchronous variant.
The GnuPG Project operates a server to query the current versions of software packages related to GnuPG. GPGME can be used to access this online database and check whether a new version of a software package is available.

```c
-- Data type: gpgme_query_swdb_result_t
  SINCE: 1.8.0

  This is a pointer to a structure used to store the result of a gpgme_op_query_swdb operation. After successful call to that function, you can retrieve the pointer to the result with gpgme_op_query_swdb_result. The structure contains the following member:

  name
    This is the name of the package.

  iversion
    The currently installed version or an empty string. This value is either a copy of the argument given to gpgme_op_query_swdb or the version of the installed software as figured out by GPGME or GnuPG.

  created
    This gives the date the file with the list of version numbers has originally been created by the GnuPG project.

  retrieved
    This gives the date the file was downloaded.

  warning
    If this flag is set either an error has occurred or some of the information in this structure are not properly set. For example if the version number of the installed software could not be figured out, the update flag may not reflect a required update status.

  update
    If this flag is set an update of the software is available.

  urgent
    If this flag is set an available update is important.

  noinfo
    If this flag is set, no valid information could be retrieved.

  unknown
    If this flag is set the given name is not known.
```
tooold
    If this flag is set the available information is not fresh enough.

error
    If this flag is set some other error has occurred.

version
    The version string of the latest released version.

reldate
    The release date of the latest released version.

-- Function: gpgme_error_t gpgme_op_query_swdb (gpgme_ctx_t CTX,
    const char *NAME, const char *IVERSION, gpgme_data_t RESERVED)

SINCE: 1.8.0

Query the software version database for software package NAME and check against the installed version given by IVERSION. If IVERSION is given as NULL a check is only done if GPGME can figure out the version by itself (for example when using "gpgme" or "gnupg"). If NULL is used for NAME the current gpgme version is checked. RESERVED must be set to 0.

-- Function: gpgme_query_swdb_result_t gpgme_op_query_swdb_result
    (gpgme_ctx_t CTX)

SINCE: 1.8.0

The function gpgme_op_query_swdb_result returns a gpgme_query_swdb_result_t pointer to a structure holding the result of a gpgme_op_query_swdb operation. The pointer is only valid if the last operation on the context was a successful call to gpgme_op_query_swdb. If that call failed, the result might be a NULL pointer. The returned pointer is only valid until the next operation is started on the context CTX.

Here is an example on how to check whether GnuPG is current:

#include <gpgme.h>

int
main (void)
{
    gpg_error_t err;
    gpgme_ctx_t ctx;
gpgme_query_swdb_result_t result;

gpgme_check_version (NULL);
err = gpgme_new (&ctx);
if (err)
    fprintf (stderr, "error creating context: %s\n", gpg_strerror (err));
else
{
    gpgme_set_protocol (ctx, GPGME_PROTOCOL_GPGCONF);

    err = gpgme_op_query_swdb (ctx, "gnupg", NULL, 0);
    if (err)
        fprintf (stderr, "error querying swdb: %s\n", gpg_strerror (err));
    else
    {
        result = gpgme_op_query_swdb_result (ctx);
        if (!result)
            fprintf (stderr, "error querying swdb\n");
        if (!result->warning && !result->update)
            printf ("GnuPG version %s is current\n", result->iversion);
        else if (!result->warning && result->update)
            printf ("GnuPG version %s can be updated to %s\n", result->iversion, result->version);
        else
            fprintf (stderr, "error finding the update status\n");
    }
    gpgme_release (ctx);
}
return 0;

File: gpgme.info, Node: Run Control, Prev: Miscellaneous, Up: Contexts

7.9 Run Control

GPGME supports running operations synchronously and asynchroneously. You can use asynchronous operation to set up a context up to initiating the desired operation, but delay performing it to a later point.

Furthermore, you can use an external event loop to control exactly when GPGME runs. This ensures that GPGME only runs when necessary and also prevents it from blocking for a long time.

* Menu:
7.9.1 Waiting For Completion

-- Function: gpgme_ctx_t gpgme_wait (gpgme_ctx_t CTX,
    gpgme_error_t *STATUS, int HANG)

    The function gpgme_wait continues the pending operation within
    the context CTX. In particular, it ensures the data exchange
    between GPGME and the crypto backend and watches over the run time
    status of the backend process.

    If HANG is true, the function does not return until the operation
    is completed or cancelled. Otherwise the function will not block
    for a long time.

    The error status of the finished operation is returned in STATUS if
    gpgme_wait does not return NULL.

    The CTX argument can be NULL. In that case, gpgme_wait waits
    for any context to complete its operation.

    gpgme_wait can be used only in conjunction with any context that
    has a pending operation initiated with one of the
    gpgme_op_*_start functions except gpgme_op_keylist_start and
    gpgme_op_trustlist_start (for which you should use the
    corresponding gpgme_op_*_next functions). If CTX is NULL, all
    of such contexts are waited upon and possibly returned.
    Synchronous operations running in parallel, as well as key and
    trust item list operations, do not affect gpgme_wait.

    In a multi-threaded environment, only one thread should ever call
    gpgme_wait at any time, regardless of whether CTX is specified or
    not. This means that all calls to this function should be fully
    synchronized by locking primitives. It is safe to start
    asynchronous operations while a thread is running in gpgme_wait.

    The function returns the CTX of the context which has finished the
    operation. If HANG is false, and the timeout expires, NULL is
    returned and *status will be set to 0. If an error occurs,
    NULL is returned and the error is returned in *status.
7.9.2 Using External Event Loops

GPGME hides the complexity of the communication between the library and the crypto engine. The price of this convenience is that the calling thread can block arbitrary long waiting for the data returned by the crypto engine. In single-threaded programs, in particular if they are interactive, this is an unwanted side-effect. OTOH, if gpgme_wait is used without the HANG option being enabled, it might be called unnecessarily often, wasting CPU time that could be used otherwise.

The I/O callback interface described in this section lets the user take control over what happens when. GPGME will provide the user with the file descriptors that should be monitored, and the callback functions that should be invoked when a file descriptor is ready for reading or writing. It is then the users responsibility to decide when to check the file descriptors and when to invoke the callback functions. Usually this is done in an event loop, that also checks for events in other parts of the program. If the callback functions are only called when the file descriptors are ready, GPGME will never block. This gives the user more control over the program flow, and allows to perform other tasks when GPGME would block otherwise.

By using this advanced mechanism, GPGME can be integrated smoothly into GUI toolkits like GTK+ even for single-threaded programs.

* Menu:

* I/O Callback Interface:: How I/O callbacks are registered.
* Registering I/O Callbacks:: How to use I/O callbacks for a context.
* I/O Callback Example:: An example how to use I/O callbacks.
* I/O Callback Example GTK+:: How to use GPGME with GTK+.
* I/O Callback Example GDK:: How to use GPGME with GDK.
* I/O Callback Example Qt:: How to use GPGME with Qt.

7.9.2.1 I/O Callback Interface

-- Data type: gpgme_error_t (*gpgme_io_cb_t) (void *DATA, int FD)

The gpgme_io_cb_t type is the type of functions which GPGME wants to register as I/O callback handlers using the gpgme_register_io_cb_t functions provided by the user.
DATA and FD are provided by GPGME when the I/O callback handler is registered, and should be passed through to the handler when it is invoked by the user because it noticed activity on the file descriptor FD.

The callback handler always returns 0, but you should consider the return value to be reserved for later use.

```
-- Data type: gpgme_error_t (*gpgme_register_io_cb_t) (void *DATA,
    int FD, int DIR, gpgme_io_cb_t FNC, void *FNC_DATA,
    void **TAG)
```

The gpgme_register_io_cb_t type is the type of functions which can be called by GPGME to register an I/O callback function FNC for the file descriptor FD with the user. FNC_DATA should be passed as the first argument to FNC when the handler is invoked (the second argument should be FD). If DIR is 0, FNC should be called by the user when FD is ready for writing. If DIR is 1, FNC should be called when FD is ready for reading.

DATA was provided by the user when registering the gpgme_register_io_cb_t function with GPGME and will always be passed as the first argument when registering a callback function. For example, the user can use this to determine the event loop to which the file descriptor should be added.

GPGME will call this function when a crypto operation is initiated in a context for which the user has registered I/O callback handler functions with gpgme_set_io_cbs. It can also call this function when it is in an I/O callback handler for a file descriptor associated to this context.

The user should return a unique handle in TAG identifying this I/O callback registration, which will be passed to the gpgme_register_io_cb_t function without interpretation when the file descriptor should not be monitored anymore.

```
-- Data type: void (*gpgme_remove_io_cb_t) (void *TAG)
```

The gpgme_remove_io_cb_t type is the type of functions which can be called by GPGME to remove an I/O callback handler that was registered before. TAG is the handle that was returned by the gpgme_register_io_cb_t for this I/O callback.

GPGME can call this function when a crypto operation is in an I/O callback. It will also call this function when the context is destroyed while an operation is pending.

```
-- Data type: enum gpgme_event_io_t
```
The `gpgme_event_io_t` type specifies the type of an event that is reported to the user by GPGME as a consequence of an I/O operation. The following events are defined:

**GPGME_EVENT_START**

The operation is fully initialized now, and you can start to run the registered I/O callback handlers now. Note that registered I/O callback handlers must not be run before this event is signalled. `TYPE_DATA` is NULL and reserved for later use.

**GPGME_EVENT_DONE**

The operation is finished, the last I/O callback for this operation was removed. The accompanying `TYPE_DATA` points to a `struct gpgme_io_event_done_data` variable that contains the status of the operation that finished. This event is signalled after the last I/O callback has been removed.

**GPGME_EVENT_NEXT_KEY**

In a `gpgme_op_keylist_start` operation, the next key was received from the crypto engine. The accompanying `TYPE_DATA` is a `gpgme_key_t` variable that contains the key with one reference for the user.

**GPGME_EVENT_NEXT_TRUSTITEM**

In a `gpgme_op_trustlist_start` operation, the next trust item was received from the crypto engine. The accompanying `TYPE_DATA` is a `gpgme_trust_item_t` variable that contains the trust item with one reference for the user.

--- Data type: `void (*gpgme_event_io_cb_t) (void *DATA, gpgme_event_io_t TYPE, void *TYPE_DATA)`

The `gpgme_event_io_cb_t` type is the type of functions which can be called by GPGME to signal an event for an operation running in a context which has I/O callback functions registered by the user.

`DATA` was provided by the user when registering the `gpgme_event_io_cb_t` function with GPGME and will always be passed as the first argument when registering a callback function. For example, the user can use this to determine the context in which this event has occurred.

`TYPE` will specify the type of event that has occurred. `TYPE_DATA` specifies the event further, as described in the above list of possible `gpgme_event_io_t` types.

GPGME can call this function in an I/O callback handler.
7.9.2.2 Registering I/O Callbacks

-- Data type: struct gpgme_io_cbs
This structure is used to store the I/O callback interface
functions described in the previous section. It has the following
members:

gpgme_register_io_cb_t add
This is the function called by GPGME to register an I/O
callback handler. It must be specified.

void *add_priv
This is passed as the first argument to the add function
when it is called by GPGME. For example, it can be used to
determine the event loop to which the file descriptor should
be added.

gpgme_remove_io_cb_t remove
This is the function called by GPGME to remove an I/O callback
handler. It must be specified.

gpgme_event_io_cb_t event
This is the function called by GPGME to signal an event for an
operation. It must be specified, because at least the start
event must be processed.

void *event_priv
This is passed as the first argument to the event function
when it is called by GPGME. For example, it can be used to
determine the context in which the event has occurred.

-- Function: void gpgme_set_io_cbs (gpgme_ctx_t CTX,
    struct gpgme_io_cbs *IO_CBS)
The function gpgme_set_io_cbs enables the I/O callback interface
for the context CTX. The I/O callback functions are specified by
IO_CBS.

If IO_CBS->add is NULL, the I/O callback interface is disabled
for the context, and normal operation is restored.

-- Function: void gpgme_get_io_cbs (gpgme_ctx_t CTX,
    struct gpgme_io_cbs *IO_CBS)
The function gpgme_get_io_cbs returns the I/O callback functions
set with gpgme_set_io_cbs in IO_CBS.


7.9.2.3 I/O Callback Example

.........................

To actually use an external event loop, you have to implement the I/O callback functions that are used by GPGME to register and unregister file descriptors. Furthermore, you have to actually monitor these file descriptors for activity and call the appropriate I/O callbacks.

The following example illustrates how to do that. The example uses locking to show in which way the callbacks and the event loop can run concurrently. For the event loop, we use a fixed array. For a real-world implementation, you should use a dynamically sized structure because the number of file descriptors needed for a crypto operation in GPGME is not predictable.

```c
#include <assert.h>
#include <errno.h>
#include <stdlib.h>
#include <pthread.h>
#include <sys/types.h>
#include <gpgme.h>

/* The following structure holds the result of a crypto operation. */
struct op_result
{
    int done;
    gpgme_error_t err;
};

/* The following structure holds the data associated with one I/O callback. */
struct one_fd
{
    int fd;
    int dir;
    gpgme_io_cb_t fnc;
    void *fnc_data;
    void *loop;
};

struct event_loop
{
```
pthread_mutex_t lock;
#define MAX_FDS 32
/* Unused slots are marked with FD being -1. */
struct one_fd fds[MAX_FDS];
);

The following functions implement the I/O callback interface.

gpgme_error_t
add_io_cb (void *data, int fd, int dir, gpgme_io_cb_t fnc, void *fnc_data,
    void **r_tag)
{
    struct event_loop *loop = data;
    struct one_fd *fds = loop->fds;
    int i;

    pthread_mutex_lock (&loop->lock);
    for (i = 0; i < MAX_FDS; i++)
    {
        if (fds[i].fd == -1)
        {
            fds[i].fd = fd;
            fds[i].dir = dir;
            fds[i].fnc = fnc;
            fds[i].fnc_data = fnc_data;
            fds[i].loop = loop;
            break;
        }
    }
    pthread_mutex_unlock (&loop->lock);
    if (i == MAX_FDS)
    return gpg_error (GPG_ERR_GENERAL);
    *r_tag = &fds[i];
    return 0;
}

void
remove_io_cb (void *tag)
{
    struct one_fd *fd = tag;
    struct event_loop *loop = fd->loop;

    pthread_mutex_lock (&loop->lock);
    fd->fd = -1;
    pthread_mutex_unlock (&loop->lock);
}

void
event_io_cb (void *data, gpgme_event_io_t type, void *type_data)
{
    struct op_result *result = data;

    /* We don't support list operations here. */
    if (type == GPGME_EVENT_DONE)
    {
        result->done = 1;
        result->err = *type_data;
    }
}

The final missing piece is the event loop, which will be presented next. We only support waiting for the success of a single operation.

int
do_select (struct event_loop *loop)
{
    fd_set rfds;
    fd_set wfds;
    int i, n;
    int any = 0;
    struct timeval tv;
    struct one_fd *fdlist = loop->fds;

    pthread_mutex_lock (&loop->lock);
    FD_ZERO (&rfds);
    FD_ZERO (&wfds);
    for (i = 0; i < MAX_FDS; i++)
        if (fdlist[i].fd != -1)
            FD_SET (fdlist[i].fd, fdlist[i].dir ? &rfds : &wfds);
    pthread_mutex_unlock (&loop->lock);

    tv.tv_sec = 0;
    tv.tv_usec = 1000;

    do
    {
        n = select (FD_SETSIZE, &rfds, &wfds, NULL, &tv);
    } while (n < 0 && errno == EINTR);

    if (n < 0)
        return n; /* Error or timeout. */

    pthread_mutex_lock (&loop->lock);
    for (i = 0; i < MAX_FDS && n; i++)
        {
if (fdlist[i].fd != -1)
{
    if (FD_ISSET(fdlist[i].fd, fdlist[i].dir ? &rfds : &wfds))
    {
        assert(n);
        n--;
        any = 1;
        /* The I/O callback handler can register/remove callbacks,
           so we have to unlock the file descriptor list. */
        pthread_mutex_unlock(&loop->lock);
        (*fdlist[i].fnc)(fdlist[i].fnc_data, fdlist[i].fd);
        pthread_mutex_lock(&loop->lock);
    }
}
}
pthread_mutex_unlock(&loop->lock);
return any;
}

void
wait_for_op(struct event_loop *loop, struct op_result *result)
{
    int ret;
    do
    {
        ret = do_select(loop);
    }
    while (ret >= 0 && !result->done);
}

The main function shows how to put it all together.

int
main(int argc, char **argv[])
{
    struct event_loop loop;
    struct op_result result;
    gpgme_ctx_t ctx;
    gpgme_error_t err;
    gpgme_data_t sig, text;
    int i;
    pthread_mutexattr_t attr;
    struct gpgme_io_cbs io_cbs =
    {
        add_io_cb,
        &loop,
        remove_io_cb,
event_io_cb,
    &result
};

init_gpgme ();

/* Initialize the loop structure. */

/* The mutex must be recursive, since remove_io_cb (which acquires a
   lock) can be called while holding a lock acquired in do_select. */
pthread_mutexattr_init (&attr);
pthread_mutexattr_settype (&attr, PTHREAD_MUTEX_RECURSIVE);
pthread_mutex_init (&loop.lock, &attr);
pthread_mutexattr_destroy (&attr);

for (i = 0; i < MAX_FDS; i++)
    loop.fds[i].fd = -1;

/* Initialize the result structure. */
result.done = 0;

err = gpgme_data_new_from_file (&sig, "signature", 1);
if (!err)
    err = gpgme_data_new_from_file (&text, "text", 1);
if (!err)
    err = gpgme_new (&ctx);
if (!err)
{
    gpgme_set_io_cbs (ctx, &io_cbs);
    err = gpgme_op_verify_start (ctx, sig, text, NULL);
}
if (err)
{
    fprintf (stderr, "gpgme error: %s: %s\n",
            gpgme_strsource (err), gpgme_strerror (err));
    exit (1);
}
wait_for_op (&loop, &result);
if (!result.done)
{
    fprintf (stderr, "select error\n");
    exit (1);
}
if (!result.err)
{
    fprintf (stderr, "verification failed: %s: %s\n",
            gpgme_strsource (result.err), gpgme_strerror (result.err));
exit (1);
}
/* Evaluate verify result. */
...
return 0;
}


7.9.2.4 I/O Callback Example GTK+
..............................

The I/O callback interface can be used to integrate GPGME with the GTK+ event loop. The following code snippets shows how this can be done using the appropriate register and remove I/O callback functions. In this example, the private data of the register I/O callback function is unused. The event notifications is missing because it does not require any GTK+ specific setup.

#include <gtk/gtk.h>

struct my_gpgme_io_cb
{
  gpgme_io_cb_t fnc;
  void *fnc_data;
  guint input_handler_id
};

void
my_gpgme_io_cb (gpointer data, gint source, GdkInputCondition condition)
{
  struct my_gpgme_io_cb *iocb = data;
  (*(iocb->fnc)) (iocb->data, source);
}

void
my_gpgme_remove_io_cb (void *data)
{
  struct my_gpgme_io_cb *iocb = data;
  gtk_input_remove (data->input_handler_id);
}

void
my_gpgme_register_io_callback (void *data, int fd, int dir, gpgme_io_cb_t fnc,
  void *fnc_data, void **tag)
{
The I/O callback interface can also be used to integrate GPGME with the GDK event loop. The following code snippets shows how this can be done using the appropriate register and remove I/O callback functions. In this example, the private data of the register I/O callback function is unused. The event notifications is missing because it does not require any GDK specific setup.

It is very similar to the GTK+ example in the previous section.

```c
#include <gdk/gdk.h>

struct my_gpgme_io_cb
{
  gpgme_io_cb_t fnc;
  void *fnc_data;
  gint tag;
};

void
my_gpgme_io_cb (gpointer data, gint source, GdkInputCondition condition)
{
  struct my_gpgme_io_cb *iocb = data;
  (*(iocb->fnc)) (iocb->data, source);
}

void
my_gpgme_remove_io_cb (void *data)
{
  struct my_gpgme_io_cb *iocb = data;
```

```c
  /*
   */

7.9.2.5 I/O Callback Example GDK

..............................

...
gdk_input_remove (data->tag);
}

void
my_gpgme_register_io_callback (void *data, int fd, int dir, gpgme_io_cb_t fnc,
   void *fnc_data, void **tag)
{
    struct my_gpgme_io_cb *iocb = g_malloc (sizeof (struct my_gpgme_io_cb));
    iocb->fnc = fnc;
    iocb->data = fnc_data;
    iocb->tag = gtk_input_add_full (fd, dir ? GDK_INPUT_READ : GDK_INPUT_WRITE,
       my_gpgme_io_callback, iocb, NULL);
    *tag = iocb;
    return 0;
}


7.9.2.6 I/O Callback Example Qt

..........................

The I/O callback interface can also be used to integrate GPGME with the Qt event loop. The following code snippets show how this can be done using the appropriate register and remove I/O callback functions. In this example, the private data of the register I/O callback function is unused. The event notifications is missing because it does not require any Qt specific setup.

```c
#include <qsocketnotifier.h>
#include <qapplication.h>

struct IOCB {
  IOCB( GpgmeIOCb f, void * d, QSocketNotifier * n )
    : func( f ), data( d ), notifier( n ) {}  
  GpgmeIOCb func;
  void * data;
  QSocketNotifier * notifier;
}

class MyApp : public QApplication {

  // ...

  static void registerGpgmeIOCallback( void * data, int fd, int dir,
    GpgmeIOCb func, void * func_data,
    void ** tag ) {
```
Sometimes you do not want to wait for an operation to finish. GPGME provides two different functions to achieve that. The function gpgme_cancel takes effect immediately. When it returns, the operation is effectively canceled. However, it has some limitations and can not be used with synchronous operations. In contrast, the function gpgme_cancel_async can be used with any context and from any thread.
but it is not guaranteed to take effect immediately. Instead, cancellation occurs at the next possible time (typically the next time I/O occurs in the target context).

-- Function: gpgme_ctx_t gpgme_cancel (gpgme_ctx_t CTX)
   SINCE: 0.4.5

   The function gpgme_cancel attempts to cancel a pending operation in the context CTX. This only works if you use the global event loop or your own event loop.

   If you use the global event loop, you must not call gpgme_wait during cancellation. After successful cancellation, you can call gpgme_wait (optionally waiting on CTX), and the context CTX will appear as if it had finished with the error code GPG_ERR_CANCEL.

   If you use an external event loop, you must ensure that no I/O callbacks are invoked for this context (for example by halting the event loop). On successful cancellation, all registered I/O callbacks for this context will be unregistered, and a GPGME_EVENT_DONE event with the error code GPG_ERR_CANCEL will be signalled.

   The function returns an error code if the cancellation failed (in this case the state of CTX is not modified).

-- Function: gpgme_ctx_t gpgme_cancel_async (gpgme_ctx_t CTX)
   SINCE: 1.1.7

   The function gpgme_cancel_async attempts to cancel a pending operation in the context CTX. This can be called by any thread at any time after starting an operation on the context, but will not take effect immediately. The actual cancellation happens at the next time GPGME processes I/O in that context.

   The function returns an error code if the cancellation failed (in this case the state of CTX is not modified).


Appendix A The GnuPG UI Server Protocol

This section specifies the protocol used between clients and a User Interface Server (UI server). This protocol helps to build a system where all cryptographic operations are done by a server and the server is responsible for all dialogs. Although GPGME has no direct support
for this protocol it is believed that servers will utilize the GPGME library; thus having the specification included in this manual is an appropriate choice. This protocol should be referenced as The GnuPG UI Server Protocol.

A server needs to implement these commands:(1)

* Menu:

* UI Server Encrypt:: Encrypt a message.
* UI Server Sign:: Sign a message.
* UI Server Decrypt:: Decrypt a message.
* UI Server Verify:: Verify a message.
* UI Server Set Input Files:: Specifying the input files to operate on.
* UI Server Sign/Encrypt Files:: Encrypting and signing files.
* UI Server Verify/Decrypt Files:: Decrypting and verifying files.
* UI Server Import/Export Keys:: Managing certificates.
* UI Server Checksum Files:: Create and verify checksums for files.
* Miscellaneous UI Server Commands:: Commands not related to a specific operation.

---------- Footnotes ----------

(1) In all examples we assume that the connection has already been established; see the Assuan manual for details.


A.1 UI Server: Encrypt a Message

=================================================

Before encryption can be done the recipients must be set using the command:

-- Command: RECIPIENT STRING

Set the recipient for the encryption. STRING is an RFC-2822 recipient name ("mailbox" as per section 3.4). This command may or may not check the recipient for validity right away; if it does not all recipients are expected to be checked at the time of the ENCRYPT command. All RECIPIENT commands are cumulative until a successful ENCRYPT command or until a RESET command. Linefeeds are obviously not allowed in STRING and should be folded into spaces (which are equivalent).

To tell the server the source and destination of the data, the next two commands are to be used:
Open Source Used In BGP TE Controller Version 4.3.0  16200

-- Command: INPUT FD=N
Set the file descriptor for the message to be encrypted to N. The message send to the server is binary encoded.

GpgOL is a Windows only program, thus N is not a libc file descriptor but a regular system handle. Given that the Assuan connection works over a socket, it is not possible to use regular inheritance to make the file descriptor available to the server. Thus DuplicateHandle needs to be used to duplicate a handle to the server process. This is the reason that the server needs to implement the GETINFO pid command. Sending this command a second time replaces the file descriptor set by the last one.

-- Command: OUTPUT FD=N [--binary]
Set the file descriptor to be used for the output (i.e. the encrypted message) to N. If the option --binary is given the output shall be in binary format; if not given, the output for OpenPGP needs to be ASCII armored and for CMS Base-64 encoded. For details on the file descriptor, see the INPUT command.

The setting of the recipients, the data source and destination may happen in any order, even intermixed. If this has been done the actual encryption operation is called using:

-- Command: ENCRYPT --protocol=NAME

This command reads the plaintext from the file descriptor set by the INPUT command, encrypts it and writes the ciphertext to the file descriptor set by the OUTPUT command. The server may (and should) overlap reading and writing. The recipients used for the encryption are all the recipients set so far. If any recipient is not usable the server should take appropriate measures to notify the user about the problem and may cancel the operation by returning an error code. The used file descriptors are void after this command; the recipient list is only cleared if the server returns success.

Because GpgOL uses a streaming mode of operation the server is not allowed to auto select the protocol and must obey to the mandatory PROTOCOL parameter:

OpenPGP
Use the OpenPGP protocol (RFC-2440).

CMS
Use the CMS (PKCS#7) protocol (RFC-3852).

To support automagically selection of the protocol depending on the selected keys, the server MAY implement the command:
-- Command: PREP_ENCRYPT [--protocol=NAME] [--expect-sign]

This command considers all recipients set so far and decides whether it is able to take input and start the actual encryption. This is kind of a dry-run ENCRYPT without requiring or using the input and output file descriptors. The server shall cache the result of any user selection to avoid asking this again when the actual ENCRYPT command is sent. The --protocol option is optional; if it is not given, the server should allow the user to select the protocol to be used based on the recipients given or by any other means.

If --expect-sign is given the server should expect that the message will also be signed and use this hint to present a unified recipient and signer selection dialog if possible and desired. A selected signer should then be cached for the expected SIGN command (which is expected in the same session but possible on another connection).

If this command is given again before a successful ENCRYPT command, the second one takes effect.

Before sending the OK response the server shall tell the client the protocol to be used (either the one given by the argument or the one selected by the user) by means of a status line:

-- Status line: PROTOCOL NAME
Advise the client to use the protocol NAME for the ENCRYPT command. The valid protocol names are listed under the description of the ENCRYPT command. The server shall emit exactly one PROTOCOL status line.

Here is an example of a complete encryption sequence; client lines are indicated by a C:, server responses by C::

C: RESET
S: OK
C: RECIPIENT foo@example.net
S: OK
C: RECIPIENT bar@example.com
S: OK
C: PREP_ENCRYPT
S: S PROTOCOL OpenPGP
S: OK
C: INPUT FD=17
S: OK
C: OUTPUT FD=18
S: OK
C: ENCRYPT
S: OK


A.2 UI Server: Sign a Message
====================================

The server needs to implement opaque signing as well as detached signing. Due to the nature of OpenPGP messages it is always required to send the entire message to the server; sending just the hash is not possible. The following two commands are required to set the input and output file descriptors:

-- Command: INPUT FD=N
Set the file descriptor for the message to be signed to N. The message send to the server is binary encoded. For details on the file descriptor, see the description of INPUT in the ENCRYPT section.

-- Command: OUTPUT FD=N [--binary]
Set the file descriptor to be used for the output. The output is either the complete signed message or in case of a detached signature just that detached signature. If the option --binary is given the output shall be in binary format; if not given, the output for OpenPGP needs to be ASCII armored and for CMS Base-64 encoded. For details on the file descriptor, see the INPUT command.

To allow the server the selection of a non-default signing key the client may optionally use the SENDER command, see *note command SENDER: .

The signing operation is then initiated by:

-- Command: SIGN --protocol=NAME [--detached]
Sign the data set with the INPUT command and write it to the sink set by OUTPUT. NAME is the signing protocol used for the message. For a description of the allowed protocols see the ENCRYPT command. With option --detached given, a detached signature is created; this is actually the usual way the command is used.

The client expects the server to send at least this status information before the final OK response:
-- Status line: MICALG STRING
  The STRING represents the hash algorithm used to create the
  signature. It is used with RFC-1847 style signature messages and
  defined by PGP/MIME (RFC-3156) and S/MIME (RFC-3851). The GPGME
  library has a supporting function gpgme_hash_algo_name to return
  the algorithm name as a string. This string needs to be lowercased
  and for OpenPGP prefixed with "pgp-".


A.3 UI Server: Decrypt a Message

Decryption may include the verification of OpenPGP messages. This is
due to the often used combined signing/encryption modus of OpenPGP. The
client may pass an option to the server to inhibit the signature
verification. The following two commands are required to set the input
and output file descriptors:

-- Command: INPUT FD=N
  Set the file descriptor for the message to be decrypted to N. The
  message send to the server is either binary encoded or in the
  case of OpenPGP ASCII armored. For details on the file
descriptor, see the description of INPUT in the ENCRYPT
  section.

-- Command: OUTPUT FD=N
  Set the file descriptor to be used for the output. The output is
  binary encoded. For details on the file descriptor, see the
  description of INPUT in the ENCRYPT section.

The decryption is started with the command:

-- Command: DECRYPT --protocol=NAME [--no-verify]
    [--export-session-key]
  NAME is the encryption protocol used for the message. For a
description of the allowed protocols see the ENCRYPT command.
  This argument is mandatory. If the option --no-verify is given,
  the server should not try to verify a signature, in case the input
data is an OpenPGP combined message. If the option
  --export-session-key is given and the underlying engine knows how
to export the session key, it will appear on a status line

Additional license notices for GPGME.                    -*- org -*-
This file contains the copying permission notices for various files in
the GPGME distribution which are not covered by the GNU Lesser
General Public License (LGPL) or the GNU General Public License (GPL).
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* MIT License

For files:
- cJSON.c, cJSON.h

#+begin_quote
Copyright (c) 2009 Dave Gamble

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#+end_quote

Just GNU it!
2011-12-02 Werner Koch <wk@g10code.com>

NB: ChangeLog files are no longer manually maintained. Starting on December 1st, 2011 we put change information only in the GIT commit log, and generate a top-level ChangeLog file from logs at "make dist". See doc/HACKING for details.

2011-10-25 Marcus Brinkmann <marcus@g10code.com>

* m4/pth.m4: Removed.
* configure.ac: Remove check for pth and automake conditional HAVE_PTH.

2011-06-16 Marcus Brinkmann <marcus@g10code.com>
Release 1.3.1

* configure.ac: Set LT version to C19/A8/R0.

2011-05-06 Marcus Brinkmann <marcus@g10code.com>

* Makefile.am (SUBDIRS): Remove complus.

* configure.ac (AC_CONFIG_FILES): Remove complus/Makefile.
(BUILD_COMPLUS): Remove AM_CONDITIONAL.
* complus/: Remove very old and stale component.

* acinclude.m4 (GNUPG_FIX_HDR_VERSION): Remove.

2011-04-14 Werner Koch <wk@g10code.com>

* configure.ac: Require automake 1.11.

2011-04-06 Werner Koch <wk@g10code.com>

* autogen.sh (--build-w32): Support option --build-w64.
* configure.ac (HAVE_W64_SYSTEM): Define.
INSERT__TYPEDEFS_FOR_GPGME_H): New.
(GPGME_CONFIG_HOST): New.

2011-02-02 Marcus Brinkmann <mb@g10code.com>

* configure.ac (NEED_LIBASSUAN_VERSION): Bump to 2.0.2 for system hooks.

2010-12-30 Werner Koch <wk@g10code.com>

* configure.ac: Support a git revision.

2010-11-03 Werner Koch <wk@g10code.com>

* configure.ac (AC_CHECK_HEADERS): Check for sys/types.h and sys/stat.h.

2010-11-02 Werner Koch <wk@g10code.com>

* configure.ac (AC_CHECK_HEADERS): Check for sys/time.h.

2010-08-19 Werner Koch <wk@g10code.com>

* configure.ac (AH_BOTTOM): Define GPG_ERR_ENABLE_ERRNO_MACROS.

2010-05-12 Marcus Brinkmann <marcus@g10code.de>
* configure.ac: Check for setlocale.

2010-05-07 Werner Koch <wk@g10code.com>

* configure.ac: Change checks to always require libassuan.

2010-05-07 Marcus Brinkmann <marcus@g10code.de>

* autogen.sh: Update the thing.

* configure.ac: Check for locale.h.

2010-05-06 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Detect Windows CE.
   (HAVE_W32CE_SYSTEM): New symbol and automake conditional.

* ltmain.sh, m4/libtool.m4: Patch so that it works for Windows CE.

* configure.ac: Require libgpg-error 1.8.

2010-03-15 Werner Koch <wk@g10code.com>

* configure.ac (emacs_local_vars_begin)
   (emacs_local_vars_read_only, emacs_local_vars_end): New.

2010-01-22 Werner Koch <wk@g10code.com>

* autogen.sh (--build-w32): Add --with-libassuan-prefix.

2010-01-11 Marcus Brinkmann <marcus@g10code.de>

Release 1.3.0.

2009-12-22 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Do not use echo -n. Test for __thread.

2009-12-17 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Make largefile check more robust.

2009-12-10 Werner Koch <wk@g10code.com>

* configure.ac: Check for getgid and getegid.

2009-12-08 Marcus Brinkmann <marcus@g10code.de>
Update to libtool 2.2.6a.
* configure.ac: Invoke AC_CONFIG_MACRO_DIR.
(AC_LIBTOOL_WIN32_DLL, AC_LIBTOOL_RC): Replace by ...
(LT_PREREQ, LT_INIT, LT_LANG): ... these.
* configure, config.sub, install-sh, ltmain.sh, m4/libtool.m4:
  Updated to libtool 2.2.6a.
* m4/ltoptions.m4, m4/ltsugar.m4, m4/lversion.m4,
m4/lt-obsolete.m4: New files from libtool 2.2.6a.

2009-11-10 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Activate UIServer if FD passing is enabled and
  Assuan is available.

2009-10-30 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Check for argp.h and error_t.

2009-10-26 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (NEED_GPG_VERSION_DEFAULT): Bump to 1.4.0 as 1.3.0
  was development versions only.

2009-10-22 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Add support for G13.

2009-10-20 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (AC_CONFIG_FILES): Remove assuan/Makefile.

2009-10-20 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Replace internal libassuan by external libassuan.
* Makefile.am (assuan): Remove variable.
  (SUBDIRS): Remove ${assuan}.
* assuan/: Removed.

2009-06-22 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Add AC_TYPE_UINTPTR_T.

* assuan/assuan.h [_ASSUAN_IN_GPGME_BUILD_ASSUAN]: Declare
  _gpgme_io_connect.

2009-06-18 Marcus Brinkmann <marcus@g10code.de>
Released GPGME 1.2.0.

* configure.ac (my_version): Set to 1.2.0.
(LIBGPGME_LT_CURRENT, LIBGPGME_LT_AGE): Bump.
(LIBGPGME_LT_REVISION): Reset.

2009-05-05 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Add infrastructure for compile time check of
_FILE_OFFSET_BITS.

2009-04-19 Moritz <moritz@gnu.org>


2009-03-06 Marcus Brinkmann <marcus@g10code.de>

* assuan/: Update to libassuan SVN 2009-03-06.

2009-01-26 Werner Koch <wk@g10code.com>

* configure.ac (AC_CONFIG_FILES): Add tests/opassuan/Makefile.

2008-12-08 Marcus Brinkmann <marcus@g10code.de>

Release GPGME 1.1.8.

* configure.ac: Bump API revision.

2008-11-03 Marcus Brinkmann <marcus@g10code.com>

* configure.ac: Replace gpgme paths with src.
* gpgme: Move to ...
* src: ... this new directory.

2008-10-20 Werner Koch <wk@g10code.com>

* configure.ac (AC_CONFIG_FILES): Add gpgme.h.
(GNUPG_FIX_HDR_VERSION): Remove.

2008-10-17 Marcus Brinkmann <marcus@g10code.com>

Release GPGME 1.1.7.

* configure.ac (LIBGPGME_LT_REVISION): Bump for release.

2008-09-19 Moritz <moritz@gnu.org>
* configure.ac: Remove bogus "esac".

2008-09-16 Marcus Brinkmann <marcus@g10code.com>

* configure.ac (_XOPEN_SOURCE) [apple-darwin]: Define it.

2008-07-04 Werner Koch <wk@g10code.com>

* config.guess, config.sub: Update to 2007-11-19. Also update missing et al scripts.

2008-04-01 Werner Koch <wk@g10code.com>

* configure.ac (AC_INIT): Fix quoting.

2008-01-30 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Bump required version of automake up to 1.10.
  * autogen.sh: Fix aclocal check.

2008-01-04 Marcus Brinkmann <marcus@g10code.de>

Release GPGME 1.1.6.

* configure.ac: Support gpgconf.

2007-09-27 Marcus Brinkmann <marcus@g10code.de>

* assuan-pipe-connect.c (pipe_connect_gpgme): Do not close process handle here. Use this function also on Unix systems.

* assuan-pipe-connect.c (pipe_connect_gpgme): Fix last change.

* assuan-pipe-connect.c (pipe_connect_gpgme): New function, use it if _ASSUAN_IN_GPGME_BUILD_ASSUAN.

2007-09-17 Werner Koch <wk@g10code.com>

* configure.ac: Use the svn version magic.

2007-09-07 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Check for C++, Qt and support --enable-w32-qt.

2007-08-21 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (--enable-w32-glib): Use --enableval, not
--withval.

2007-07-16 Marcus Brinkmann <marcus@g10code.de>

* assuan/assuan-socket.c (_assuan_close): Always use close().
* assuan/assuan.h (_gpgme_io_close): New prototype.
  (close): New macro, define as _gpgme_io_close.

2007-07-13 Marcus Brinkmann <marcus@g10code.de>

* assuan/assuan-io.c (_assuan_simple_read, _assuan_simple_write):
  Always use read/write (which means _gpgme_io_read and
  _gpgme_io_write).

2007-07-09 Marcus Brinkmann <marcus@g10code.de>

Released 1.1.5.

* configure.ac (LIBGPGME_LT_REVISION): Bump for release.

2007-07-08 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (PGPDEFAULT) [-mingw32*]: Initialize it.
  (HAVE_ASSUAN_H): Set to 1 if we have it.
  (funopen): Use AC_REPLACE_FUNCS.
  (USE_DESCRIPTOR_PASSING): Define to 1 if we have it. Do not
  define it at all if we don't.
  (NETLIBS) [have_w32_system]: Add -lws2_32.
  (DIRSEP_C, DIRSEP_S, EXPSEP_C, EXPSEP_S, PATHSEP_S)
  [HAVE_DOSISH_SYSTEM]: Remove definitions.

* assuan/assuan.h (_assuan_funopen): Define to _gpgme_funopen.
* assuan/funopen.c: Move to ../gpgme/funopen.c.
* assuan/Makefile.am (libassuan_la_SOURCES): Remove funopen.c.

2007-07-04 Marcus Brinkmann <marcus@g10code.de>

* assuan/Makefile.am (INCLUDES): Include $(top_srcdir)/gpgme.
* assuan/assuan.h: Include <ath.h> instead of trying to duplicate
  the definitions.

* assuan/: Update files to 2007-07-04 version of assuan.

* autogen.sh: Use = not == in test.

2007-03-05 Werner Koch <wk@g10code.com>

Released 1.1.4.
* configure.ac (LIBGPGME_LT_REVISION): Bump for release.

* autogen.sh: New option --force.

2007-01-29 Marcus Brinkmann <marcus@g10code.de>

Released 1.1.3.

* configure.ac (LIBGPGME_LT_REVISION): Bump for release.

2007-01-26 Werner Koch <wk@g10code.com>

* configure.ac: Changed gpg and gpgsm version checks to work with arbitrary names of the gpg binary. New option --disable-gpg-test and --disable-gpgsm-test.

2007-01-09 Werner Koch <wk@g10code.com>

* configure.ac (NEED_GPG_VERSION, NEED_GPGSM_VERSION): Must define after it may have been changed by an option.

2007-01-08 Werner Koch <wk@g10code.com>

* configure.ac: Require gpg-error 1.4 due to the use of gpg_error_from_syserror. (HAVE_ASSUAN_H): New.

2007-01-05 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Add options --with-gpg-version and --with-gpgsm-version to allow overriding the minimum version requirements.

2006-12-17 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Fix two typos in last change.

2006-12-03 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Use descriptor passing only if --enable-fd-passing is provided.

* configure.ac: Add check for use of descriptor passing.

2006-11-29 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (NEED_GPG_VERSION): Bump to 1.3.0.
2006-09-19 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Turn stpcpy into a replacement function.
  Check for unistd.h and add setenv as replacement function.

2006-07-29 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Check for network libraries and set NETLIBS.

2006-07-06 Marcus Brinkmann <marcus@g10code.de>

* lang, lang/cl: New subdirectories.
  * lang/Makefile.am, lang/README: New files.
  * configure.ac (AC_CONFIG_FILES): Add lang/Makefile, lang/cl/Makefile and lang/cl/gpgme.asd.
  * Makefile.am (SUBDIRS): Add lang.

2006-03-02 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (LIBGPGME_LT_REVISION): Bump for release.

2006-02-22 Marcus Brinkmann <marcus@g10code.de>

Released 1.1.1.

* configure.ac (LIBGPGME_LT_CURRENT, LIBGPGME_LT_AGE): Bump for release.
  (LIBGPGME_LT_REVISION): Reset to 0 for release.

2006-01-05 Werner Koch <wk@g10code.com>

* configure.ac: Test for inline feature.
  (AH_BOTTOM): New to define the pure attribute.

2006-01-03 Werner Koch <wk@g10code.com>

* configure.ac: Append SVN revision to the version.

2005-11-18 Werner Koch <wk@g10code.com>

* configure.ac (BUILD_REVISION): New.

2005-11-17 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Add support for --enable-w32-glib (disabled by default). Invoke AM_PATH_GLIB_2_0.
2005-11-16 Werner Koch <wk@g10code.com>

* configure.ac (CFLAGS) [W32]: Make sure that -mms-bitfields are used.

2005-11-15 Werner Koch <wk@g10code.com>

* configure.ac: Create BUILD_FILEVERSION from SVN Revision.

* autogen.sh [W32]: Build shared and static versions of the library.

2005-10-20 Marcus Brinkmann <marcus@g10code.de>

* w32-dll/ChangeLog, w32-dll/build-dll, w32-dll/gpgme.def: Remove files.

* configure.ac: Instead checking for windres and dlltool, invoke
  AC_LIBTOOL_WIN32_DLL and AC_LIBTOOL_RC.

* src/Makefile.am [HAVE_W32_SYSTEM]: Use libtool, which simplifies
  the rules.

2005-10-01 Marcus Brinkmann <marcus@g10code.de>

Released 1.1.0.

* configure.ac (LIBGPGME_LT_CURRENT, LIBGPGME_LT_AGE): Bump for
  release.

  (LIBGPGME_LT_REVISION): Reset to 0 for release.

2005-09-12 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (HAVE_PTH): Don't add $PTH_CFLAGS to $CFLAGS here.

2005-08-26 Werner Koch <wk@g10code.com>

* configure.ac (SEPCONSTANTS): New to define DIRSEP_C et al.

2005-08-19 Werner Koch <wk@g10code.com>

* configure.ac [W32]: Create values for versioninfo.rc and list
  substutution versioninfo.rc.

* configure.ac: Define ENABLE_GPGSM.

2005-08-08 Werner Koch <wk@g10code.com>

* configure.ac (stpcpy): Changed from replace to test.

2005-03-24 Marcus Brinkmann <marcus@g10code.de>
* configure.ac (AH_BOTTOM): Removed.

2005-03-09 Werner Koch <wk@g10code.com>

* acinclude.m4 (GNUPG_CHECK VA_COPY): Assume no when cross-compiling.

* Makefile.am (EXTRA_DIST): Include autogen.sh

* autogen.sh: Added the usual code to build for W32 (--build-w32).

* configure.ac: Fixed the mingw32 host string, removed OS/2 stuff.
  (HAVE_DRIVE_LETTERS): Removed.
  (HAVE_W32_SYSTEM): Added.
  (AC_GNU_SOURCE): New to replace the identical AH_VERBATIM.
  (AH_BOTTOM): Added.

2004-12-28 Werner Koch <wk@g10code.com>

Released 1.0.2.

* Makefile.am (AUTOMAKE_OPTIONS): Build bzip 2 version.
  (ACLOCAL_AMFLAGS): Add -I m4.
* configure.ac: Require automake 1.9.3 and autoconf 2.59.
* acinclude.m4: Changed quoting for automake 1.9.
* README: Use SHA1 instead of MD5.

2004-12-11 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Replace ttyname_r if it doesn't exist (and warn in that case).

2004-12-07 Marcus Brinkmann <marcus@g10code.de>

* README: Refer to COPYING.LESSER and "each file" instead of COPYING.
* COPYING.LESSER: New file.
* gpgme.spec.in (%doc): Add COPYING.LESSER.
* acinclude.m4, configure.ac, Makefile.am: Change license to LGPL 2.1 or later.
* TODO: Add copyright notice.
* README.CVS: Likewise.

* configure.ac (PGSM_VERSION): Fix filter to get it.

2004-10-22 Marcus Brinkmann <marcus@g10code.de>

Released 1.0.1.
* configure.ac (LIBGPGME_LT_REVISION): Bump up to 2.
  (AC_INIT): Set version to 1.0.1.

* configure.ac: Set HAVE_GPGSM to true only if $GPGSM is not "no".

2004-09-30 Marcus Brinkmann  <marcus@g10code.de>

Released 1.0.0.

* configure.ac (LIBGPGME_LT_REVISION): Bump up to 1.
  (AC_INIT): Set version to 1.0.0.

* Makefile.am (EXTRA_DIST): Remove README-alpha.
* README-alpha: Remove file.

2004-09-17 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac: Disable AC_CONFIG_MACRO_DIR for now.

2004-09-14 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac: Improve diagnostics with version check.

* configure.ac: Print diagnostics about found thread libraries at
the end. Check for the versions of GPG and GPGSM and print the
found versions at the end.
(HAVE_GPGSM): Do not require GPGSM to exist and be readable.
(AC_CONFIG_MACRO_DIR): Invoke with argument m4.

* acinclude.m4: Add copyright notice.
(jm,GLIBC21, AM_PATH_GPG_ERROR, _AC_PTH_ERROR, _AC_PTH_VERBOSE,
AC_CHECK_PTH): Removed.

2004-06-23 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac: Check for <sys/uio.h>.

2004-06-08 Marcus Brinkmann  <marcus@g10code.de>

Released 0.9.0.

* configure.ac (AC_INIT): Set version number to 0.9.0.
  (LIBGPGME_LT_CURRENT, LIBGPGME_LT_AGE): Bump up by one.
  (LIBGPGME_LT_REVISION): Reset to zero.

2004-05-21 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac (GPGME_CONFIG_API_VERSION): New variable,
substitute it.

2004-04-29 Marcus Brinkmann  <marcus@g10code.de>

Released 0.4.7.

* configure.ac (LIBGPGME_LT_REVISION): Bump it up.

2004-04-02 Thomas Schwinge  <schwinge@nic-nac-project.de>

* autogen.sh: Added ACLOCAL_FLAGS.

2004-04-06 Werner Koch   <wk@gnupg.org>

Released 0.4.6.

* config.guess, config.sub, ltmain.sh: Updated to those from
libtool 1.5.4.

2004-03-07 Marcus Brinkmann <marcus@g10code.de>

Released 0.4.5.

* configure.ac (NEED_GPGSM_VERSION): Bump up to 1.9.6.

* Makefile.am (EXTRA_DIST): Remove autogen.sh and README.CVS.

2004-02-18 Werner Koch <wk@gnupg.org>

* configure.ac: Make the check for funopen fail with just a
warning.

2004-02-11 Werner Koch <wk@gnupg.org>

* autogen.sh (check_version): Removed bashism and simplified.

2004-02-10 Werner Koch <wk@gnupg.org>

* configure.ac: Fixed funopen test change.

2004-02-06 Moritz Schulte <mo@g10code.com>

* configure.ac: Fix funopen replacement mechanism.

2004-01-31 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Add invocation of AC_SYS_LARGEFILE, AC_TYPE_OFF_T
and AC_FUNC_FSEEKO.
2004-01-12 Werner Koch  <wk@gnupg.org>

Released 0.4.4.

* configure.ac: Bumped LT_Revision; now at C12/A1/R1.

(NEED_GPGSM_VERSION): Set to 1.9.3.
(min_automake_version): Added.
* README.CVS: New.
* Makefile.am (EXTRA_DIST): Added README.CVS.
* autogen.sh: Updated.

2003-11-19 Werner Koch  <wk@gnupg.org>

* acinclude.m4: Add AM_PATH_GPG_ERROR.
* configure.ac: Check for timegm. Made warning messages more prominent.

2003-10-06 Marcus Brinkmann  <marcus@g10code.de>

Released 0.4.3.

* configure.ac (LIBGPGME_LT_CURRENT, LIBGPGME_LT_AGE): Bump up by 1.
(LIBGPGME_LT_REVISION): Set to 0.

2003-09-13 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac: Require libgpg-error 0.5.

* acinclude.m4: Remove libtool cruft, add jm_GLIBC21.
* configure.ac: Add check for getenv_r, and call jm_GLIBC21.
Define HAVE_THREAD_SAFE_GETENV if appropriate.

2003-09-03 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac: Remove GPGME_CONFIG_LIBS and GPGME_CONFIG_CFLAGS.

2003-09-02 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac: Move invocation of AC_CANONICAL_HOST up to suppress warning by autoconf.

2003-08-30 Robert Schiele <rschiele@uni-mannheim.de>

* gpgme.spec.in: %{_infodir}/dir is not packaged, remove to prevent checking failure.

2003-08-18 Marcus Brinkmann  <marcus@g10code.de>
* configure.ac: If building Assuan, check for funopen and
  fopencookie, and make isascii, putc_unlocked and memrchr
  replacement functions.
  (AM_PATH_GPG_ERROR): Require 0.3.

2003-07-31 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac (AC_INIT): Bump version to 0.4.3.

2003-07-30 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac (LIBGPGME_LT_REVISION): Bump up to 1.

Released 0.4.2.

2003-07-08 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac: Complain if libgpg-error is not found.

2003-06-22 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac (AC_INIT): Bump version to 0.4.2.

2003-06-06 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac (LIBGPGME_LT_CURRENT): Bump up to 11.

* configure.ac: Use AM_PATH_GPG_ERROR.

* configure.ac: Check for libgpg-error. Define
  GPG_ERR_SOURCE_DEFAULT.

2003-05-26 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac (NEED_GPG_VERSION): Bump up to 1.2.2.

2003-05-18 Marcus Brinkmann  <marcus@g10code.de>

In all files, replace the Gpgme* type names with the new gpgme_*
type names.

2003-02-01 Marcus Brinkmann  <marcus@g10code.de>

* assuan/: Update files to 2002-11-10 version of assuan.

2003-01-29 Marcus Brinkmann  <marcus@g10code.de>
* bonobo/gpgme.c, bonobo/main.c, bonobo/main.h, bonobo/Makefile, bonobo/Makefile.am, bonobo/Makefile.in: Dead files removed.
* configure.ac: Remove automake conditional BUILD_BONOBO (AC_CONFIG_FILES): Remove bonobo/Makefile.
* Makefile.am (bonobo): Remove variable.
  (SUBDIRS): Remove '${bonobo}'.

* configure.ac: Remove all uses of GNUPG_CHECK_TYPEDEF, for byte, ushort, ulong, u16 and u32.
* acinclude.m4 (GNUPG_CHECK_TYPEDEF): Remove macro.

2002-12-24 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: New conditional HAVE_LD_VERSION_SCRIPT. Call AC_CANONICAL_HOST, use host instead target.

2002-12-23 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Bump up to 0.4.1.

Released 0.4.0.

2002-12-23 Marcus Brinkmann <marcus@g10code.de>

* autogen.sh (automake_vers): Require 1.7 (really 1.7.1) for the conditional source distribution bug fix.

2002-12-08 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (LIBGPGME_LT_CURRENT): Increase by one.
  (LIBGPGME_LT_AGE, LIBGPGME_LT_REVISION): Set to 0.

2002-11-28 Marcus Brinkmann <marcus@g10code.de>

* NEWS: Add note about moving "gpgmeplug" to the "cryptplug" package.
* README: Remove instructions related to "gpgmeplug".
* configure.ac: Remove enable option "gpgmeplug" and automake conditional BUILD_GPGMEPLUG, as well as the status info about it.
  (GPGMEPLUG): Remove variable.
* Makefile.am (gpgmeplug): Remove variable.
  (SUBDIRS): Remove '${gpgmeplug}.'.
* cryptplug.h, gpgme-openpgp.c, gpgmeplug.dox, gpgme-smime.c, Makefile.am, gpgmeplug.c, ChangeLog: Files removed.

2002-11-22 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Disable GPGSM for all dosish systems.
2002-10-12 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Add automake conditional HAVE_GPGSM.

2002-10-08 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (AC_INIT): Bump version up to 0.4.0.  
(NEED_GPG_VERSION): Bump up to 1.2.0.  
(NEED_GPGSM_VERSION): Bump up to 0.9.0.  
* README: Update version numbers.  
* NEWS: Start entry for 0.4.0.

2002-09-20 Werner Koch <wk@gnupg.org>

Released 0.3.11.

* configure.ac: Bump up LIBGPGME_LT_REVISION.

* configure.ac (AC_CHECK_HEADERS): Check for sys/select.h.

2002-09-04 Marcus Brinkmann <marcus@g10code.de>

* autogen.sh (autoconf_vers): Bump up to 2.53 to get the @&t@ quadrigraph.  Always cutting the edge!

2002-09-02 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Create and substitute LTLIBOBS.

2002-09-02 Marcus Brinkmann <marcus@g10code.de>

Released 0.3.10.

* NEWS: Update for 0.3.9 release.  
* configure.ac: Bump up LIBGPGME_LT_REVISION.

2002-08-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.spec.in: Changed user name in Wojciech Polak's email address from ghostface to polak per request by himself.

2002-08-28 Werner Koch <wk@gnupg.org>

* acinclude.m4 (GNUPG_CHECK_VA_COPY): New.  
* configure.ac: Use it.

2002-08-23 Werner Koch <wk@gnupg.org>
* configure.ac (GPGME_CONFIG_CFLAGS): Renamed from GPGME_CFLAGS and removed the libpath because it is set by the config script.

2002-08-21 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Bump version number to 0.3.10.

* NEWS: Add template for development version.

2002-08-21 Marcus Brinkmann <marcus@g10code.de>

Released 0.3.9.

* NEWS: Update for 0.3.9 release.
* Makefile.am (EXTRA_DIST): Add gpgme.spec.in.

2002-08-21 Marcus Brinkmann <marcus@g10code.de>

* jnlib/argparse.c, jnlib/argparse.h, jnlib/ChangeLog, jnlib/dotlock.c, jnlib/dotlock.h, jnlib/libjnlib-config.h, jnlib/logging.c, jnlib/logging.h, jnlib/Makefile.am, jnlib/mischelp.h, jnlib/README, jnlib/stringhelp.c, jnlib/stringhelp.h, jnlib/strlist.c, jnlib/strlist.h, jnlib/types.h, jnlib/xmalloc.c, jnlib/xmalloc.h: Remove files.

2002-08-21 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (SUBDIRS): Remove jnlib.
* configure.ac: Don't check for unsigned short or unsigned long. Don't check for memcmp, strlwr, strtoul, memcpy, memcmp. Make stpcpy a replaced function. Don't define HAVE_JNLIB_LOGGING. Don't generate jnlib/Makefile.

2002-07-02 Werner Koch <wk@gnupg.org>

* configure.ac: Bumped version number to 0.3.9; add a comment on when to change it.

* Makefile.am (dist-hook): New.

* AUTHORS: Added Wojciech and bug reporting addresses.

2002-06-25 Werner Koch <wk@gnupg.org>

Released 0.3.8.
* configure.ac: Bumped LT version to 9/3/0.
  (NEED_GPGSM_VERSION): Need 0.3.8 due to fixed export command.

2002-06-04 Marcus Brinkmann <marcus@g10code.de>

Released 0.3.7.

* configure.ac (AC_INIT): Set version to 0.3.7.
  (LIBGPGME_LT_REVISION): Add one.

* README: Document version requirement correctly.

2002-06-02 Marcus Brinkmann <marcus@g10code.de>

* acinclude.m4: Fix Pth check so that it doesn't error out if pth
  is not found.

2002-06-02 Marcus Brinkmann <marcus@g10code.de>

* configure.ac: Add checks for Pth and pthreads.
  * acinclude.m4: Add slightly hacked check for pth (seems to be an
    autoconf version problem).

2002-05-21 Werner Koch <wk@gnupg.org>

* configure.ac (NEED_GPGSM_VERSION): We need gpgsm 0.3.7.

2002-05-03 Werner Koch <wk@gnupg.org>

Released 0.3.6.

2002-04-05 Marcus Brinkmann <marcus@g10code.de>

* acconfig.h: File removed.
  * configure.ac (NEED_GPG_VERSION): Add description.
    (NEED_GPGSM_VERSION): Likewise.
    (HAVE_DOSISH_SYSTEM): Likewise.
    (HAVE_DRIVE_LETTERS): Likewise.
    (GPG_PATH): Likewise.
    (GPGSM_PATH): Likewise.
  * acinclude.m4 (GNUPG_CHECK_TYPEDEF): Likewise.

2002-04-01 Werner Koch <wk@gnupg.org>

Released 0.3.5.

2002-03-17 Marcus Brinkmann <marcus@g10code.de>
* configure.ac: Add automake conditional HAVE_DOSISH_SYSTEM.

2002-03-04 Werner Koch  <wk@gnupg.org>

* configure.ac: Bumped version to 0.3.4-cvs to continue development.

Released 0.3.4.

* configure.ac: Bumped LT version numbers to (7,1,0), requires gpgsm 0.3.1.

2002-03-03 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac (AC_INIT): Change version number to snapshot CVS version.

2002-02-13 Werner Koch  <wk@gnupg.org>

* configure.ac (vasprintf,fopencookie): Add checks.

2002-02-12 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac (AC_INIT): Bump version to 0.3.3.
* jnlib/Makefile.am: Revert to older version that includes xmalloc but not dotlock and some other files. Reported by Stphane Corthsy.

2002-02-10 Marcus Brinkmann  <marcus@g10code.de>

* Released 0.3.2.

* configure.ac (AC_INIT): Bump version to 0.3.2.
* jnlib/libjnlibconfig.h: Revert to older version that doesn't expect libgcrypt. Reported by Jose Carlos Garcia Sogo <jsogo@debian.org>.

2002-02-09 Marcus Brinkmann  <marcus@g10code.de>

* Released 0.3.1.

* configure.ac (LIBGPGME_LT_CURRENT): Bump it up to 6!
(NEED_GPGSM_VERSION): Bump it up to 0.3.0!
(AC_INIT): Bump version to 0.3.1

2002-01-22 Marcus Brinkmann  <marcus@g10code.de>

* configure.ac (HAVE_JNLIB_LOGGING): Define always for assuan.
2001-12-19 Werner Koch <wk@gnupg.org>

* configure.ac (VERSION,PACKAGE): Defined and subst. Used for
  AM_INIT_AUTOMAKE and moved all version number more to the top.

2001-12-18 Marcus Brinkmann <marcus@g10code.de>

* autogen.sh (libtool_vers): Bump to 1.4.

* configure.ac (LIBGPGME_LT_CURRENT): Increment.
  (LIBGPGME_LT_AGE): Reset.
  Improve comment.
  Fix wrong comment character.

2001-12-18 Werner Koch <wk@gnupg.org>

* acinclude.m4 (GNUPG_FIX_HDR_VERSION): Fixed for new automake.

2001-12-14 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (GPG): Substitute this variable.
  (GPGSM): Likewise.

2001-11-22 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (AC_CONFIG_FILES): Add tests/gpg/Makefile and
  tests/gpgsm/Makefile.

2001-11-21 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (gpgmeplug): New variable, set to gpgmeplug if
  [BUILD_GPGMEPLUG].
* configure.ac (AC_CONFIG_FILES): Add gpgmeplug/Makefile.
  Support --enable-gpgmeplug.

2001-11-21 Marcus Brinkmann <marcus@g10code.de>

* autogen.sh: Tighten version dependencies.

2001-11-20 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (SUBDIRS): Support building the assuan library
  (currently if GPGSM_PATH is set).
* configure.ac: Support building the assuan library.
* assuan: New directory, populated with the Assuan library
  (copied from the newpg repository).
2001-11-20 Marcus Brinkmann <marcus@g10code.de>

* configure.ac (NEED_GPGSM_VERSION): New variable. Treat it similarly to NEED_GPG_VERSION.
* acconfig.h: Likewise.

2001-11-18 Marcus Brinkmann <marcus@g10code.de>

* configure.in: Renamed to ...
* configure.ac: ... this. Update to autoconf 2.52. Lots of small changes in the transition. Support --with-gpg=PATH and
--with-gpgsm=PATH options. Check if test suites can be run.
* acconfig.h: Add GPGSM_PATH.
* Makefile.am: New variable `tests', set to `tests' if
RUN_GPG_TESTS.
(SUBDIRS): Replace string `tests' with variable `tests'.

2001-10-22 Marcus Brinkmann <marcus@g10code.de>

* autogen.sh: Invoke automake with `-a' (add missing files).
Do not invoke configure.

2001-09-17 Werner Koch <wk@gnupg.org>

Released 0.2.3.

* configure.in (NEED_GPG_VERSION): Set to 1.0.6. Incremented LT current and age.

* Makefile.am (SUBDIRS): Add doc

2001-06-12 Werner Koch <wk@gnupg.org>

Released 0.2.2.

2001-04-05 Werner Koch <wk@gnupg.org>

* configure.in (NEED_GPG_VERSION): Set to 1.0.4g

2001-04-02 Werner Koch <wk@gnupg.org>

Released 0.2.1.

Changed the copyright notices all over the place.

2001-02-28 Werner Koch <wk@gnupg.org>

Released 0.2.0.
* autogen.sh: Added option --build-w32.


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INFO-DIR-SECTION GNU Libraries
START-INFO-DIR-ENTRY
* GPGME: (gpgme). Adding support for cryptography to your program.
END-INFO-DIR-ENTRY

This file documents the GPGME library.


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Permission is granted to copy, distribute and/or modify this document under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version. The text of the license can be found in the section entitled Copying.
The server needs to support the verification of opaque signatures as well as detached signatures. The kind of input sources controls what kind message is to be verified.

-- Command: MESSAGE FD=N
This command is used with detached signatures to set the file descriptor for the signed data to N. The data is binary encoded (used verbatim). For details on the file descriptor, see the description of INPUT in the ENCRYPT section.

-- Command: INPUT FD=N
Set the file descriptor for the opaque message or the signature part of a detached signature to N. The message send to the server is either binary encoded or in the case of OpenPGP ASCII armored. For details on the file descriptor, see the description of INPUT in the ENCRYPT section.

-- Command: OUTPUT FD=N
Set the file descriptor to be used for the output. The output is binary encoded and only used for opaque signatures. For details on the file descriptor, see the description of INPUT in the ENCRYPT section.

The verification is then started using:

-- Command: VERIFY --protocol=NAME [--silent]
NAME is the signing protocol used for the message. For a description of the allowed protocols see the ENCRYPT command. This argument is mandatory. Depending on the combination of MESSAGE INPUT and OUTPUT commands, the server needs to select the appropriate verification mode:

MESSAGE and INPUT
This indicates a detached signature. Output data is not applicable.
INPUT
This indicates an opaque signature. As no output command has been given, the server is only required to check the signature.

**INPUT and OUTPUT**

This indicates an opaque signature. The server shall write the signed data to the file descriptor set by the output command. This data shall even be written if the signatures can't be verified.

With --silent the server shall not display any dialog; this is for example used by the client to get the content of opaque signed messages. The client expects the server to send at least this status information before the final OK response:

```
-- Status line: SIGSTATUS FLAG DISPLAYSTRING
```

Returns the status for the signature and a short string explaining the status. Valid values for FLAG are:

- **none**
  - The message has a signature but it could not be verified due to a missing key.
- **green**
  - The signature is fully valid.
- **yellow**
  - The signature is valid but additional information was shown regarding the validity of the key.
- **red**
  - The signature is not valid.

**DISPLAYSTRING** is a percent-and-plus-encoded string with a short human readable description of the status. For example

```
S SIGSTATUS green Good+signature+from+Keith+Moon+<keith@example.net>
```

Note that this string needs to fit into an Assuan line and should be short enough to be displayed as short one-liner on the clients window. As usual the encoding of this string is UTF-8 and it should be send in its translated form.

The server shall send one status line for every signature found on the message.
All file related UI server commands operate on a number of input files or directories, specified by one or more FILE commands:

-- Command: FILE [--clear] NAME
Add the file or directory NAME to the list of pathnames to be processed by the server. The parameter NAME must be an absolute path name (including the drive letter) and is percent espaced (in particular, the characters %, = and white space characters are always escaped). If the option --clear is given, the list of files is cleared before adding NAME.

Historical note: The original spec did not define --clear but the keyword --continued after the file name to indicate that more files are to be expected. However, this has never been used and thus removed from the specs.


A.6 UI Server: Encrypting and signing files.

First, the input files need to be specified by one or more FILE commands. Afterwards, the actual operation is requested:

-- Command: ENCRYPT_FILES --nohup
-- Command: SIGN_FILES --nohup
-- Command: ENCRYPT_SIGN_FILES --nohup
Request that the files specified by FILE are encrypted and/or signed. The command selects the default action. The UI server may allow the user to change this default afterwards interactively, and even abort the operation or complete it only on some of the selected files and directories.

What it means to encrypt or sign a file or directory is specific to the preferences of the user, the functionality the UI server provides, and the selected protocol. Typically, for each input file a new file is created under the original filename plus a protocol specific extension (like .gpg or .sig), which contain the encrypted/signed file or a detached signature. For directories, the server may offer multiple options to the user (for example ignore or process recursively).

The ENCRYPT_SIGN_FILES command requests a combined sign and encrypt operation. It may not be available for all protocols (for example, it is available for OpenPGP but not for CMS).
The option --nohup is mandatory. It is currently unspecified what should happen if --nohup is not present. Because --nohup is present, the server always returns OK promptly, and completes the operation asynchronously.

A.7 UI Server: Decrypting and verifying files.

First, the input files need to be specified by one or more FILE commands. Afterwards, the actual operation is requested:

-- Command: DECRYPT_FILES --nohup
-- Command: VERIFY_FILES --nohup
-- Command: DECRYPT_VERIFY_FILES --nohup
Request that the files specified by FILE are decrypted and/or verified. The command selects the default action. The UI server may allow the user to change this default afterwards interactively, and even abort the operation or complete it only on some of the selected files and directories.

What it means to decrypt or verify a file or directory is specific to the preferences of the user, the functionality the UI server provides, and the selected protocol. Typically, for decryption, a new file is created for each input file under the original filename minus a protocol specific extension (like .gpg) which contains the original plaintext. For verification a status is displayed for each signed input file, indicating if it is signed, and if yes, if the signature is valid. For files that are signed and encrypted, the VERIFY command transiently decrypts the file to verify the enclosed signature. For directories, the server may offer multiple options to the user (for example ignore or process recursively).

The option --nohup is mandatory. It is currently unspecified what should happen if --nohup is not present. Because --nohup is present, the server always returns OK promptly, and completes the operation asynchronously.

A.8 UI Server: Managing certificates.
First, the input files need to be specified by one or more FILE commands. Afterwards, the actual operation is requested:

-- Command: IMPORT_FILES --nohup  
Request that the certificates contained in the files specified by FILE are imported into the local certificate databases.

For directories, the server may offer multiple options to the user (for example ignore or process recursively).

The option --nohup is mandatory. It is currently unspecified what should happen if --nohup is not present. Because --nohup is present, the server always returns OK promptly, and completes the operation asynchronously.

FIXME: It may be nice to support an EXPORT command as well, which is enabled by the context menu of the background of a directory.

First, the input files need to be specified by one or more FILE commands. Afterwards, the actual operation is requested:

-- Command: CHECKSUM_CREATE_FILES --nohup  
Request that checksums are created for the files specified by FILE. The choice of checksum algorithm and the destination storage and format for the created checksums depend on the preferences of the user and the functionality provided by the UI server. For directories, the server may offer multiple options to the user (for example ignore or process recursively).

The option --nohup is mandatory. It is currently unspecified what should happen if --nohup is not present. Because --nohup is present, the server always returns OK promptly, and completes the operation asynchronously.

-- Command: CHECKSUM_VERIFY_FILES --nohup  
Request that checksums are created for the files specified by FILE and verified against previously created and stored checksums. The choice of checksum algorithm and the source storage and format for previously created checksums depend on the preferences of the user and the functionality provided by the UI
For directories, the server may offer multiple options to the user (for example ignore or process recursively).

If the source storage of previously created checksums is available to the user through the Windows shell, this command may also accept such checksum files as FILE arguments. In this case, the UI server should instead verify the checksum of the referenced files as if they were given as INPUT files.

The option --nohup is mandatory. It is currently unspecified what should happen if --nohup is not present. Because --nohup is present, the server always returns OK promptly, and completes the operation asynchronously.

The server needs to implement the following commands which are not related to a specific command:

-- Command: GETINFO WHAT
This is a multi purpose command, commonly used to return a variety of information. The required subcommands as described by the WHAT parameter are:

pid
Return the process id of the server in decimal notation using an Assuan data line.

To allow the server to pop up the windows in the correct relation to the client, the client is advised to tell the server by sending the option:

-- Command option: window-id NUMBER
The NUMBER represents the native window ID of the clients current window. On Windows systems this is a windows handle (HWND) and on X11 systems it is the X Window ID. The number needs to be given as a hexadecimal value so that it is easier to convey pointer values (e.g. HWND).

A client may want to fire up the certificate manager of the server. To do this it uses the Assuan command:

-- Command: START_KEYMANAGER
The server shall pop up the main window of the key manager (aka
certificate manager). The client expects that the key manager is brought into the foreground and that this command immediately returns (does not wait until the key manager has been fully brought up).

A client may want to fire up the configuration dialog of the server. To do this it uses the Assuan command:

-- Command: START_CONF DIALOG
The server shall pop up its configuration dialog. The client expects that this dialog is brought into the foreground and that this command immediately returns (i.e. it does not wait until the dialog has been fully brought up).

When doing an operation on a mail, it is useful to let the server know the address of the sender:

-- Command: SENDER [--info] [--protocol=NAME] EMAIL
EMAIL is the plain ASCII encoded address ("addr-spec" as per RFC-2822) enclosed in angle brackets. The address set with this command is valid until a successful completion of the operation or until a RESET command. A second command overrides the effect of the first one; if EMAIL is not given and --info is not used, the server shall use the default signing key.

If option --info is not given, the server shall also suggest a protocol to use for signing. The client may use this suggested protocol on its own discretion. The same status line as with PREP_ENCRYPT is used for this.

The option --protocol may be used to give the server a hint on which signing protocol should be preferred.

To allow the UI-server to visually identify a running operation or to associate operations the server MAY support the command:

-- Command: SESSION NUMBER [STRING]
The NUMBER is an arbitrary value, a server may use to associate simultaneous running sessions. It is a 32 bit unsigned integer with 0 as a special value indicating that no session association shall be done.

If STRING is given, the server may use this as the title of a window or, in the case of an email operation, to extract the senders address. The string may contain spaces; thus no plus-escaping is used.

This command may be used at any time and overrides the effect of
the last command. A RESET undoes the effect of this command.

Appendix B How to solve problems
********************************

Everyone knows that software often does not do what it should do and thus there is a need to track down problems. This is in particular true for applications using a complex library like GPGME and of course also for the library itself. Here we give a few hints on how to solve such problems.

First of all you should make sure that the keys you want to use are installed in the GnuPG engine and are usable. Thus the first test is to run the desired operation using gpg or gpgsm on the command line. If you can't figure out why things don't work, you may use GPGME's built-in trace feature. This feature is either enabled using the environment variable GPGME_DEBUG or, if this is not possible, by calling the function gpgme_set_global_flag. The value is the trace level and an optional file name. If no file name is given the trace output is printed to stderr.

For example

GPGME_DEBUG=9:/home/user/mygpgme.log
(Note that under Windows you use a semicolon in place of the colon to separate the fields.)

A trace level of 9 is pretty verbose and thus you may want to start off with a lower level. The exact definition of the trace levels and the output format may change with any release; you need to check the source code for details. In any case the trace log should be helpful to understand what is going on. Warning: The trace log may reveal sensitive details like passphrases or other data you use in your application. If you are asked to send a log file, make sure that you run your tests only with play data.

Appendix C Deprecated Functions
********************************

For backward compatibility GPGME has a number of functions, data types and constants which are deprecated and should not be used anymore. We document here those which are really old to help understanding old code and to allow migration to their modern counterparts.
*Warning:* These interfaces will be removed in a future version of GPGME.

-- Function: void gpgme_key_release (gpgme_key_t KEY)

The function gpgme_key_release is equivalent to gpgme_key_unref.

-- Function: void gpgme_trust_item_release (gpgme_trust_item_t ITEM)

The function gpgme_trust_item_release is an alias for gpgme_trust_item_unref.

-- Function: gpgme_error_t gpgme_op_import_ext (gpgme_ctx_t CTX,
  gpgme_data_t KEYDATA, int *NR)

SINCE: 0.3.9

The function gpgme_op_import_ext is equivalent to:

```c
  gpgme_error_t err = gpgme_op_import (ctx, keydata);
  if (!err)
  {   
    gpgme_import_result_t result = gpgme_op_import_result (ctx);
    *nr = result->considered;
  }
```

-- Data type: gpgme_error_t (*gpgme_edit_cb_t) (void *HANDLE,
  gpgme_status_code_t STATUS, const char *ARGS, int FD)

The gpgme_edit_cb_t type is the type of functions which GPGME calls if it a key edit operation is on-going. The status code STATUS and the argument line ARGS are passed through by GPGME from the crypto engine. The file descriptor FD is -1 for normal status messages. If STATUS indicates a command rather than a status message, the response to the command should be written to FD. The HANDLE is provided by the user at start of operation.

The function should return GPG_ERR_FALSE if it did not handle the status code, 0 for success, or any other error value.

-- Function: gpgme_error_t gpgme_op_edit (gpgme_ctx_t CTX,
  gpgme_key_t KEY, gpgme_edit_cb_t FNC, void *HANDLE,
  gpgme_data_t OUT)

SINCE: 0.3.9

Note: This function is deprecated, please use gpgme_op_interact instead.

The function gpgme_op_edit processes the key KEY interactively, using the edit callback function FNC with the handle HANDLE. The
callback is invoked for every status and command request from the crypto engine. The output of the crypto engine is written to the data object OUT.

Note that the protocol between the callback function and the crypto engine is specific to the crypto engine and no further support in implementing this protocol correctly is provided by GPGME.

The function returns the error code GPG_ERR_NO_ERROR if the edit operation completes successfully, GPG_ERR_INV_VALUE if CTX or KEY is not a valid pointer, and any error returned by the crypto engine or the edit callback handler.

-- Function: gpgme_error_t gpgme_op_edit_start (gpgme_ctx_t CTX, gpgme_key_t KEY, gpgme_edit_cb_t FNC, void *HANDLE, gpgme_data_t OUT)

SINCE: 0.3.9

Note: This function is deprecated, please use gpgme_op_interact_start instead.

The function gpgme_op_edit_start initiates a gpgme_op_edit operation. It can be completed by calling gpgme_wait on the context. *Note Waiting For Completion::.

The function returns the error code GPG_ERR_NO_ERROR if the operation was started successfully, and GPG_ERR_INV_VALUE if CTX or KEY is not a valid pointer.

-- Function: gpgme_error_t gpgme_op_card_edit (gpgme_ctx_t CTX, gpgme_key_t KEY, gpgme_edit_cb_t FNC, void *HANDLE, gpgme_data_t OUT)

Note: This function is deprecated, please use gpgme_op_interact with the flag GPGME_INTERACT_CARD instead.

The function gpgme_op_card_edit is analogous to gpgme_op_edit, but should be used to process the smart card corresponding to the key KEY.

-- Function: gpgme_error_t gpgme_op_card_edit_start (gpgme_ctx_t CTX, gpgme_key_t KEY, gpgme_edit_cb_t FNC, void *HANDLE, gpgme_data_t OUT)

Note: This function is deprecated, please use gpgme_op_interact_start with the flag GPGME_INTERACT_CARD instead.

The function gpgme_op_card_edit_start initiates a
The function returns the error code GPG_ERR_NO_ERROR if the operation was started successfully, and GPG_ERR_INV_VALUE if CTX or KEY is not a valid pointer.

-- Function: gpgme_error_t gpgme_data_new_with_read_cb
    (gpgme_data_t *DH, int (*READFUNC) (void *HOOK, char *BUFFER, size_t COUNT, size_t *NREAD), void *HOOK_VALUE)
The function gpgme_data_new_with_read_cb creates a new gpgme_data_t object and uses the callback function READFUNC to retrieve the data on demand. As the callback function can supply the data in any way it wants, this is the most flexible data type GPGME provides. However, it can not be used to write data.

The callback function receives HOOK_VALUE as its first argument whenever it is invoked. It should return up to COUNT bytes in BUFFER, and return the number of bytes actually read in NREAD. It may return 0 in NREAD if no data is currently available. To indicate EOF the function should return with an error code of -1 and set NREAD to 0. The callback function may support to reset its internal read pointer if it is invoked with BUFFER and NREAD being NULL and COUNT being 0.

The function returns the error code GPG_ERR_NO_ERROR if the data object was successfully created, GPG_ERR_INV_VALUE if DH or READFUNC is not a valid pointer, and GPG_ERR_ENOMEM if not enough memory is available.

-- Function: gpgme_error_t gpgme_data_rewind (gpgme_data_t DH)
The function gpgme_data_rewind is equivalent to:

        return (gpgme_data_seek (dh, 0, SEEK_SET) == -1) ? gpgme_error_from_errno (errno) : 0;

-- Data type: gpgme_attr_t
The gpgme_attr_t type is used to specify a key or trust item attribute. The following attributes are defined:

GPGME_ATTR_KEYID
    This is the key ID of a sub key. It is representable as a string.

    For trust items, the trust item refers to the key with this ID.

GPGME_ATTR_FPR
This is the fingerprint of a sub key. It is representable as a string.

**GPGME_ATTR_ALGO**
This is the crypto algorithm for which the sub key can be used. It is representable as a string and as a number. The numbers correspond to the enum gcry_pk_algos values in the gcrypt library.

**GPGME_ATTR_LEN**
This is the key length of a sub key. It is representable as a number.

**GPGME_ATTR_CREATED**
This is the timestamp at creation time of a sub key. It is representable as a number.

**GPGME_ATTR_EXPIRE**
This is the expiration time of a sub key. It is representable as a number.

**GPGME_ATTR_OTRUST**
XXX FIXME (also for trust items)

**GPGME_ATTR_USERID**
This is a user ID. There can be more than one user IDs in a GPGME_KEY_T object. The first one (with index 0) is the primary user ID. The user ID is representable as a number.

For trust items, this is the user ID associated with this trust item.

**GPGME_ATTR_NAME**
This is the name belonging to a user ID. It is representable as a string.

**GPGME_ATTR_EMAIL**
This is the email address belonging to a user ID. It is representable as a string.

**GPGME_ATTR_COMMENT**
This is the comment belonging to a user ID. It is representable as a string.

**GPGME_ATTR_VALIDITY**
This is the validity belonging to a user ID. It is representable as a string and as a number. See below for a list of available validities.
For trust items, this is the validity that is associated with this trust item.

GPGME_ATTR_UID_REVOKED
This specifies if a user ID is revoked. It is representable as a number, and is 1 if the user ID is revoked, and 0 otherwise.

GPGME_ATTR_UID_INVALID
This specifies if a user ID is invalid. It is representable as a number, and is 1 if the user ID is invalid, and 0 otherwise.

GPGME_ATTR_LEVEL
This is the trust level of a trust item.

GPGME_ATTR_TYPE
This returns information about the type of key. For the string function this will either be "PGP" or "X.509". The integer function returns 0 for PGP and 1 for X.509. It is also used for the type of a trust item.

GPGME_ATTR_IS_SECRET
This specifies if the key is a secret key. It is representable as a number, and is 1 if the key is revoked, and 0 otherwise.

GPGME_ATTR_KEY_REVOKED
This specifies if a sub key is revoked. It is representable as a number, and is 1 if the key is revoked, and 0 otherwise.

GPGME_ATTR_KEY_INVALID
This specifies if a sub key is invalid. It is representable as a number, and is 1 if the key is invalid, and 0 otherwise.

GPGME_ATTR_KEY_EXPRIED
This specifies if a sub key is expired. It is representable as a number, and is 1 if the key is expired, and 0 otherwise.

GPGME_ATTR_KEY_DISABLED
This specifies if a sub key is disabled. It is representable as a number, and is 1 if the key is disabled, and 0 otherwise.
GPGME_ATTR_KEY_CAPS
This is a description of the capabilities of a sub key. It is representable as a string. The string contains the letter e if the key can be used for encryption, s if the key can be used for signatures, and c if the key can be used for certifications.

GPGME_ATTR_CAN_ENCRYPT
This specifies if a sub key can be used for encryption. It is representable as a number, and is 1 if the sub key can be used for encryption, and 0 otherwise.

GPGME_ATTR_CAN_SIGN
This specifies if a sub key can be used to create data signatures. It is representable as a number, and is 1 if the sub key can be used for signatures, and 0 otherwise.

GPGME_ATTR_CAN_CERTIFY
This specifies if a sub key can be used to create key certificates. It is representable as a number, and is 1 if the sub key can be used for certifications, and 0 otherwise.

GPGME_ATTR_SERIAL
The X.509 issuer serial attribute of the key. It is representable as a string.

GPGME_ATTR_ISSUE
The X.509 issuer name attribute of the key. It is representable as a string.

GPGME_ATTR_CHAINID
The X.509 chain ID can be used to build the certification chain. It is representable as a string.

-- Function: const char * gpgme_key_get_string_attr (gpgme_key_t KEY, gpgme_attr_t WHAT, const void *RESERVED, int IDX)
The function gpgme_key_get_string_attr returns the value of the string-representable attribute WHAT of key KEY. If the attribute is an attribute of a sub key or an user ID, IDX specifies the sub key or user ID of which the attribute value is returned. The argument RESERVED is reserved for later use and should be NULL.

The string returned is only valid as long as the key is valid.

The function returns 0 if an attribute cant be returned as a string, KEY is not a valid pointer, IDX out of range, or RESERVED not NULL.
-- Function: unsigned long gpgme_key_get_ulong_attr (gpgme_key_t KEY, 
gpgme_attr_t WHAT, const void *RESERVED, int IDX)
The function gpgme_key_get_ulong_attr returns the value of the
number-representable attribute WHAT of key KEY. If the attribute
is an attribute of a sub key or an user ID, IDX specifies the sub
key or user ID of which the attribute value is returned. The
argument RESERVED is reserved for later use and should be NULL.

The function returns 0 if the attribute cant be returned as a
number, KEY is not a valid pointer, IDX out of range, or RESERVED
not NULL.

The signatures on a key are only available if the key was retrieved
via a listing operation with the GPGME_KEYLIST_MODE_SIGS mode enabled,
because it is expensive to retrieve all signatures of a key.

So, before using the below interfaces to retrieve the signatures on a
key, you have to make sure that the key was listed with signatures
enabled. One convenient, but blocking, way to do this is to use the
function gpgme_get_key.

-- Data type: gpgme_attr_t
The gpgme_attr_t type is used to specify a key signature
attribute. The following attributes are defined:

GPGME_ATTR_KEYID
This is the key ID of the key which was used for the
signature. It is representable as a string.

GPGME_ATTR_ALGO
This is the crypto algorithm used to create the signature. It
is representable as a string and as a number. The numbers
correspond to the enum gcry_pk_algos values in the gcrypt
library.

GPGME_ATTR_CREATED
This is the timestamp at creation time of the signature. It
is representable as a number.

GPGME_ATTR_EXPIRE
This is the expiration time of the signature. It is
representable as a number.

GPGME_ATTR_USERID
This is the user ID associated with the signing key. The user
ID is representable as a number.

GPGME_ATTR_NAME
This is the name belonging to a user ID. It is representable as a string.

GPGME_ATTR_EMAIL
This is the email address belonging to a user ID. It is representable as a string.

GPGME_ATTR_COMMENT
This is the comment belonging to a user ID. It is representable as a string.

GPGME_ATTR_KEY_REVOKED
This specifies if a key signature is a revocation signature. It is representable as a number, and is 1 if the key is revoked, and 0 otherwise.

GPGME_ATTR_SIG_CLASS
This specifies the signature class of a key signature. It is representable as a number. The meaning is specific to the crypto engine.

GPGME_ATTR_SIG_CLASS
This specifies the signature class of a key signature. It is representable as a number. The meaning is specific to the crypto engine.

GPGME_ATTR_SIG_STATUS
This is the same value as returned by gpgme_get_sig_status.

-- Function: const char * gpgme_key_sig_get_string_attr
    (gpgme_key_t KEY, int UID_IDX, gpgme_attr_t WHAT, const void *RESERVED, int IDX)
The function gpgme_key_sig_get_string_attr returns the value of the string-representable attribute WHAT of the signature IDX on the user ID UID_IDX in the key KEY. The argument RESERVED is reserved for later use and should be NULL.

The string returned is only valid as long as the key is valid.

The function returns 0 if an attribute can't be returned as a string, KEY is not a valid pointer, UID_IDX or IDX out of range, or RESERVED not NULL.

-- Function: unsigned long gpgme_key_sig_get_ulong_attr
    (gpgme_key_t KEY, int UID_IDX, gpgme_attr_t WHAT, const void *RESERVED, int IDX)
The function gpgme_key_sig_get_ulong_attr returns the value of the number-representable attribute WHAT of the signature IDX on the
user ID UID_IDX in the key KEY. The argument RESERVED is reserved for later use and should be NULL.

The function returns 0 if an attribute can’t be returned as a string, KEY is not a valid pointer, UID_IDX or IDX out of range, or RESERVED not NULL.

Trust items have attributes which can be queried using the interfaces below. The attribute identifiers are shared with those for key attributes. *Note Information About Keys::.

-- Function: const char * gpgme_trust_item_get_string_attr
  (gpgme_trust_item_t ITEM, gpgme_attr_t WHAT,
   const void *RESERVED, int IDX)
The function gpgme_trust_item_get_string_attr returns the value of the string-representable attribute WHAT of trust item ITEM. The arguments IDX and RESERVED are reserved for later use and should be 0 and NULL respectively.

The string returned is only valid as long as the key is valid.

The function returns 0 if an attribute can’t be returned as a string, KEY is not a valid pointer, IDX out of range, or RESERVED not NULL.

-- Function: int gpgme_trust_item_get_int_attr
  (gpgme_trust_item_t ITEM, gpgme_attr_t WHAT,
   const void *RESERVED, int IDX)
The function gpgme_trust_item_get_int_attr returns the value of the number-representable attribute WHAT of trust item ITEM. If the attribute occurs more than once in the trust item, the index is specified by IDX. However, currently no such attribute exists, so IDX should be 0. The argument RESERVED is reserved for later use and should be NULL.

The function returns 0 if the attribute can’t be returned as a number, KEY is not a valid pointer, IDX out of range, or RESERVED not NULL.

-- Data type: enum gpgme_sig_stat_t
The gpgme_sig_stat_t type holds the result of a signature check, or the combined result of all signatures. The following results are possible:

GPGME_SIG_STAT_NONE
  This status should not occur in normal operation.

GPGME_SIG_STAT_GOOD
This status indicates that the signature is valid. For the combined result this status means that all signatures are valid.

GPGME_SIG_STAT_GOOD_EXP
This status indicates that the signature is valid but expired. For the combined result this status means that all signatures are valid and expired.

GPGME_SIG_STAT_GOOD_EXPKEY
This status indicates that the signature is valid but the key used to verify the signature has expired. For the combined result this status means that all signatures are valid and all keys are expired.

GPGME_SIG_STAT_BAD
This status indicates that the signature is invalid. For the combined result this status means that all signatures are invalid.

GPGME_SIG_STAT_NOKEY
This status indicates that the signature could not be verified due to a missing key. For the combined result this status means that all signatures could not be checked due to missing keys.

GPGME_SIG_STAT_NOSIG
This status indicates that the signature data provided was not a real signature.

GPGME_SIG_STAT_ERROR
This status indicates that there was some other error which prevented the signature verification.

GPGME_SIG_STAT_DIFF
For the combined result this status means that at least two signatures have a different status. You can get each keys status with gpgme_get_sig_status.

-- Function: const char * gpgme_get_sig_status (gpgme_ctx_t CTX,
 int IDX, gpgme_sig_stat_t *R_STAT, time_t *R_CREATED)
The function gpgme_get_sig_status is equivalent to:

    gpgme_verify_result_t result;
    gpgme_signature_t sig;

    result = gpgme_op_verify_result (ctx);
    sig = result->signatures;
while (sig && idx)
{
    sig = sig->next;
    idx--;
}
if (!sig || idx)
    return NULL;

if (r_stat)
{
    switch (gpg_err_code (sig->status))
    {
    case GPG_ERR_NO_ERROR:
        *r_stat = GPGME_SIG_STAT_GOOD;
        break;

    case GPG_ERR_BAD_SIGNATURE:
        *r_stat = GPGME_SIG_STAT_BAD;
        break;

    case GPG_ERR_NO_PUBKEY:
        *r_stat = GPGME_SIG_STAT_NOKEY;
        break;

    case GPG_ERR_NO_DATA:
        *r_stat = GPGME_SIG_STAT_NOSIG;
        break;

    case GPG_ERR_SIG_EXPIRED:
        *r_stat = GPGME_SIG_STAT_GOOD_EXP;
        break;

    case GPG_ERR_KEY_EXPIRED:
        *r_stat = GPGME_SIG_STAT_GOOD_EXPKEY;
        break;

    default:
        *r_stat = GPGME_SIG_STAT_ERROR;
        break;
    }
}
if (r_created)
    *r_created = sig->timestamp;
return sig->fpr;

-- Function: const char * gpgme_get_sig_string_attr (gpgme_ctx_t CTX,
    int IDX, gpgme_attr_t WHAT, int WHATIDX)
The function gpgme_get_sig_string_attr is equivalent to:

```c
  gpgme_verify_result_t result;
  gpgme_signature_t sig;

  result = gpgme_op_verify_result (ctx);
  sig = result->signatures;

  while (sig && idx) {
    sig = sig->next;
    idx--;
  }
  if (!sig || idx)
    return NULL;

  switch (what) {
    case GPGME_ATTR_FPR:
      return sig->fpr;
    case GPGME_ATTR_ERRTOK:
      if (whatidx == 1)
        return sig->wrong_key_usage ? "Wrong_Key_Usage" : "";
      else
        return "";
      default:
        break;
  }

  return NULL;
```

-- Function: const char * gpgme_getSig_ulong_attr (gpgme_ctx_t CTX, int IDX, gpgme_attr_t WHAT, int WHATIDX)

The function gpgme_getSig_ulong_attr is equivalent to:

```c
  gpgme_verify_result_t result;
  gpgme_signature_t sig;

  result = gpgme_op_verify_result (ctx);
  sig = result->signatures;

  while (sig && idx) {
    sig = sig->next;
    idx--;
  }
  if (!sig || idx)
```
return 0;

switch (what)
{
  case GPGME_ATTR_CREATED:
    return sig->timestamp;

  case GPGME_ATTR_EXPIRE:
    return sig->exp_timestamp;

  case GPGME_ATTR_VALIDITY:
    return (unsigned long) sig->validity;

  case GPGME_ATTR_SIG_STATUS:
    switch (sig->status)
    {
      case GPG_ERR_NO_ERROR:
        return GPGME_SIG_STAT_GOOD;

      case GPG_ERR_BAD_SIGNATURE:
        return GPGME_SIG_STAT_BAD;

      case GPG_ERR_NO_PUBKEY:
        return GPGME_SIG_STAT_NOKEY;

      case GPG_ERR_NO_DATA:
        return GPGME_SIG_STAT_NOSIG;

      case GPG_ERR_SIG_EXPIRED:
        return GPGME_SIG_STAT_GOOD_EXP;

      case GPG_ERR_KEY_EXPIRED:
        return GPGME_SIG_STAT_GOOD_EXPKEY;

      default:
        return GPGME_SIG_STAT_ERROR;
    }

  case GPGME_ATTR_SIG_SUMMARY:
    return sig->summary;

  default:
    break;
}

return 0;

-- Function: const char * gpgme_get_sig_key (gpgme_ctx_t CTX, int IDX,
               gpgme_key_t *R_KEY)
The function `gpgme_get_sig_key` is equivalent to:

```c
    gpgme_verify_result_t result;
    gpgme_signature_t sig;

    result = gpgme_op_verify_result (ctx);
    sig = result->signatures;

    while (sig && idx)
    {
        sig = sig->next;
        idx--;
    }
    if (!sig || idx)
        return gpg_error (GPG_ERR_EOF);

    return gpgme_get_key (ctx, sig->fpr, r_key, 0);
```

File: gpgme.info, Node: Library Copying, Next: Copying, Prev: Deprecated Functions, Up: Top

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Version 2.1, February 1999

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* enum gpgme_pubkey_algo_t:  Public Key Algorithms.
  (line 9)
* enum gpgme_sig_mode_t:  Creating a Signature.
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* enum gpgme_tofu_policy_t:  Changing TOFU Data.  (line 10)
* FILE:  UI Server Set Input Files.
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* gpgme_data_encoding_t:  Data Buffer Meta-Data.
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* gpgme_data_new_from_cbs: Callback Based Data Buffers.
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* gpgme_data_new_from_estream: File Based Data Buffers.
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* gpgme_error_t (*gpgme_interact_cb_t) (void *HANDLE, const char *STATUS, const char *ARGS, int FD): Advanced Key Editing.
  (line 6)
* gpgme_error_t (*gpgme_io_cb_t) (void *DATA, int FD): I/O Callback Interface.
  (line 6)
* gpgme_error_t (*gpgme_passphrase_cb_t)(void *HOOK, const char *UID_HINT, const char *PASSPHRASE_INFO, int PREV_WAS_BAD, int FD): Passphrase Callback.
  (line 6)
* gpgme_error_t (*gpgme_register_io_cb_t) (void *DATA, int FD, int DIR, gpgme_io_cb_t FNC, void *FNC_DATA, void **TAG): I/O Callback Interface.
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* gpgme_op_export: Exporting Keys. (line 50)
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* gpgme_op_revid: Generating Keys. (line 224)
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* off_t (*gpgme_data_seek_cb_t) (void *HANDLE, off_t OFFSET, int WHENCE): Callback Based Data Buffers.
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* ssize_t (*gpgme_data_read_cb_t) (void *HANDLE, void *BUFFER, size_t SIZE): Callback Based Data Buffers.
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Buffers.

* START_CONFDIALOG: Miscellaneous UI Server Commands.

* START_KEYMANAGER: Miscellaneous UI Server Commands.

* struct gpgme_data_cbs: Callback Based Data Buffers.

* struct gpgme_io_cbs: Registering I/O Callbacks.

* VERIFY: UI Server Verify. (line 31)

* VERIFY_FILES: UI Server Verify/Decrypt Files.

* void (*gpgme_data_release_cb_t) (void *HANDLE): Callback Based Data Buffers.

* void (*gpgme_event_io_cb_t) (void *DATA, gpgme_event_io_t TYPE, void *TYPE_DATA): I/O Callback Interface.

* void (*gpgme_progress_cb_t)(void *HOOK, const char *WHAT, int TYPE, int CURRENT, int TOTAL): Progress Meter Callback.

* void (*gpgme_remove_io_cb_t) (void *TAG): I/O Callback Interface.

* window-id: Miscellaneous UI Server Commands.

# -*- mode: org -*-
#+TITLE: Maintenance Mode
#+AUTHOR: Ben McGinnes
#+LATEX_COMPILER: xelatex
#+LATEX_CLASS: article
#+LATEX_CLASS_OPTIONS: [12pt]
#+LATEX_HEADER: \usepackage{xltxtra}
#+LATEX_HEADER: \usepackage[margin=1in]{geometry}
#+LATEX_HEADER: \setmainfont[ Ligatures={Common} ]{Times New Roman}
#+LATEX_HEADER: \author{Ben McGinnes <ben@gnupg.org>}

* Maintenance Mode from 2019

:PROPERTIES:
:CUSTOM_ID: maintenance-mode
:END:

| Version: | 0.0.1 |
| GPGME Version: | 1.13.0 |
| Author: | Ben McGinnes <ben@gnupg.org> |
| Author GPG Key: | DB4724E6FA4286C92B4AE55C4321E4E2373590E5D |
| Language: | Australian English, British English |
| xml:lang: | en-AU, en-GB, en |
From the beginning of 2019 the Python bindings to GPGME will enter maintenance mode, meaning that new features will not be added and only bug fixes and security fixes will be made. This also means that documentation beyond that existing at the end of 2018 will not be developed further except to correct errors.

Though use of these bindings appears to have been quite well received, there has been no indication of what demand there is, if any for either financial backing of the current Python bindings development or support contracts with g10code GmbH citing the necessity of including the bindings.

** Maintainer from 2019 onward

How does this affect the position of GnuPG Python Bindings Maintainer?

Well, I will remain as maintainer of the bindings; but without funding for that position, the amount of time I will be able to dedicate solely to this task will be limited and reduced to volunteered time. As with all volunteered time and effort in free software projects, this will be subject to numerous external imperatives.

** Using the Python Bindings from 2019 and beyond

For most, if not all, Python developers using these bindings; they will continue to just work the same as they always have. Expansions of GPGME itself are usually handled by SWIG with the existing code and thus bindings are generated properly when the bindings are installed alongside GPGME and when the latter is built from source.

In the rare circumstances where that is not enough to address some new addition to GPGME, then that is a bug and thus subject to the maintenance mode provisions (i.e. it will be fixed following a bug report being raised and your humble author will need to remember where the timesheet template was filed, depending on how many years off such an event is).

All the GPGME functionality will continue to be accessible via the lower level, dynamically generated methods which match the GPGME C
documentation. While the more intuitively Pythonic higher level layer already covers the vast majority of functionality people require with key generation, signatures, certifications (key signing), encryption, decryption, verification, validation, trust levels and so on.

Any wanted features lacking in the Python bindings are usually lacking because they are missing from GPGME itself (e.g. revoking keys via the API) and in such cases they are usually deliberately excluded. More discussion of these issues can be found in the archives of the [[https://lists.gnupg.org/mailman/listinfo/gnupg-devel][gnupg-devel mailing list]].

Any features existing in the dynamically generated layer for which people want a specific, higher level function included to make it more Pythonic (e.g. to avoid needing to learn or memorise cryptographic mode values or GnuPG status code numbers), would be a feature request and /not/ a bug.

It is still worthwhile requesting it, but the addition of such a feature would not be guaranteed and provided on a purely volunteer basis. Expediting such a request would require funding that request.

Those with a commercial interest in expediting such a feature request already know how to [[https://gnupg.org/cgi-bin/procdonate.cgi?mode=preset][expedite it]] (use the message field to state what feature is being requested).

** Documentation formats

The documentation has been written in Org mode for GNU Emacs, with both Texinfo and reStructuredText formats generated from that. The Texinfo files are intended for use with the rest of the GnuPG documentation; while the reStructuredText files are intended for use with Docutils and Sphinx, as with other Python projects.

*** Cautionary Notes regarding Sphinx and EPUB

Though Python's Docutils in conjunction with Sphinx is capable of generating some very useful HTML sites, as proven by [[https://readthedocs.org/][Read the Docs]] and the [[https://docs.python.org/][Python documentation]], there are a number of output formats it does not handle well. At the top of the list of things it manages to break
so atrociously as to be embarassing is the [[http://idpf.org/epub][EPUB 3]] format.

The automatically generated EPUB of the CPython documentation always contains hundreds of validation errors and even the modest amount of documentation here [[https://files.au.adversary.org.s3.amazonaws.com/crypto/gpgme-python/rst/epub/GPGMEPythonBindings.epub][produced a file]] with approximately thirty validation errors. As the volume of documentation content increases, so does the induced errors. Whereas Texinfo doesn't produce EPUB output at all, nor does Org-mode.

Should there ever be genuine demand for this format, lodge a [[https://dev.gnupg.org/maniphest/task/edit/form/4/][feature request]] case marked for [[https://dev.gnupg.org/p/BenM/][my]] attention. The means of generating such files flawlessly is already available, but is not yet part of the GnuPG build system. Nor is it integrated with a means of converting Org mode input files to the relevant base format automatically, as can already be done when converting Org to reStructuredText or Org to Texinfo. As a certain amount of work would be required to get it done, there would need to be clear demand for that work to be done.

2011-12-02 Werner Koch <wk@g10code.com>

NB: ChangeLog files are no longer manually maintained. Starting on December 1st, 2011 we put change information only in the GIT commit log, and generate a top-level ChangeLog file from logs at "make dist". See doc/HACKING for details.

2011-05-11 Marcus Brinkmann <marcus@g10code.com>

* gpgsm/Makefile.am (DISTCLEANFILES): Move to ...
  (CLEANFILES): ... here.
  (clean-local): New rule.

* gpg/Makefile.am (DISTCLEANFILES): Move to ...
  (CLEANFILES): ... here.

2011-05-05 Marcus Brinkmann <marcus@g10code.com>

* gpg/Makefile.am: Unset GPG_AGENT_INFO when setting up local configuration.
  (clean-local): Shut down local gpg-agent.

2011-05-04 Marcus Brinkmann <marcus@g10code.com>

* gpg/t-import.c (check_result): Complete secret key pair counting
  and disable status check, as GPG 2.1 currently emits two IMPORT_OK
  lines and we only look at the first.

2011-04-27 Marcus Brinkmann <marcus@g10code.com>
* gpg/Makefile.am (DISTCLEANFILES): Add S.gpg-agent.
  (mkdemodirs, ./Alpha/Secret.gpg): Remove targets.
  (GNUPGHOME): Export as absolute build directory (for gpg-agent).
  (./pubring.gpg): Remove --homedir option, import secdemo.asc.
  (clean-local): Rewrite.
* gpg/pubkey-1.asc, gpg/seckey-1.asc: Change passphrase to "abc" (now needed as GnuPG 2.1 asks for secret key passphrase on import).
* gpg/t-keylist.c (keys): Update key info for Joe Random Hacker.
  (main): Disable check for can_encrypt, as this is now in a different subkey.
* gpg/t-encrypt-sign.c (check_result): Allow RMD160 hash algorithm.
* gpg/t-import.c (check_result): One secret key pair now counts as two secret keys, allow that.

2009-11-03 Werner Koch <wk@g10code.com>

* run-support.h (fail_if_err): Include program name.

* run-sign.c (main): Add option --uiserver.

2009-10-26 Marcus Brinkmann <marcus@g10code.de>

* opassuan/t-command.c: Update to new interface.

2009-10-15 Werner Koch <wk@g10code.com>

* run-verify.c: New.

2009-08-06 Werner Koch <wk@g10code.com>

* run-sign.c: New.

2009-07-07 Werner Koch <wk@g10code.com>

* run-keylist.c (main): Add options --cms and --openpgp.

* gpg/pgp-keylist.c: Rename to ...
* run-keylist.c: ... this.
* gpg/pgp-import.c: Rename to ...
* run-import.c: ... this.
* gpg/pgp-export.c: Rename to ...
* run-export.c: ... this.
* run-support.h: New. Copied from gpg/t-support.h.
* gpg/Makefile.am (noinst_PROGRAMS): Remove them.
* Makefile.am (noinst_PROGRAMS): Add them.
2009-06-22 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-support.h (passphrase_cb): Implement write() according to
  the book to silence compiler warning.
* gpgsm/t-support.h (passphrase_cb): Likewise.

2009-06-16 Werner Koch <wk@g10code.com>

* gpg/pgp-import.c: New.
* gpg/t-support.h (print_import_result, nonnull): Factored out
  from other tools.

* gpg/pgp-export.c, gpg/pgp-keylist.c: New.

2009-06-09 Werner Koch <wk@g10code.com>

* gpg/Makefile.am (/pubring.gpg): Ignore errors in case of
  already imported keys. Add --no-permission-warning and remove
  obsolete --allow-secret-key-import.
* gpg/mkdemodirs.in (GPG): Add --no-permission-warning.

* gpg/t-edit.c (edit_fnc): Use gpgme_io_write.

2009-04-19 Moritz <moritz@gnu.org>

* gpg/Makefile.am (EXTRA_DIST): Replaced mkdemodirs with mkdemodirs.in.
  (mkdemodirs): New target.
  (clean-local): Added command for removing mkdemodirs script.
  (./Alpha/Secret.gpg): Added dependency on mkdemodirs.

* gpg/mkdemodirs: Renamed to ...
* gpg/mkdemodirs.in: ... here.
* gpg/mkdemodirs.in (GPG): Derive value from @GPG@ instead of
  hard-coding "gpg".

2009-02-24 Werner Koch <wk@g10code.com>

* opassuan/t-command.c: Adjust for changed new op_assuan interface.

2009-02-03 Werner Koch <wk@g10code.com>

* gpg/t-keylist.c (main): Check that new fields is_cardkey and
  card_number are not set.

2009-01-26 Werner Koch <wk@g10code.com>
* opassuan/: New.
* opassuan/Makefile.am: New.
* opassuan/t-command.c: New.

2008-12-03 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (INCLUDES): Fix path to include file.
* gpg/Makefile.am (INCLUDES), gpgsm/Makefile.am (INCLUDES): Likewise.

2008-11-18 Werner Koch <wk@g10code.com>

* gpgsm/cms-decrypt.c: New.

2008-11-03 Marcus Brinkmann <marcus@g10code.com>

* gpgsm/Makefile.am (INCLUDES, LDADD): Replace gpgme path with src.
* gpg/Makefile.am (INCLUDES, LDADD, t_thread1_LDADD): Likewise.
* Makefile.am (LDADD): Likewise.

2008-10-30 Werner Koch <wk@g10code.com>

* gpgsm/cms-keylist.c: New.

2008-06-19 Werner Koch <wk@g10code.com>

* gpg/t-gpgconf.c (dump_arg): Add new types. Print strings in quotes.

2008-01-28 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (DISTCLEANFILES): Add pubring.kbx~.

2008-01-10 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-gpgconf.c (main): Allow for dirmngr not to be available.
* gpg/Makefile.am (.gpg-agent.conf): Correct pinentry path.
* EXTRA_DIST): Add pinentry.

* gpg/t-gpgconf.c (main): Exit early if compiled without gpgconf.

2008-01-04 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (CLEANFILES): Add pubring.kbx and dirmngr.conf.
* Makefile.am (TESTS_ENVIRONMENT): Use absolute path for GNUPGHOME.
* gpg/Makefile.am (TESTS_ENVIRONMENT): Use absolute path for GNUPGHOME.
* gpgsm/Makefile.am (TESTS_ENVIRONMENT): Use absolute path for GNUPGHOME.
* gpg/Makefile.am (TESTS): Add t-gpgconf. t-gpgconf.c: New file.

2007-11-23 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-verify.c (show_auditlog): Check for GPG_ERR_ASS_UNKNOWN_CMD.

2007-11-23 Werner Koch <wk@g10code.com>

* gpgsm/t-verify.c (check_result): Don't exit on error but set a flag.
  (main): Consult flag for return value.
  (show_auditlog): New.
  (main): Use it.

2007-09-27 Marcus Brinkmann <marcus@g10code.de>

* t-engine-info.c (check_engine_info): Fix debug output.
* gpg/Makefile.am (tests_unix): New variable.
  (TESTS): Use it.
* gpg/t-support.h (passphrase_cb) [HAVE_W32_SYSTEM]: Use WriteFile instead of write.
* gpg/t-wait.c [HAVE_W32_SYSTEM]: Define sleep as _sleep.

2007-09-14 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-verify.c (main): Release TEXT and SIG.

2007-07-12 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/Makefile.am (key_id): Change := into =.

2007-07-12 Werner Koch <wk@g10code.com>

* gpgsm/t-support.h (init_gpgme) [W32]: Do not init the locales as the constants are not available.

2007-02-26 Werner Koch <wk@g10code.com>

* gpg/t-verify.c (double_plaintext_sig): New.
  (main): Check it.

2006-12-02 Marcus Brinkmann <marcus@g10code.de>
* gpgsm/t-keylist.c (main): Skip unknown keys. Newer versions of GPGSM import more keys than older ones.

2005-12-06 Werner Koch <wk@g10code.com>

* gpg/t-keylist.c (main): Changed for that secondary keys now have a fingerprint.
  * gpg/t-keylist-sig.c (main): Ditto.
  * gpgsm/t-keylist.c (main): Ditto. The test used to be wrong.

2005-10-18 Werner Koch <wk@g10code.com>

* gpg/pubdemo.asc, gpg/secdemo.asc: Add 2 expired subkeys to Whisky.
* gpg/t-keylist.c: Reordered list to match new demo keyring. Add arg for number of subkeys and for extra checking function.
  (main): Enhanced a few error outputs. Changed subkey counting. Call extra checking function.
  (check_whisky): New.

2005-10-07 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-keylist.c (main): Allow for an email address as a second uid.

* gpg/t-sig-notation.c: Change critical notation to something GnuPG understands.

2005-10-01 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (EXTRA_DIST): Remove gpg.conf.
  (DISTCLEANFILES): Add gpg.conf.
  (all-local): Add gpg.conf.
  (/gpg.conf): New target.
  * gpg/gpg.conf: Remove file.

* gpg/Makefile.am (EXTRA_DIST): Add gpg.conf.

* gpg/Makefile.am (TESTS): Add t-sig-notation.
* gpg/t-sig-notation.c (check_result): New file.
* gpg/t-verify.c (check_result): Also check the length of the notation data.

2005-09-30 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (TESTS): Add t-filename.

2005-09-23 Werner Koch <wk@g10code.com>

* gpg/t-support.h (init_gpgme) [W32]: Don't use LC_MESSAGES.

* gpg/t-encrypt-large.c: New test.
* gpg/Makefile.am (TESTS): Add t-encrypt-large.

2005-06-03 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (TESTS): Add t-wait.
* gpg/t-wait.c (main): New test.

2004-12-07 Marcus Brinkmann <marcus@g10code.de>

* gpg/mkdemodirs: Add copyright notice.

* gpgsm/Makefile.am, gpgsm/t-support.h, gpgsm/t-decrypt.c,
gpgsm/t-encrypt.c, gpgsm/t-export.c, gpgsm/t-genkey.c,
gpgsm/t-import.c, gpgsm/t-keylist.c, gpgsm/t-sign.c,
gpgsm/t-verify.c, gpgsm/Makefile.am, gpgsm/t-decrypt.c,
gpg/t-decrypt-verify.c, gpg/t-edit.c, gpg/t-encrypt.c,
gpg/t-encrypt-sign.c, gpg/t-encrypt-sym.c, gpg/t-eventloop.c,
gpg/t-export.c, gpg/t-genkey.c, gpg/t-import.c, gpg/t-keylist.c,
gpg/t-keylist-sig.c, gpg/t-sign.c, gpg/t-signers.c,
gpg/t-support.h, gpg/t-thread1.c, gpg/t-trustlist.c,
gpg/t-verify.c, Makefile.am, t-data.c, t-engine-info.c,
t-version.c: Change license to LGPL.

2004-08-17 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-keylist.c (struct): Add new fields VALIDITY and KEY_LENGTH.
  (main): Use them.
* gpgsm/t-import.c (check_result): New argument total_stat.
  (main): Pass this argument. Reduce number of total considered keys to 1 for the second test.

2004-04-05 Werner Koch <wk@gnupg.org>

* gpgsm/Makefile.am: Changed the faked system time to 20011213T12000.

2004-03-07 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-keylist.c: Add chain IDs.

2004-03-03 Werner Koch <wk@gnupg.org>
* gpgsm/t-export.c (main): Also check exporting 2 certificates.

2004-02-17 Werner Koch  <wk@gnupg.org>

* gpgsm/t-import.c (check_result): gpgsm does now return info in
the result->imports; adjust for that.

* gpgsm/Makefile.am (TESTS_ENVIRONMENT): Reset the GPG_AGENT_INFO.

   Include config.h at the top of each C source. This is required
due to LFS support.

* gpg/t-keylist-sig.c (main): s/class/sig_class/.
* gpg/t-signers.c (check_result): Ditto.
* gpg/t-sign.c (check_result): Ditto.
* gpg/t-encrypt-sign.c (check_result): Ditto.
* gpgsm/t-sign.c (check_result): Ditto.

2004-01-12 Werner Koch  <wk@gnupg.org>

* gpg/t-keylist-sig.c (main): Temporary disabled one test due top
  gpg 1.3.4 problems.
* gpg/t-import.c (check_result): Likewise.

2003-11-19 Werner Koch  <wk@gnupg.org>

* gpg/t-support.h (DIM): Added.

* gpg/t-verify.c (check_result): Rewrote test for notations
  because the order of notations is not guaranteed.

* gpgsm/t-support.h (fail_if_err): Also print the numeric values.

2003-10-06 Marcus Brinkmann  <marcus@g10code.de>

* gpg/t-eventloop.c: Include <sys/types.h> for old systems.

* gpgsm/Makefile.am (DISTCLEANFILES): Add random_seed.

* gpg/t-thread1.c (thread_one): Do not call initialize_gpgme.
  Likewise.

2003-09-14 Marcus Brinkmann  <marcus@g10code.de>

* gpg/t-thread1.c (main): Call init_gpgme here.
  (initialize_gpgme): Function removed.
* gpg/t-thread1.c: New file.
* gpg/Makefile.am (TESTS): Add t-thread1.c.
(t_thread1_LDADD): New variable.
(LDADD): Remove GPG Error lib.
* gpgsm/Makefile.am (LDADD): Likewise.

* gpg/t-import.c (main): Likewise.
* gpg/t-keylist-sig.c (main): Likewise.
* gpg/t-keylist.c (main): Likewise.
* gpg/t-sign.c (main): Likewise.
* gpg/t-signers.c (main): Likewise.
* gpg/t-trustlist.c (main): Likewise.
* gpgsm/t-support.h: Include <stdlib.h> and <locale.h>.
(init_gpgme): New function.
* gpg/t-support.h: Likewise.
* gpgsm/t-verify.c (main): Call init_gpgme.
* gpgsm/t-decrypt.c (main): Likewise.
* gpgsm/t-encrypt.c (main): Likewise.
* gpgsm/t-export.c (main): Likewise.
* gpgsm/t-genkey.c (main): Likewise.
* gpgsm/t-import.c (main): Likewise.
* gpgsm/t-keylist.c (main): Likewise.
* gpgsm/t-sign.c (main): Likewise.
* gpg/t-verify.c (main): Call init_gpgme.
* gpg/t-decrypt-verify.c (main): Likewise.
* gpg/t-decrypt.c (main): Likewise.
* gpg/t-edit.c (main): Likewise.
* gpg/t-encrypt-sign.c (main): Likewise.
* gpg/t-encrypt-sym.c (main): Likewise.
* gpg/t-encrypt.c (main): Likewise.
* gpg/t-eventloop.c (main): Likewise.
* gpg/t-export.c (main): Likewise.
* gpg/t-genkey.c (main): Likewise.

2003-08-14 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-sign.c (check_result): Change output format for signature class to unsigned int.
* gpg/t-signers.c (check_result): Likewise.
* gpg/t-encrypt-sign.c (check_result): Likewise.
* gpgsm/t-sign.c (check_result): Likewise.

2003-07-31 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-verify.c (check_result): Change type of SUMMARY to unsigned int.
* gpg/t-decrypt-verify.c (check_verify_result): Likewise.
* gpg/t-keylist-sig.c (keys): Change type of member CLASS to
unsigned int.
* t-data.c (read_cb): Change type of AMOUNT to unsigned int.
* t-version.c (version): Remove unused variable.

2003-07-22 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (AM_CPPFLAGS): New variable.
  (LDADD): Add @GPG_ERROR_LIBS@.
* gpg/Makefile.am (AM_CPPFLAGS): New variable.
  (LDADD): Add @GPG_ERROR_LIBS@.
* gpgsm/Makefile.am (AM_CPPFLAGS): New variable.
  (LDADD): Add @GPG_ERROR_LIBS@.

2003-06-06 Marcus Brinkmann <marcus@g10code.de>

Everywhere: Use libgpg-error error codes.

* gpg/Makefile.am (noinst_HEADERS): New variable.
* gpg/t-support.h: New file.
* gpgsm/Makefile.am (noinst_HEADERS): New variable.
* gpgsm/t-support.h: New file.

2003-05-29 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-encrypt-sym.c (main): Adapt to new syntax.
* gpg/t-encrypt.c (main): Likewise.
* gpg/t-eventloop.c (main): Likewise.
* gpg/t-encrypt-sign.c (main): Likewise.
* gpgsm/t-export.c (main): Likewise.
* gpgsm/t-encrypt.c (main): Likewise.

2003-05-28 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-eventloop.c (main): Rewrite recipient management.
* gpg/t-encrypt-sign.c (main): Likewise.
* gpg/t-encrypt.c (main): Likewise.
* gpg/t-export.c (main): Likewise.
* gpgsm/t-encrypt.c (main): Likewise.
* gpgsm/t-export.c (main): Likewise.

2003-05-27 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (TESTS): Order t-keylist and t-keylist-sig after t-import.
* gpg/t-edit.c (edit_fnc): Fix primary UID for keylisting tests.
* gpg/t-keylist.c: Change order of user IDs.
* gpg/t-keylist-sig.c: Likewise.
* gpg/t-import.c: Add support for gpg in CVS.
2003-05-27 Marcus Brinkmann <marcus@g10code.de>

* t-data.c: Remove TEST_OUT_CB.
  (main): Likewise.
* gpg/t-trustlist.c (main): Access ITEM directly.

* (t-decrypt-verify.c, t-decrypt.c, t-edit.c, t-encrypt-sign.c, t-encrypt-sym.c, t-sign.c, t-signers.c): Include <unistd.h>.
  (passphrase_cb): Rewritten.
* t-edit.c (edit_fnc): Rewritten.

2003-05-04 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-keylist-sig.c (main): Remove timestamp check.

* gpgsm/t-keylist.c: Add check for timestamp.

* gpg/Makefile.am (TESTS): Add t-keylist-sig.

2003-04-30 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-eventloop.c (main): Do not call print_op_info.
  (print_op_info): Function removed.

* gpg/t-keylist.c: Rewritten.
* gpgsm/t-keylist.c (main): Rewritten.
* gpg/t-edit.c (main): Do not use gpgme_key_get_as_xml. Use gpgme_key_unref instead gpgme_key_release.
* gpg/t-signers.c (main): Use gpgme_key_unref instead gpgme_key_release.

2003-04-29 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-trustlist.c: Rewritten.

* gpg/t-verify.c (main): Rewritten.
* gpg/t-decrypt-verify.c: Rewritten.
* gpgsm/t-verify.c (main): Rewritten.

2003-04-28 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-decrypt.c (main): Rewritten.

* gpg/t-decrypt.c: Rewritten.

* gpg/t-signers.c: Rewritten.
2003-04-27 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-encrypt-sign.c (check_result): Rewritten.
* gpg/t-sign.c: Rewritten.
* gpgsm/t-sign.c: Rewritten.
* gpg/t-encrypt.c: Check for invalid recipients.
* gpgsm/t-encrypt.c: Likewise.

* gpg/t-import.c (check_result): Really use FPR.
* gpgsm/t-import.c (check_result): Rewritten.

2003-04-25 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-import.c: Rewritten.
* gpgsm/t-genkey.c: Rewritten.
* gpgsm/Makefile.am (noinst_PROGRAMS): Add t-genkey.
* gpg/t-genkey.c: Include <stdlib.h>.
  (main): Check result->fpr before checking its length.

2003-04-24 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-genkey.c: Rewritten to match new semantics.

2003-02-06 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-decrypt.c (passphrase_cb): Fix to new prototype.
* gpg/t-decrypt-verify.c (passphrase_cb): Likewise.
* gpg/t-edit.c (passphrase_cb): Likewise.
* gpg/t-encrypt-sign.c (passphrase_cb): Likewise.
* gpg/t-encrypt-sym.c (passphrase_cb): Likewise.
* gpg/t-sign.c (passphrase_cb): Likewise.
* gpg/t-signers.c (passphrase_cb): Likewise.

2003-01-30 Marcus Brinkmann <marcus@g10code.de>

* t-engine-info.c: Use file_name instead path throughout.
* Makefile.am (TESTS): Add t-engine-info.
* t-engine-info.c: New file.
* gpg/t-encrypt.c (main): Don't print engine info.
* gpg/t-eventloop.c (main): Likewise.
* gpg/t-encrypt-sign.c (main): Likewise.
* gpgsm/t-encrypt.c (main): Likewise.

2002-12-24 Marcus Brinkmann <marcus@g10code.de>
* gpgsm/t-verify.c (main): Adjust caller of gpgme_op_verify.
* gpg/t-verify.c (main): Likewise.
* gpg/t-decrypt-verify.c (main): Likewise for gpgme_op_decrypt_verify.

2002-12-23 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/Makefile.am (/gpgsm.conf): Add a faked system time to avoid certification's expiry.
* gpgsm/t-encrypt.c (main): Use the short certification name.

2002-11-19 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-genkey.c (main): Add missing argument to gpgme_op_genkey invocation.

2002-10-09 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-decrypt.c (print_data): Update to new gpgme_data_read interface, and use gpgme_engine_check_version instead gpgme_check_version.
* gpg/t-decrypt-verify.c (print_data): Likewise.
* gpg/t-edit.c (main): Likewise.
* gpg/t-encrypt.c (print_data): Likewise.
* gpg/t-encrypt-sign.c (print_data): Likewise.
* gpg/t-encrypt-sym.c (print_data): Likewise.
* gpg/t-eventloop.c (print_data): Likewise.
* gpg/t-export.c (print_data): Likewise.
* gpg/t-sign.c (print_data): Likewise.
* gpg/t-signers.c (print_data): Likewise.
* gpgsm/t-decrypt.c (print_data): Likewise.
* gpgsm/t-encrypt.c (print_data): Likewise.
* gpgsm/t-export.c (print_data): Likewise.
* gpgsm/t-sign.c (print_data): Likewise.
* gpg/t-verify.c (main): Likewise for gpgme_op_verify.
* gpgsm/t-verify.c (main): Likewise for gpgme_op_verify.
* t-data.c (read_once_test): Likewise.
  (write_test): Update for new behaviour of data objects.
  (main): Remove type test.

2002-09-30 Werner Koch <wk@gnupg.org>

* gpgsm/t-keylist.c (doit): Add arg SECRET.
  (main): Add option --secret.

2002-09-28 Marcus Brinkmann <marcus@g10code.de>
* t-version.c: Include <string.h>. Reported by Stphane Corthsy.

2002-09-02 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-keylist.c (main): Test PATTERN for NULL before printing. Reported by Dr. Stefan Dalibor <Dr.Stefan.Dalibor@bfa.de>.

2002-08-01 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-edit.c: Also add a test for the expire command (testing the passphrase callback).

2002-07-28 Marcus Brinkmann <marcus@g10code.de>

  * gpg/Makefile (TESTS): Add t-edit.

2002-07-25 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-encrypt-sym.c (main): Change type of I to size_t and rename to LEN.
* gpg/t-verify.c (main): Likewise. Submitted by Stphane Corthsy.

2002-07-03 Marcus Brinkmann <marcus@g10code.de>

  * gpg/Makefile (TESTS): Add t-eventloop.

2002-06-26 Werner Koch <wk@gnupg.org>

* gpgsm/t-import.c (print_op_info): New.
  (main): Print operation info.

2002-06-25 Werner Koch <wk@gnupg.org>

* gpgsm/Makefile.am (DISTCLEANFILES): new.

2002-06-25 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/Makefile.am (TESTS): Add t-export.

2002-06-20 Werner Koch <wk@gnupg.org>

* gpgsm/t-sign.c (main): Also test a normal signature.

* gpg/Makefile (TESTS_ENVIRONMENT): Set GPG_AGENT_INFO empty.
* gpg/t-signers.c, gpg/t-sign.c, gpg/t-encrypt-sym.c
* gpg/t-encrypt-sign.c, gpg/t-decrypt.c
* gpg/t-decrypt-verify.c (main): Changed the GPG_AGENT_INFO check to match the one in ../../gpgme/runpg.c.

2002-06-12 Werner Koch <wk@gnupg.org>

* gpgsm/t-keylist.c (doit): Print operation info if available.

2002-06-10 Werner Koch <wk@gnupg.org>

* gpgsm/t-verify.c (print_sig_stat): Print the error token.

2002-06-04 Werner Koch <wk@gnupg.org>

* gpgsm/t-encrypt.c (main): Add a simple option parser and allow to specify an encryption key.

2002-05-26 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (all-local): Remove dependency on ./secring.gpg.
  ./secring.gpg): Remove target, and move all rules for this target to ...
  ./pubring.gpg): ... here. This was necessary because GnuPG 1.0.7 does create an empty secring.gpg file when importing public keys.

2002-05-08 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-verify.c (validity_string): New.
  (print_sig_stat): Print expire time and validity.
  (status_string): Add new exipred stati.

2002-05-03 Werner Koch <wk@gnupg.org>

* gpg/t-verify.c (validity_string): New.
  (print_sig_stat): Print expire time and validity.
  (status_string): Add new exipred stati.

2002-04-05 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/Makefile.am (/trustlist.txt): Put more into this file to prevent use of gpg-agent.
  ./gpg-agent.conf): Remove target.
  (all-local): Remove /gpg-agent.conf.

2002-04-05 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-keylist.c (main): Use gpgme_engine_check_version instead
gpgme_check_engine.
* gpgsm/t-encrypt.c (main): Likewise.

2002-03-06 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (TESTS): Add t-encrypt-sym.

2002-03-05 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (CLEANFILES): Remove random_seed, which is now in DISTCLEANFILES.

2002-03-04 Werner Koch <wk@gnupg.org>

* gpg/Makefile.am (DISTCLEANFILES): Added.

2002-03-03 Marcus Brinkmann <marcus@g10code.de>

* gpg/t-verify.c (main): Add a few more sanity checks, and a check for normal signatures.

2002-02-26 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (TESTS): Add t-encrypt-sign.

2002-02-13 Werner Koch <wk@gnupg.org>

* gpgsm/Makefile.am (private-keys-v1.d): Don't fail when the directory already exists.

2002-02-09 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (CLEANFILES): New target.
  (distclean-local): Rename to ...
  (clean-local): ... this.

2002-02-09 Marcus Brinkmann <marcus@g10code.de>


2002-02-09 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-genkey.c: New file (not added to Makefile.am because of gpg-agent bug).

2002-02-08 Marcus Brinkmann <marcus@g10code.de>
* gpgsm/Makefile.am (key_id): Update value.
  (all-local): Add .key to keyid filename.
  (/private-keys-v1.d/$(@key_id)): Renamed to ...
  (/private-keys-v1.d/$(@key_id).key): ... this.
  (all-local): Add ./gpgsm.conf, ./trustlist.txt.
  (/gpgsm.conf, ./trustlist.txt): New target.
  * gpgsm/567064FE6D14A17B2D811ABB407728BC558AA455: Renamed to ...
  * gpgsm/32100C27173EF6E9C4E9A25D3D69F86D37A4F939: ... this.

2002-01-30 Marcus Brinkmann <marcus@g10code.de>

  * gpg/t-import.c (print_op_info): New function.
    (main): Use it.

2002-01-22 Marcus Brinkmann <marcus@g10code.de>

  * gpg/t-signers.c (passphrase_cb): Change type of r_hd to void**.
    * gpg/t-sign.c (passphrase_cb): Likewise.
    * gpg/t-decrypt-verify.c (passphrase_cb): Likewise.
    * gpg/t-decrypt.c (passphrase_cb): Likewise.

2001-12-19 Marcus Brinkmann <marcus@g10code.de>

  * gpg/t-decrypt-verify.c: Don't include `mcheck.h'. Reported by
    Stephane Corthsy.

2001-12-19 Marcus Brinkmann <marcus@g10code.de>

  * gpg/Makefile.am (EXTRA_DIST): Add missing line continuation.

2001-12-19 Marcus Brinkmann <marcus@g10code.de>

  * gpgsm/Makefile.am (EXTRA_DIST): Add $(@key_id).

2001-12-16 Marcus Brinkmann <marcus@g10code.de>

  * gpgsm/Makefile: Rename `pubcerts.kbx' to `pubring.kbx'.

2001-12-15 Marcus Brinkmann <marcus@g10code.de>

  * gpgsm/t-keylist.c (check_two_contexts): Set protocols.

2001-12-14 Marcus Brinkmann <marcus@g10code.de>

  * gpgsm/Makefile.am (TESTS): Add t-sign.
2001-12-14 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-decrypt.c: New file.
* gpgsm/Makefile.am (TESTS): Add t-decrypt.
   (key_id): New variable.
   (all-local): New target ./private-keys-v1.d/$(key_id) added.
   (/private-keys-v1.d/$(key_id)): New target.

2001-12-14 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-verify.c: New file.
* gpgsm/Makefile.am (TESTS): Add t-verify.

2001-12-14 Marcus Brinkmann <marcus@g10code.de>

* gpg/Makefile.am (GPG): Set to @GPG_PATH@.
   (/pubring.gpg): Use $(GPG) instead gpg.
   (/secring.gpg): Likewise.

* gpgsm/t-import.c (main): Remove third test case.
* gpgsm/Makefile.am (GPGSM): Set to @GPGSM@.
   (all-local): New target.
   (/pubcerts.kbx): Likewise.
* gpgsm/t-encrypt.c: New file.
* gpgsm/Makefile.am (TESTS): Add t-encrypt.

2001-12-14 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/t-keylist.c: New file.
* gpgsm/Makefile.am (TESTS): Add t-keylist.

2001-12-13 Marcus Brinkmann <marcus@g10code.de>

* gpgsm/cert_dfn_pca01.der: New file.
* gpgsm/cert_dfn_pca15.der: Likewise.
* gpgsm/cert_g10code_test1.der: Likewise.
* gpgsm/t-import.c: Likewise.
* gpgsm/Makefile.am (EXTRADIST): Add new files.
   (TESTS): Add t-import.

2001-11-22 Marcus Brinkmann <marcus@g10code.de>

* gpg/: New directory.
* Makefile.am, t-verify.c, t-encrypt.c, t-signers.c, t-trustlist.c,
  t-sign.c, t-keylist.c, t-import.c, t-genkey.c, t-export.c,
  t-decrypt-verify.c, t-decrypt.c, t-version.c, t-data.c, mkdemodirs.
cipher-1.asc, cipher-2.asc, geheim.txt, pubdemo.asc, pubkey-1.asc,
secdemo.asc, seckey-1.asc): Move to sub directory gpg/.

* gpg/Makefile.am (INCLUDES): Include gpgme/, not include/ and intl/.
  (LDD): Correct relative path to gpgme library.
  (TESTS): Remove t-version and t-data.
* gpg/t-verify.c, gpg/t-encrypt.c, gpg/t-signers.c, gpg/t-trustlist.c,
gpg/t-sign.c, gpg/t-keylist.c, gpg/t-import.c, gpg/t-genkey.c,
gpg/t-export.c, gpg/t-decrypt-verify.c, gpg/t-decrypt.c,
t-version.c, t-data.c): Include gpgme.h, not ".../gpgme/gpgme.h".

* gpgsm/: New directory.
* gpgsm/Makefile.am: New file.

2001-11-16 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (TESTS): Add t-decrypt-verify.
* t-decrypt-verify.c: New file.
* cipher-2.asc: Likewise.

2001-11-02 Marcus Brinkmann <marcus@g10code.de>

* t-data.c: Include stddef.h.
  (read_once_test): Change type of READ to size_t.
  (read_test): Likewise.
  (write_test): Likewise.

2001-10-29 Marcus Brinkmann <marcus@g10code.de>

* t-signers.c: New file.
* Makefile.am (TESTS): Add t-signers.

2001-10-22 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (TEST_ENVIRONMENT): Revert last change.

2001-10-22 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (TEST_ENVIRONMENT): Set environment to $($(srcdir)),
  not current directory.

2001-10-22 Marcus Brinkmann <marcus@g10code.de>

* t-data.c (write_test): New function.
  (main): Invoke write_test for all rounds except TEST_OUT_CB.

2001-10-22 Marcus Brinkmann <marcus@g10code.de>
* Makefile.am (INCLUDES): Remove spurious duplicate to silence automake.

2001-10-16 Marcus Brinkmann <marcus@g10code.de>

* t-version.c: New file.
* t-data.c: Likewise.
* t-data-1.txt: Likewise.
* t-data-2.txt: Likewise.
* Makefile.am (TESTS): Add t-version, t-data.

2001-09-17 Werner Koch <wk@gnupg.org>

* t-keylist.c (check_two_contexts): New.

2001-09-03 Werner Koch <wk@gnupg.org>

* t-encrypt.c (print_op_info): New and use it after each operation.

2001-08-28 Werner Koch <wk@gnupg.org>

* t-sign.c (print_op_info): New and use it after each operation.

2001-03-15 Werner Koch <wk@gnupg.org>

* t-keylist.c (doit): List subkeys too, show caps.

2001-02-13 Werner Koch <wk@gnupg.org>

* t-verify.c (print_sig_stat): Repaled ulong by unsigned long because we don't use the config stuff here.

2001-02-12 Werner Koch <wk@gnupg.org>

* tests/t-verify.c (print_sig_stat): Print info about the keys.


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Version 2.1, February 1999

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That's all there is to it!

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Last time the most obviously new thing was adding the /What's New/ section to the HOWTO. Now it's moving it out of the HOWTO.

** New in GPGME 1130

Additions since GPGME 1.12.0 include:

- Moving the /What's New/ section out of the basic [[file:gpgme-python-howto.org][HOWTO]] document and into its own file so as to more readily include other documents beyond that HOWTO.
- Moving the preceding, archival, segments into [[file:what-was-new.org][another file]].
- Added =gpg.version.versionintlist= to make it easier for Python developers to check for a specific version number, even with beta
versions (it will drop the "-betaN" part).
- Added expanded detail on issues pertaining to installing for Windows users.
- Added documentation on maintenance mode and what changes can be made to the code when in that status. Essentially that boils down to bug fixes only and no feature requests.
- The import-keys-hkp.py example script, which uses the =hkp4py= module to search the SKS servers for a key, has been tightened up to search for both hexadecimal key IDs and user ID strings with reduced chance of unnecessary repetition. There may still be some repetition if a key includes a user ID matching the hexadecimal value of a key ID.

1543830060

## Sketch 1 2
document()
layout('A4',1)
fp((0,0,0))
ft(1)
Fn('Helvetica-Bold')
Fs(18)
dstyle('Text')
fp((0,1,0.498))
ft(1)
lp((0,0,0))
lw(0.283465)
lc(1)
lj(0)
lid()
lal1()
lal2()
dstyle('Application Box')
layer('Layer 1',1,1,0,0,(0,0,0))
lw(1)
r(0,0,0,688.145,44.1554)
lw(1)
r(0,0,0,682.363,85.0359)
lp((0.392,0.584,0.929))
lw(4.25197)
b()
bs(605.383,329.758,0)
bs(605.383,230.546,0)
lw(1)
r(0,0,0,807.414,53.6148)
lp((0.392,0.584,0.929))
lw(4.25)
b()
bs(480.134,240.945,0)
\[ \text{la2}([[-4.0, 3.0], [2.0, 0.0], [-4.0, -3.0], [-4.0, 3.0]], 1) \]
\[ \text{b()} \]
\[ \text{bs}(574.015, 85.0393, 0) \]
\[ \text{bs}(574.015, 141.732, 0) \]
\[ \text{bs}(262.204, 141.732, 0) \]
\[ \text{lw}(1) \]
\[ \text{la2}([[-4.0, 3.0], [2.0, 0.0], [-4.0, -3.0], [-4.0, 3.0]], 1) \]
\[ \text{b()} \]
\[ \text{bs}(602.361, 85.0393, 0) \]
\[ \text{bs}(602.361, 170.079, 0) \]
\[ \text{bs}(439.37, 170.079, 0) \]
\[ \text{bs}(439.37, 311.811, 0) \]
\[ \text{bs}(460.629, 311.811, 0) \]
\[ \text{bs}(460.629, 325.984, 0) \]
\[ \text{lw}(1) \]
\[ \text{ld}((5, 1)) \]
\[ \text{la2}([[-4.0, 3.0], [2.0, 0.0], [-4.0, -3.0], [-4.0, 3.0]], 1) \]
\[ \text{b()} \]
\[ \text{bs}(389.763, 240.945, 0) \]
\[ \text{bs}(389.763, 269.291, 0) \]
\[ \text{bs}(290.551, 269.291, 0) \]
\[ \text{bs}(290.551, 340.157, 0) \]
\[ \text{bs}(262.204, 340.157, 0) \]
\[ \text{bs}(389.763, 269.291, 0) \]
\[ \text{bs}(559.843, 269.291, 0) \]
\[ \text{bs}(559.843, 333.071, 0) \]
\[ \text{bs}(574.016, 333.071, 0) \]
\[ \text{lw}(1) \]
\[ \text{ld}((5, 1)) \]
\[ \text{la2}([[-4.0, 3.0], [2.0, 0.0], [-4.0, -3.0], [-4.0, 3.0]], 1) \]
\[ \text{b()} \]
\[ \text{bs}(389.763, 269.291, 0) \]
\[ \text{bs}(559.843, 269.291, 0) \]
\[ \text{bs}(559.843, 333.071, 0) \]
\[ \text{bs}(574.016, 333.071, 0) \]
\[ \text{lw}(1) \]
\[ \text{ld}((5, 1)) \]
\[ \text{la2}([[-4.0, 3.0], [2.0, 0.0], [-4.0, -3.0], [-4.0, 3.0]], 1) \]
\[ \text{b()} \]
\[ \text{bs}(488.976, 85.0393, 0) \]
\[ \text{bs}(488.976, 127.559, 0) \]
\[ \text{bs}(389.763, 127.559, 0) \]
\[ \text{bs}(389.763, 212.598, 0) \]
\[ \text{lw}(2) \]
\[ \text{ld}((1, 1)) \]
\[ \text{la2}([[-4.0, 3.0], [2.0, 0.0], [-4.0, -3.0], [-4.0, 3.0]], 1) \]
\[ \text{b()} \]
\[ \text{bs}(205.512, 127.559, 0) \]
\[ \text{bs}(205.512, 113.386, 0) \]
\[ \text{bs}(170.079, 113.386, 0) \]
\[ \text{bs}(170.079, 141.732, 0) \]
\[ \text{bs}(155.906, 141.732, 0) \]
le()
lw(1)
Fn('Helvetica')
Fs(14)
style('Text')
txt('WatchGnuPG', (0.552654, 0, 0, 0.552654, 98.8185, 338.713), 1, 1)
G_()
G()
fp((1, 0.647, 0.31))
lw(0.283465)
r(70.5589, 0, 0, -28.1194, 63.7795, 240.718, 0.0670228, 0.168178)
fp((0, 0, 0))
le()
lw(1)
Fn('Helvetica')
Fs(14)
style('Text')
txt('Log Socket', (0.552654, 0, 0, 0.552654, 98.8175, 225.1), 1, 1)
G_()
G_()
G()
fp((1, 0.647, 0.31))
lw(0.283465)
r(85.0392, 0, 0, -28.3464, 446.457, 240.945, 0.0670228, 0.151107)
fp((0, 0, 0))
le()
lw(1)
Fn('Helvetica')
Fs(14)
style('Text')
Fn('Helvetica-Bold')
Fs(18)
txt('Config Files', (0.552654, 0, 0, 0.552654, 485.621, 226.772), 1, 1)
G_()
G()
fp((1, 0.647, 0.31))
lw(0.283465)
r(85.0392, 0, 0, -28.3464, 545.669, 85.0394, 0.0670228, 0.151107)
fp((0, 0, 0))
le()
lw(1)
Fn('Helvetica')
Fs(14)
style('Text')
Fn('Helvetica-Bold')
Fs(18)
txt('Config Files', (0.552654, 0, 0, 0.552654, 584.834, 70.8662), 1, 1)
G_()
NB: ChangeLog files are no longer manually maintained. Starting on December 1st, 2011 we put change information only in the GIT commit log, and generate a top-level ChangeLog file from logs at "make dist". See doc/HACKING for details.

2011-10-25 Marcus Brinkmann <marcus@g10code.com>

* Makefile.am: Remove build rules for libgpgme-pth.
* gpgme.m4: Remove support for libgpgme-pth.

2011-05-26 Marcus Brinkmann <marcus@g10code.com>

* decrypt.c (gpgme_op_decrypt_start, gpgme_op_decrypt): Check CTX.
* decrypt-verify.c (gpgme_op_decrypt_verify_start)
  (gpgme_op_decrypt_verify): Likewise.
* delete.c (gpgme_op_delete_start, gpgme_op_delete): Likewise.
* edit.c (gpgme_op_edit_start, gpgme_op_edit)
  (gpgme_op_card_edit_start, gpgme_op_card_edit): Likewise.
* encrypt.c (gpgme_op_encrypt_start, gpgme_op_encrypt): Likewise.
* encrypt-sign.c (gpgme_op_encrypt_sign_start)
  (gpgme_op_encrypt_sign): Likewise.
* export.c (gpgme_op_export_start, gpgme_op_export)
  (gpgme_op_export_ext_start, gpgme_op_export_ext)
  (gpgme_op_export_keys_start, gpgme_op_export_keys): Likewise.
* genkey.c (gpgme_op_genkey_start, gpgme_op_genkey): Likewise.
* getauditlog.c (gpgme_op_getauditlog_start)
  (gpgme_op_getauditlog): Likewise.
* gpgconf.c (gpgme_op_conf_load, gpgme_op_conf_save): Likewise.
* import.c (gpgme_op_import_start, gpgme_op_import_keys_start)
  (gpgme_op_import_keys, gpgme_op_import): Likewise.
* keylist.c (gpgme_op_keylist_start, gpgme_op_keylist_ext_start):
  (gpgme_op_keylist): Likewise.
* opassuan.c (gpgme_op_assuan_transact_start)
  (gpgme_op_assuan_transact_ext): Likewise.
* passwd.c (gpgme_op_passwd_start, gpgme_op_passwd): Likewise.
* sign.c (gpgme_op_sign_start, gpgme_op_sign): Likewise.
* trustlist.c (gpgme_op_trustlist_start)
  (gpgme_op_trustlist_next): Likewise.
* verify.c (gpgme_op_verify_start, gpgme_get_sig_key): Likewise.
* op-support.c (_gpgme_op_data_lookup): Likewise.
* vfs-create.c (gpgme_op_vfs_transact, gpgme_op_vfs_create): Likewise.
* vfs-mount.c (gpgme_op_vfs_mount, gpgme_op_vfs_transact): Likewise.
* gpgme.c (gpgme_set_protocol)
  (gpgme_set_sub_protocol)
  (gpgme_set_armor, gpgme_set_include_certs)
  (gpgme_set_keylist_mode, gpgme_set_passphrase_cb)
  (gpgme_set_progress_cb, gpgme_set_io_cbs, gpgme_set_locale)
  (gpgme_ctx_set_engine_info, gpgme_sig_notation_clear): Likewise.
* gpgme.c (gpgme_new): Check for valid R_CTX.
  (gpgme_cancel, gpgme_cancel_async, gpgme_release): Likewise.

2011-04-06 Werner Koch <wk@g10code.com>

* gpgme-config.in: Add option --host. Change options --cflags and
  --libs to collapse duplicate include and lib dirs. Try to put
  extra libs at the end.

* gpgme.h.in: Use INSERT__TYPEDEFS_FOR_GPGME_H to include platform
  specific typedefs.

2011-02-03 Werner Koch <wk@g10code.com>

* extra-stati.h: New.
* mkstatus: Extend to also process extra-stati.h
* Makefile.am (main_sources): Add extra-stati.h
  (status-table.h): Depend on extra-stati.h and adjust rule.

2011-02-03 Marcus Brinkmann <marcus@g10code.com>

* w32-io.c (_gpgme_io_socket): Return fd, not res.

2011-02-02 Marcus Brinkmann <mb@g10code.com>

* assuan-support.c (my_socket, my_connect): New functions.
  (_gpgme_assuan_system_hooks): Add my_Socket, my_connect.
* w32-io.c (pid_to_handle, handle_to_oid, fd_to_handle): Remove macros.
  (is_socket): Remove function.
  (_gpgme_io_spawn) [HAVE_W32CE_SYSTEM]: Remove some dead code.
  (_gpgme_io_spawn): Translate handles before DuplicateHandle them.

2011-02-02 Marcus Brinkmann <mb@g10code.com>

* w32-util.c (mkstemp): Don't use CreateFile instead of open (the
  function is not used on Windows CE, and the callers were not
  adjusted).

2011-01-21 Marcus Brinkmann <mb@g10code.com>

* engine-gpgconf.c (_gpgme_conf_opt_change): Fix the case that is
  not self-assignment.

2010-12-08 Werner Koch <wk@g10code.com>

* gpgme-tool.c (strcpy_escaped_plus): New.
  (DIM, xtoi_1, xtoi_2): New.
  (cmd_keylist): Allow for multiple patterns.

2010-11-23 Marcus Brinkmann <mb@g10code.com>

* w32-io.c (create_reader, create_writer): Use small stack size on
  Windows CE.

2010-11-23 Marcus Brinkmann <mb@g10code.com>

* gpgme.h.in (gpgme_conf_arg_new): Make VALUE arg const void *.
  * gpgconf.c (_gpgme_conf_arg_new): Likewise.
  (gpgme_conf_arg_new): Likewise.
  * engine-gpgconf.c (_gpgme_conf_arg_new): Likewise.
  (gpgconf_write): Remove debug hack.

2010-11-19 Marcus Brinkmann <mb@g10code.com>

2010-11-17 Marcus Brinkmann <mb@g10code.com>

* vasprintf.c (int_vasprintf) [HAVE_W32CE_SYSTEM]: Just use a fixed size buffer, as va_copy is not easy to fake.

2010-11-15 Marcus Brinkmann <mb@g10code.com>

* w32-ce.h (strcasecmp, strdup) [_MSC_VER]: Define.
  * genkey.c, passphrase.c: Include util.h.

* w32-util.c (_gpgme_w32ce_get_debug_envvar): Fix return value.

2010-11-15 Werner Koch <wk@g10code.com>

* data-compat.c (gpgme_data_new_from_filepart)
  (gpgme_data_new_from_file) [W32CE && _MSC_VER]: Return not GPG_ERR_NOT_IMPLEMENTED.

* w32-ce.h (HKEY_PERFORMANCE_DATA, HKEY_CURRENT_CONFIG, _IOLBF) (abort) [_MSC_VER]: Provide these macros.

* ath.h [W32CE && _MSC_VER]: Include winsock2.h.

* ath.c (ath_read, ath_write) [W32CE & & _MSC_VER]: Do not call non-available functions.

2010-11-04 Werner Koch <wk@g10code.com>

* w32-ce.h [_MSC_VER && W32CE]: Undef leave.
  * export.c: Include util.h so that we get the above undef.

* memrchr.c: Remove. Used to be a replacement function required by the formerly included assuan code.

2010-11-03 Werner Koch <wk@g10code.com>

* debug.c (_gpgme_debug) [W32CE]: Replace locatime by GetLocalTime.

* signers.c (gpgme_signers_clear): Remove useless return. Reported by Patrick Spendrin.

* w32-util.c: s/__inline__/GPG_ERR_INLINE/

* setenv.c: Include string.h due to our strerror replacement.
* w32-ce.h (access, bsearch): New macros.
* w32-ce.c (_gpgme_wince_access): New.
  (RegQueryValueExA): Change DATA to a void*.
  (_gpgme_wince_bsearch): New. Taken from glibc 2.6.

Guard include of sys/stat.h and sys/types.h.

2010-11-02 Werner Koch <wk@g10code.com>

* data-fd.c (read, write, lseek) [W32CE && !_MINGW32CE_]: New.
  Taken from Pedro Alves Public Domain code.

* w32-ce.h (SHGetSpecialFolderPath): Remove our defines and
  prototypes. We use the system provided prototypes now.
* w32-ce.c: Include shlobj.h
  (_WIN32_IE): Define to 0x0400
  (CreateFileA): New.
* w32-util.c: Explicitly include windows headers before util.h.
  (_gpgme_w32ce_get_debug_envvar): Do not use wchar_t strings for
  read_w32_registry_string.
  (mkstemp): Use CreateFile instead of open.

* w32-io.c (handle_to_fd, fd_tohandle): Add. We need them for W32.
* w32-util.c (_WIN32_IE): Define to 0x0400.

* util.h [W32]: Include windows.h.
* w32-sema.c: Do not include windows.h directly.
* ath.c (ssize_t, pid_t)[_MSC_VER]: Add new types.
* gpgme.c (gpgme_result_ref, gpgme_result_unref): Do not use a
  void pointer in pointer arithmetic.
* w32-util.c: Include util.h prior to ath.h. Don't include
  windows.h directly.
  (F_OK): Define if not defined.
* w32-ce.c: Include string.h.
  (RegQueryValueExA): Use WINAPI modifier to match the declaration.
* vfs-create.c: Include string.h because under W32CE with MSC we
  get a warning related to our strerror replacement.
* encrypt-sign.c: Include stdlib.h, string.h and errno.h.
* priv-io.h [W32CE]: Include w32-ce.h
* w32-ce.h: Include winsock2.h and ws2tcpip.h.
  (_MSV_VER): Remove useless macro.
  (pid_t): Add typedef.

Guard all includes of unistd.h and sys/time.h.

2010-10-28 Marcus Brinkmann <marcus@g10code.com>
* opassuan.c (gpgme_op_assuan_transact_ext): Fix uninitialized value use. Reported by Marc Mutz.

2010-10-07 Werner Koch <wk@g10code.com>

* gpgme-tool.c (ARGP_ERR_UNKNOWN): Use EDEADLK if available.

* w32-util.c (_gpgme_w32ce_get_debug_envvar) [W32CE]: New.
* debug.c (debug_init) [W32CE]: Use new function.

2010-09-16 Werner Koch <wk@g10code.com>

* import.c: Include "util.h".
(parse_import): Return GPG_ERR_MISSING_ISSUER_CERT.

* util.h: Add fallback define for GPG_ERR_MISSING_ISSUER_CERT.
* op-support.c: Include "util.h".
(_gpgme_parse_inv_recip): Handle new code 12.

2010-09-02 Marcus Brinkmann <marcus@g10code.de>

* error.c (gpgme_err_code_to_errno): Fix cut and paste bug (thanks to Marc Mutz).

2010-09-01 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c: Revert change from 2009-06-18, as it created a race condition.

2010-08-18 Marcus Brinkmann <marcus@g10code.de>

* gpgme.def: Add gpgme_err_code_from_syserror and gpgme_err_set_errno.
* libgpgme.vers: Likewise.
* gpgme.h.in (gpgme_error_from_errno): Fix return type to gpgme_error_t.
(gpgme_err_code_from_syserror, gpgme_err_set_errno): New prototype.
(gpgme_error_from_errno): New inline function (why are gpgme_err_make_from_errno and gpgme_error_from_errno not inline functions?).
* error.c (gpgme_error_from_errno): Fix return type to gpgme_error_t.
(gpgme_err_set_errno, gpgme_err_code_from_syserror): New functions.

2010-08-03 Marcus Brinkmann <marcus@g10code.de>

* gpgme-tool.c (result_encrypt_to_xml, result_sign_to_xml)
(result_verify_to_xml, result_import_to_xml)
(result_genkey_to_xml): Check vigorously for null pointers.
* w32-io.c (GPGCEDEV_IOCTL_ASSIGN_RVID): New macro. (_gpgme_io_spawn): Use ASSIGN_RVID.

2010-06-11 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c (_gpgme_io_spawn): Remove debug printf.

2010-06-10 Marcus Brinkmann <marcus@g10code.de>

* gpgme-tool.c (gpgme_server): Use special hack for Windows CE to get at stdin and stdout.

* engine-gpgsm.c (gpgsm_new): Translate returned achild_fds back to child_fds.

(fd_table): New static variable.
(new_fd, release_fd): New functions.
(fd_to_handle, handle_to_fd, handle_to_socket): Remove macros.
(MAX_READERS, MAX_WRITERS): Increase to 64.
(notify_table): Increase to MAX_SLAFD.
(struct reader_context_s, struct writer_context_s): Add member file_sock.
(reader, writer): Use file_hd vs file_sock to decide if socket operations to use. Remove auto-detect mode.
(create_reader, create_writer): Set file_sock. Unblock pending thread only if this is a pipe fd.
(_gpgme_io_pipe): Allocate fds from table and return slot indices instead of windows handles. This allows to properly handle RVIDs.
(_gpgme_io_close): Handle dup'ed file descriptors.
(build_commandline) [HAVE_W32_SYSTEM]: Use RVID from fd table now.
(_gpgme_io_spawn): Use fd table now.
(_gpgme_io_fd2str): Use RVID from fd table now.
(_gpgme_io_dup): Implement using fd table.
(_gpgme_io_socket): Allocate fds from table.
(_gpgme_io_connect): Use fd from table.

* w32-glib-io.c (find_channel): Check that the slot is used.

2010-06-09 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c [HAVE_W32CE_SYSTEM]: Include assuan.h and winioctl.h.
(GPGCEDEV_IOCTL_UNBLOCK) [HAVE_W32CE_SYSTEM]: Define.
(set_synchronize) [HAVE_W32CE_SYSTEM]: Stub it out.
(is_socket): Allow to return -1 for auto-detect (old behaviour).
(is_socket) [HAVE_W32CE_SYSTEM]: Return -1.
(reader): Handle auto-detect case. Handle ctx->stop_me before
checking for EOF.

(destroy_reader) [HAVE_W32CE_SYSTEM]: Unblock a pending reader.

(writer): Handle auto-detect case. Handle ctx->stop_me with
ERROR_BUSY.

(destroy_writer) [HAVE_W32CE_SYSTEM]: Unblock a pending writer.

(_gpgme_io_pipe) [HAVE_W32CE_SYSTEM]: Implement in terms of a
half-pipe.

(build_commandline) [HAVE_W32CE_SYSTEM]: New function.

(_gpgme_io_spawn) [HAVE_W32CE_SYSTEM]: Implement it differently
for this platform.

(_gpgme_io_fd2str) [HAVE_W32CE_SYSTEM]: Implement it for RVIDs.

(_gpgme_io_dup) [HAVE_W32CE_SYSTEM]: Stub it out.

* gpgme-tool.c (result_add_timestamp): Add missing NULL argument.

(result_sign_to_xml): Protect against NULL fingerprint.

(struct server): New members input_fd, input_filename,
input_stream output_fd, output_filename, output_stream,
message_filename, message_stream.

(server_reset_fds): Deallocate those.

(server_parse_fd): New function.

(server_data_obj): Take optional filename argument and direction
argument. Also take new argument to return a filestream that
needs to be closed after destroying the data object.

Change all callers, too.

(input_notify, output_notify): Removed.

(cmd_input, cmd_output): New functions.

(gpgme_server): Do not register input and output notifier.

(register_commands): Use cmd_input and cmd_output.

(cmd_message): Rewritten to use server_parse_fd.

(cmd_delete, cmd_keylist): Fix inverted option check.

(main) [HAVE_W32CE_SYSTEM]: Sleep a bit to work around bug in ssh.

* genkey.c (gpgme_op_genkey): Return err with TRACE_ERR.

2010-05-12 Marcus Brinkmann <marcus@g10code.de>

* conversion.c (_gpgme_timegm) [HAVE_W32_SYSTEM]: New static
function.

(_gpgme_parse_timestamp) [HAVE_W32_SYSTEM]: Use it.

* gpgme-tool.c (main): Protect call to setlocale with
HAVE_SETLOCALE.

* Makefile.am (system_components): Remove custom cppflags from
RCCOMPILE (because gpg-error adds -idirafter that makes RC bail.
[HAVE_W32CE_SYSTEM]: Add w32-ce.h and w32-ce.c, clear
libexec_PROGRAMS.

* w32-ce.h, w32-ce.c: New files.
* priv-io.h: Include <sys/types.h>
* util.h: Likewise.

2010-05-11 Marcus Brinkmann <marcus@g10code.de>

* w32-util.c: Include ath.h
  (HAVE_ALLOW_SET_FOREGROUND_WINDOW) ![HAVE_W32CE_SYSTEM]: Define it.
  (RTLD_LAZY, dlopen, dlsym, dlclose) ![HAVE_ALLOW_SET_FOREGROUND_WINDOW]: Don't define anymore.
  (_gpgme_allow_set_foreground_window) ![HAVE_ALLOW_SET_FOREGROUND_WINDOW]: Make it a stub.
  (read_w32_registry_string): Use FooA variants of Windows functions instead of Foo (which dispatches depending on UNICODE).
  ![HAVE_W32CE_SYSTEM]: Don't check environment.
  (w32_shgetfolderpath): Remove.
  (find_program_at_standard_place): Call SHGetSpecialFolderPath (which is available on all Windows systems and also Windows CE).
  (mkstemp): Use ath_self instead of getpid.
  (_gpgme_mkstemp): Use GetTempPathA instead of GetTempPath.

* gpgme.h.in: Use _WIN32 instead of _MSC_VER. Include time.h for time_t.

2010-05-07 Marcus Brinkmann <marcus@g10code.de>

* engine-g13.c, gpgme.c, engine-gpgsm.c, engine-gpg.c,
  op-support.c, engine-assuan.c, gpgme-tool.c: Include <locale.h>
  only if available with HAVE_LOCALE_H and conditionalize use of LC_CTYPE on its definition.
* engine-gpgconf.c: Do not include <locale.h>.

* engine-gpgsm.c (gpgsm_new, start): Cast between int and assuan_fd_t.
  * assuan-support.c (my_pipe, my_close, my_read, my_write): Likewise.
  * gpgme-tool.c (server_data_obj, server_reset_fds, gpgme_server),
    (my_recvmsg, my_sendmsg, my_spawn): Likewise.
  * engine-assuan.c (start): Likewise.
  * engine-g13.c (start): Likewise.

2010-05-06 Marcus Brinkmann <marcus@g10code.de>

* w32-glib-io.c, w32-io.c, w32-qt-io.cpp, w32-sema.c, w32-util.c:
  Do not include <signal.h>.

* sign.c, data-user.c, conversion.c, debug.c, verify.c, data.c,
decrypt.c, delete.c, assuan-support.c, import.c, engine-gpgsm.c,
data-mem.c, op-support.c, w32-io.c, w32-util.c, data-compat.c: Use
gpg_error_from_syserror instead gpg_error_from_errno, and use
gpg_err_set_errno to set error number.
* setenv.c: Include <gpg-error.h> and define __set_errno to use
gpg_err_set_errno.
* gpgme-tool.c (ARGP_ERR_UNKNOWN): Define to EDEADLOCK (which is
mapped in Windows CE) instead of E2BIG (which is not).

2010-04-19 Marcus Brinkmann <marcus@g10code.de>

* assuan-support.c (my.spawn): Cast to avoid warning.
* engine-g13.c (g13_new): Make ARGV array of pointer to const
  char.
(g13_assuan_simple_command) ![USE_DESCRIPTOR_FUNCTION]: Don't define.
* ops.h (gpg_key_append_name): Same in prototype.
* key.c (gpgme_key_append_name): Make SRC argument pointer to
  const char.
* posix-util.c (gpgme_get_uiserver_socket_path): Make HOMEDIR
  const.
* vfs-mount.c (gpgme_op vfs_transact_start): Never define this
  potentially useful but currently unused function.
* vfs-create.c (gpgme_op vfs_transact_start): Likewise.

2010-04-16 Werner Koch <wk@g10code.com>

* w32-io.c (is_socket): New.
  (reader, writer): Use it to figure out the API to use.

2010-03-15 Werner Koch <wk@g10code.com>

* gpgme.h.in: Add autoconf template to set generated file to
  read-only in an emacs buffer.

2010-03-12 Werner Koch <wk@g10code.com>

* gpgme.h.in (GPGME_STATUS_SUCCESS): Use the right file for the
  change; see below.

* passwd.c (op_data_t): New.
  (passwd_start): Setup OPD.
  (passwd_status_handler): Return GPG_ERR_NOT_SUPPORTED if needed.
* context.h (OPDATA_PASSWD): New.
* gpgme.h (GPGME_STATUS_SUCCESS): New.

2010-03-09 Werner Koch <wk@g10code.com>
* engine-gpgsm.c (gpgsm_keylist): Try to start the agent.

2010-02-17 Werner Koch <wk@g10code.com>

* posix-io.c (notify_table): Change implementation.
  (notify_table_item_t, notify_table_size, notify_table_lock): New.
  (_gpgme_io_close, _gpgme_io_set_close_notify): Adjust for new
  implementation.

2010-02-16 Werner Koch <wk@g10code.com>

* gpgme-tool.c (spacep, has_option, skip_options): New.
  (cmd_export): Implement option --minimal.

* gpgme.h.in (GPGME_EXPORT_MODE_MINIMAL): New.
* export.c (export_start, export_ext_start): Implement it.
* engine-gpg.c (export_common): Ditto.

2010-01-25 Werner Koch <wk@g10code.com>

* w32-io.c (_gpgme_io_connect): Fix return code check to make it work.

* version.c (do_subsystem_inits): Remove superfluous second
  WSAStartup.

2010-01-22 Werner Koch <wk@g10code.com>

* w32-io.c (writer): Try to use send first.
  (reader): Try to use recv first.

2010-01-08 Werner Koch <wk@g10code.com>

* engine-gpg.c (gpg_passwd): New.
  (_gpgme_engine_ops_gpg): Register.
* passwd.c (parse_error): New.
  (passwd_status_handler): Use it.

2010-01-07 Marcus Brinkmann <marcus@g10code.de>

* gpgme-tool.c (result_xml_write_cb_t, struct result_xml_state):
  New types.
  (MAX_TAGS): New macro.
  (result_init, result_xml_indent, result_xml_tag_start)
  (result_xml_tag_data, result_xml_tag_end, result_add_error)
  (result_add_pubkey_algo, result_add_hash_algo, result_add_keyid)
  (result_add_fpr, result_add_timestamp, result_add_sig_mode)
  (result_add_value, result_add_string, result_encrypt_to_xml)
  (result_decrypt_to_xml, result_sign_to_xml)
(result_verify_to_xml, result_import_to_xml)
(result_genkey_to_xml, result_keylist_to_xml)
(result_vfs_mount_to_xml): New functions.
(gt_result): Rewritten.

2010-01-05 Werner Koch  <wk@g10code.com>

* gpgme-tool.c (gt_passwd, cmd_passwd): New.
(register_commands): Register.

* gpgme.h.in (gpgme_op_passwd_start, gpgme_op_passwd): New.
* libgpgme.vers, gpgme.def: Add new functions.
* passwd.c: New.
* Makefile.am (main_sources): Add passwd.c
* engine.c, engine.h (_gpgme_engine_op_passwd): New.
* engine-backend.h (struct engine_ops): Add PASSWD.
* engine-gpgsm.c (gpgsm_passwd): New.
  (_gpgme_engine_ops_gpgsm): Register.
  (gpgsm_reset): Reset only if we have a connection.

* gpgme.h.in (GPGME_PK_ECDSA, GPGME_PK_ECDH): New.
* gpgme.c (gpgme_pubkey_algo_name): Add them.

2009-12-22 Marcus Brinkmann  <marcus@g10code.de>

* debug.c: Test for TLS, not __GNUC__

2009-12-15 Marcus Brinkmann  <marcus@g10code.de>

* assuan-support.c (my_spawn): Calloc, not malloc, the fd_items.

2009-12-10 Werner Koch  <wk@g10code.com>

* debug.c (debug_init): Test on sgid process.

2009-12-08 Marcus Brinkmann  <marcus@g10code.de>

* Makefile.am (LTRCCOMPILE): Refactor with ...
(RCCOMPILE): ... this new macro.
(SUFFIXES): Add .lo.
(gpgme_res_ldflag): Removed.
(gpgme_res): Use libtool object file name here.
(libgpgme_la_LDFLAGS): Remove gpgme_res ldflag usage.
(libgpgme_la_LIBADD): Add gpgme_res.

* ath.c (ath_self) [HAVE_W32_SYSTEM]: Fix typo.

2009-12-02 Werner Koch  <wk@g10code.com>
* gpgconf.c (gpgme_conf_arg_release): No return in a function returning void. Reported by Wyllys Ingersoll.

2009-12-01 Werner Koch <wk@g10code.com>


2009-11-26 Marcus Brinkmann <marcus@g10code.de>

* opassuan.c (opassuan_start): Allocate result structure before beginning operation.

2009-11-25 Marcus Brinkmann <marcus@g10code.de>

* gpgme-tool.c (gpgme_server): Use assuan_fd_t and assuan_fdopen on fds.

2009-11-13 <wk@g10code.com>

* sign.c (_gpgme_sign_status_handler): Handle SIG_CREATED_SEEN. * engine-uiserver.c (uiserver_sign): Make sending SENDER optional.

2009-11-10 Marcus Brinkmann <marcus@g10code.de>

* op-support.c (_gpgme_op_reset): Instead of last change, only set sub protocol if it is not the default.

2009-11-10 Werner Koch <wk@g10code.com>

* op-support.c (_gpgme_op_reset): Ignore GPG_ERR_NOT_IMPLEMENTED while setting the sub protocol.

* engine-uiserver.c (uiserver_new): Pass fdpassing flag to assuan_socket_connect. (set_recipients): Replace fingerprint by user id.

* engine-gpgsm.c (set_recipients): Fix non-terminating loop in case of a missing key.
2009-11-10 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_new): Set default sub protocol.
* gpgme-tool.c: Implement get sub protocol.

* gpgme.h.in (gpgme_get_sub_protocol): Add prototype.
* gpgme.def, libgpgme.vers: Add gpgme_get_sub_protocol.
* context.h (struct gpgme_context): New member sub_protocol.
* gpgme.c (gpgme_set_sub_protocol): Set CTX->sub_protocol.
(gpgme_get_sub_protocol): New function.
* op-support.c (_gpgme_op_reset): Set sub protocol.

* Makefile.am (uiserver_components): New variable.
(main_sources): Add it.
* ops.h, key.c (_gpgme_key_append_name): Take CONVERT argument, implement it. Adjust callers.
(gpgme_key_from_uid): New function.
* gpgme.h.in (gpgme_protocol_t): Add GPGME_PROTOCOL_DEFAULT.
(gpgme_encrypt_flags_t): Add GPGME_ENCRYPT_PREPARE, GPGME_ENCRYPT_EXPECT_SIGN.
(gpgme_set_sub_protocol, gpgme_key_from_uid): New functions.
* libgpgme.vers, gpgme.def: Add new functions.
* gpgme.c (gpgme_set_protocol): Add UIServer protocol.
(gpgme_get_protocol_name): New function.
* assuan-support.c: Return correct error values, implement socketpair for POSIX.
* priv-io.h, posix-io.c, w32-ioctl, w32-glib-ioctl,
  w32-qt-ioctl.cpp (_gpgme_io_spawn): Add ATFORK and ATFORKVALUE arguments. Implement it for POSIX. Adjust all callers.
* engine.h, engine-backend.h (_gpgme_engine_set_protocol)
* engine.c (engine_ops, gpgme_get_engine_info): Add UIServer engine.
(_gpgme_engine_set_protocol, _gpgme_engine_op_decrypt_verify): New function.
* decrypt-verify.c (decrypt_verify_start): Call
  _gpgme_engine_op_decrypt_verify.
* util.h, posix-util.c,
  w32-util.c (_gpgme_get_uiserver_socket_path): New function.
* engine-gpgsm.c (gpgsm_set_fd): Fix _gpgme_io_pipe invocation.
* gpgme-tool.c: Some support for UIServer protocol.

2009-11-09 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_new): Close server side FDs.
* gpgme-tool.c (struct gpgme_tool): New members write_data and
  write_data_hook.
  (gt_write_data): New function.
  (gt_result): Output vfs_mount result.
  (server_write_data): New function.
  (gpgme_server): Initialize write_data members.

2009-11-05 Marcus Brinkmann <marcus@g10code.de>

* engine-g13.c (struct engine_g13): Remove members RESULT_CB and
  RESULT_CB_VALUE.
  (g13_assuan_simple_command, status_handler): Don't use those anymore.
  (g13_transact): Remove them from argument list, too.
* vfs-mount.c (_gpgme_vfs_mount_status_handler): New function.
  (_gpgme_op_vfs_mount): Pass it to transact.

* engine-assuan.c (Ilass_new): Update use of assuan_socket_connect.
* engine-gpgsm.c (gpgsm_new): Update use of assuan_pipe_connect.
* engine-g13.c (g13_new): Likewise.

* w32-io.c (_gpgme_io_spawn): Implement this flag.
* posix-io.c (_gpgme_io_spawn): Likewise.
* w32-glib-io.c (_gpgme_io_spawn): Likewise.
* assuan-support.c (my_spawn): Set this flag.

* decrypt.c (gpgme_op_decrypt_start): Fix use of debug macro.
* decrypt-verify.c (gpgme_op_decrypt_verify_start): Likewise.
* delete.c (gpgme_op_delete_start): Likewise.
* edit.c (gpgme_op_edit_start, gpgme_op_card_edit_start):
  Likewise.
* encrypt.c (gpgme_op_encrypt_start): Likewise.
* encrypt-sign.c (gpgme_op_encrypt_sign_start): Likewise.
* export.c (gpgme_op_export_start, gpgme_op_export_ext_start)
  (gpgme_op_export_keys_start, gpgme_op_export_keys): Likewise.
* genkey.c (gpgme_op_genkey_start): Likewise.
* getauditlog.c (gpgme_op_getauditlog_start): Likewise.
* import.c (gpgme_op_import_start, gpgme_op_import_keys_start):
  Likewise.
* opassuan.c (gpgme_op_assuan_transact_start): Likewise.
* sign.c (gpgme_op_sign_start): Likewise.
* verify.c (gpgme_op_verify_start): Likewise.
* vfs-create.c (gpgme_op_vfs_create): Likewise.
* vfs-mount.c (gpgme_op_vfs_mount): Likewise.
2009-11-04  Marcus Brinkmann  <marcus@g10code.de>

* ath.h (ath_self): New prototype. Include <stdint.h>
* ath.c, ath-pth.c, ath-pthread.c (ath_self): New function.
* debug.h: Rewrite most macros to beautify debug output.
(_gpgme_debug_buffer): Remove tagname and tag argument.
(_gpgme_debug_frame_begin, _gpgme_debug_frame_end): New prototypes.
* debug.c: Include <time.h>. Don't include assuan.h.
(frame_nr, FRAME_NR): New thread-specific variable and macro.
(debug_init): Do not initialize assuan. Call _gpgme_debug after
initialization instead using printf directly.
(_gpgme_debug): Do not call debug_init (we now ensure proper
initialization by user). Add timestamp and thread/process ID.
(_gpgme_debug_buffer): Do not take tagname and tag argument.
(_gpgme_debug_frame_begin, _gpgme_debug_frame_end): New functions.
* version.c (gpgme_check_version_internal, gpgme_check_version):
Fix debug string. Do not initialize assuan.
* posix-io.c (get_max_fds): Use 0 not NULL (nicer debug output).

2009-11-04  Werner Koch  <wk@g10code.com>

* gpgme-tool.c (register_commands): Add HELP feature.

2009-11-03  Werner Koch  <wk@g10code.com>

* gpgme.h.in (GPGME_PROTOCOL_UISERVER): New.

2009-11-03  Marcus Brinkmann  <marcus@g10code.de>

* Makefile.am (main_sources): Change g13.c to vfs-mount.c. Add
  vfs-create.c
* vfs-create.c: New file.
* g13.c: Renamed to ...
* vfs-mount.c: ... this new file.
* gpgme.h.in (gpgme_op_vfs_create): New prototype.
* gpgme.def, libgpgme.vers: Add gpgme_op_vfs_create.
* gpgme-tool.c (gt_vfs_create, cmd_vfs_create): New functions.
(register_commands): Add VFS_CREATE and CREAET.

2009-11-02  Marcus Brinkmann  <marcus@g10code.de>

* debug.h (_gpgme_debug_buffer): Make TAG argument const const.
* debug.c (_gpgme_debug_buffer): Likewise.
* gpgme-tool.c (input_notify, output_notify): Adjust type to new
  assuan interface.
* decrypt.c (gpgme_op_decrypt_result): Remove unused variable.
* opassuan.c (gpgme_op_assuan_transact): Fix return value.
2009-10-30 Marcus Brinkmann <marcus@g10code.de>

  (gpgme_tool_LDADD): New variable.
* gpgme-tool.c: New file.
* ops.h (_gpgme_sig_notation_clearm _gpgme_signers_clear): New
  prototypes.
* gpgme.c (gpgme_set_protocol): Allow GPGME_PROTOCOL_GPGCONF (when
  had that gone missing?).
(_gpgme_sig_notation_clear): New function without debug output.
(gpgme_release): Call it and _gpgme_signers_clear.
* signers.c (_gpgme_signers_clear): New function without debug output.
* g13.c (gpgme_op_vfs_mount): Add debug output.
* assuan-support.c (my_spawn): Allow fd_child_list to be NULL.
* conversion.c (_gpgme_encode_percent_string): Fix infinite loop.
* debug.h: Put tag in front of debug lines, should make for nicer
  output.
* engine-assuan.c (llass_new): Use our new system hooks for libassuan.
* engine-g13.c (g13_new): Remove redundant assuan context allocation.
* version.c (gpgme_check_version_internal): Delay debug output
  until after gpgme_check_version was called.

2009-10-28 Marcus Brinkmann <marcus@g10code.de>

* signers.c, encrypt-sign.c, encrypt.c, delete.c, keylist.c,
  edit.c, import.c, export.c: Fix last change in debug output.

2009-10-27 Marcus Brinkmann <marcus@g10code.de>

* edit.c (gpgme_op_edit_start, gpgme_op_edit)
  (gpgme_op_card_edit_start, gpgme_op_card_edit): Add debug output.
* encrypt-sign.c (gpgme_op_encrypt_sign_start)
  (gpgme_op_encrypt_sign): Likewise.
* encrypt.c (gpgme_op_encrypt_start, gpgme_op_encrypt)
  (gpgme_op_encrypt_result): Likewise.
* export.c (gpgme_op_export_start, gpgme_op_export)
  (gpgme_op_export_ext_start, gpgme_op_export_ext)
  (gpgme_op_export_keys_start, gpgme_op_export_keys): Likewise.
* genkey.c (gpgme_op_genkey_start, gpgme_op_genkey)
  (gpgme_op_genkey_result): Likewise.
* getauditlog.c (gpgme_op_getauditlog_start)
  (gpgme_op_getauditlog): Likewise.
* import.c (gpgme_op_import_result, gpgme_op_import_start)
  (gpgme_op_import): Likewise.
* keylist.c (gpgme_op_keylist_result, keylist_colon_handler)
  (gpgme_op_keylist_start, gpgme_op_keylist_ext_start)
  (gpgme_op_keylist_next, gpgme_op_keylist_end, gpgme_get_key): Likewise.
* opassuan.c (gpgme_op_assuan_transact_start)
(gpgme_op_assuan_transact_ext, gpgme_op_assuan_result)
(gpgme_op_assuan_transact): Likewise.
* signers.c (gpgme_signers_add, gpgme_signers_clear): Likewise.
* trustlist.c (gpgme_op_trustlist_start)
(gpgme_op_trustlist_next, gpgme_op_trustlist_end): Likewise.
* verify.c (gpgme_op_verify_start, gpgme_op_verify)
(gpgme_op_verify_result): Likewise.

2009-10-26 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h.in (struct gpgme_io_event_done_data)
(gpgme_io_event_done_data_t): New types.
(struct _gpgme_op_assuan_result): Deprecate the err member.
(gpgme_op_assuan_result): Deprecate (for now).
(gpgme_op_assuan_transact_ext): New prototype.
(gpgme_op_assuan_transact): Deprecate.
(struct _gpgme_op_g13_result): Replace with ...
(struct _gpgme_op_vfs_mount_result): ... this.
(gpgme_op_g13_mount): Replace with ...
(gpgme_op_vfs_mount): ... this.
* gpgme.def (gpgme_op_assuan_transact_ext, gpgme_wait_ext)
(gpgme_op_vfs_mount_result, gpgme_op_vfs_mount): New.
(gpgme_op_g13_mount): Remove.
* libgpgme.vers: Likewise.
* engine-backend.h (struct engine_ops): Remove RESULT_CB and
RESULT_CB_VALUE args in opassuan_transact member. Add CANCEL_OP
member.
* ops.h (_gpgme_cancel_with_err, _gpgme_wait_on_condition): Add
OP_ERR argument.
(_gpgme_wait_one_ext): New prototype.
* context.h (ctx_op_data_id_t): Add OPDATA_VFS_MOUNT.
* engine-g13.c (g13_cancel_op): New function.
(parse_status): Remove declaration.
(g13_assuan_simple_command): Do nothing with status lines for now.
(status_handler): Update opaque value access.
(_gpgme_engine_ops_g13): Add new cancel_op member.
* gpgme.c (_gpgme_cancel_with_err): Add new parameter OP_ERR.
Handle operational errors.
(gpgme_cancel, gpgme_io_read, gpgme_io_write): Add debug output.
* data.c (_gpgme_data_inbound_handler)
(_gpgme_data_outbound_handler): Adjust opaque value access.
* engine-gpg.c (command_handler, status_handler)
(colon_line_handler): Likewise.
* engine-gpgsm.c (status_handler): Likewise.
* engine-gpg.c (_gpgme_engine_ops_gpg): Add cancel_op member.
* engine-gpgsm.c (_gpgme_engine_ops_gpgsm): Likewise.
* g13.c: Rewritten (and will be rewritten again).
* engine.h (_gpgme_engine_op_assuan_transact): Remove result_cb
and result_cb_value parameters from prototype.
(_gpgme_engine_cancel_op): New prototype.
* engine.c (engine_ops) [! ENABLE_ASSUAN]: Add missing comma.
(_gpgme_engine_op_assuan_transact): Remove result_cb and
result_cb_value parameter.
(_gpgme_engine_cancel_op): New function.
* wait.h (_gpgme_run_io_cb): Add new argument OP_ERR.
(struct io_cb_data): New struct to pass opaque data and get a
op_err return value. Needed because we can't modify I/O callback
handler signature because it is exposed to the user.
* wait.c (_gpgme_run_io_cb): Add OP_ERR parameter. Handle
operational errors.
* wait-user.c (_gpgme_user_io_cb_handler): Handle operational
ersors.
* wait-private.c (_gpgme_wait_on_condition): New argument to
retrieve the operational result. Handle operational errors in
session based protocols.
(_gpgme_wait_one_ext): New function.
(_gpgme_wait_one): Pass argument in invocation of
_gpgme_wait_on_condition.
* wait-global.c (struct ctx_list_item): Add member OP_ERR.
(ctx_done): New argument OP_ERR.
(ctx_wait): New argument OP_ERR.
(gpgme_wait_ext): New function based on gpgme_wait but handling
operational errors.
(gpgme_wait): Implement in term of gpgme_wait_ext.
* keylist.c (gpgme_op_keylist_next): Pass argument in invocation
of _gpgme_wait_on_condition.
* trustlist.c (gpgme_op_trustlist_next): Pass argument in
invocation of _gpgme_wait_on_condition.
* engine-assuan.c (struct engine_llass): Replace members RESULT_CB
and RESULT_CB_VALUE by LAST_OP_ERR.
(_gpgme_engine_assuan_last_op_err): Add this hack function.
(lass_cancel_op): New function.
(_gpgme_engine_llass_ops): Add cancel_op member.
(llass_status_handler): Update opaque value access.
(llass_transact): Remove RESULT_CB and RESULT_CB_VALUE arguments.
* opassuan.c: Move compat hacks to the end of file.
(opassuan_start): Do not set OPD->result.err.
Do not pass RESULT_Cb and CTX to _gpgme_engine_op_assuan_transact.
(gpgme_op_assuan_transact_ext): New function.

* debug.h (DEBUG_GLOBAL): New debug level.
* conversion.c (gnupg_errors, _gpgme_map_gnupg_error): Removed.
* data-user.c (gpgme_data_new_from_cbs): Add debug output.
* data-fd.c (gpgme_data_new_from_fd): Likewise.
* data-stream.c (gpgme_data_new_from_stream): Likewise.
* decrypt.c (gpgme_op_decrypt_result, gpgme_op_decrypt_start)
(gpgme_op_decrypt): Likewise.
* delete.c (gpgme_op_delete_start, gpgme_op_delete): Likewise.
* decrypt-verify.c (gpgme_op_decrypt_verify_start)
  (gpgme_op_decrypt_verify): Likewise.
* sign.c (gpgme_op_sign_result): Fix debug message.
* data-mem.c (gpgme_data_new): Improve debug output.
* verify.c (parse_trust): Use atoi instead of
  _gpgme_map_gnupg_error.
* decrypt.c (_gpgme_decrypt_status_handler): Likewise.

2009-10-22 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am: Remove @NETLIBS@ from LIBADDs.
  (g13_components): New variable.
  (main_sources): Add $g13_components).
* g13.c, engine-g13.c: New files.
* engine.c (engine_ops): Check for assuan for assuan engine, add
  g13 engine.
* util.h (_gpgme_get_g13_path, _gpgme_encode_percent_string): New
  prototypes.
* conversion.c (_gpgme_encode_percent_string): New function.
* gpgme.h.in (gpgme_protocol_t): Add GPGME_PROTOCOL_G13.
  (struct _gpgme_op_g13_result, gpgme_g13_result_t): New types.
  (gpgme_op_g13_mount): New function.
* gpgme.def, libgpgme.vers: Add gpgme_op_g13_mount.
* POSIX-UTIL.c (_gpgme_get_g13_path): New function.
* W32-UTIL.c (_gpgme_get_g13_path): New function.
* engine-backend.h (_gpgme_engine_ops_g13): New declaration.

2009-10-20 Marcus Brinkmann <marcus@g10code.de>

* gpgme-config.in (netlibs): Remove.
  (assuan_cflags, assuan_libs): Add.

* Makefile.am (assuan_cppflags, assuan_libobjs): Removed.
  (gpgsm_components): Move engine-assuan.c to ...
  (assuan_components): ... this new variable.
  (main_sources): Add this new variable.
  (AM_CPPFLAGS): Remove $(assuan_cppflags).
  (AM_CFLAGS): Add @LIBASSUAN_CFLAGS@.
  (libgpgme_la_DEPENDENCIES, libgpgme_pth_la_DEPENDENCIES)
  (libgpgme_glib_la_DEPENDENCIES, libgpgme_qt_la_DEPENDENCIES)
  (libgpgme_pthread_la_DEPENDENCIES): Remove $(assuan_libobjs).
  (libgpgme_la_LIBADD, libgpgme_pth_la_LIBADD)
  (libgpgme_glib_la_LIBADD, libgpgme_qt_la_LIBADD))
  (libgpgme_pthread_la_LIBADD): Replace $(assuan_libobjs) by
* priv-io.h [HAVE_W32_SYSTEM]: Declare _gpgme_io_recvmsg, 
_gpgme_io_sendmsg, _gpgme_io_waitpid.
* engine-backend.h: Define with [ENABLE_ASSUAN] instead 
of [ENABLE_GPGSM].
* util.h (ENABLE_ASSUAN): Declare _gpgme_assuan_system_hooks, 
_gpgme_assuan_malloc_hooks, _gpgme_assuan_log_cb.
* engine-gpgsm.c: Don't map assuan error codes. Use 
assuan_release instead of assuan_disconnect.
  (map_assuan_error): Remove function.
  (gpgsm_new): Use new assuan context interface.
* engine-assuan.c: Use assuan_release instead of 
assuan_disconnect.
  (lass_new): Use new assuan context interface.

2009-10-07    <wk@g10code.com>

* priv-io.h [W32]: Include windows.h instead of sys/socket.h.

2009-08-06  Werner Koch  <wk@g10code.com>

* op-support.c (_gpgme_parse_inv_recp): Allow for no fingerprint.

* engine-gpgsm.c (gpgsm_sign): Hook up the status func for the 
SIGNER command.
* gpgme.h.in (GPGME_STATUS_INV_SGNR, GPGME_STATUS_NO_SGNR): New.
* sign.c (op_data_t): Add fields IGNORE_INV_RECP and INV_SGNR_SEEN.
  (_gpgme_op_sign_init_result): Factor code out to ...
  (sign_init_result): .. new. Init new fields.
  (sign_start): Use sign_init_result.
  (_gpgme_sign_status_handler): Take care of the new INV_SGNR.
Return an error if no signature has been created.

2009-07-07  Werner Koch  <wk@g10code.com>

* engine-gpgsm.c (struct engine_gpgsm): Add fields 
input_helper_data and input_helper_memory.
  (close_notify_handler): Release these new fields.
  (gpgsm_import): Implement the keyarray feature.

* engine-gpg.c (gpg_import): Actually return GPG_ERR_INV_VALUE.

* engine-gpgsm.c (gpgsm_import): Return an error for unknown data 
encodings.

2009-06-22 Marcus Brinkmann  <marcus@g10code.de>
* debug.h: Everywhere, use %p instead of 0x%x to print pointer.

[HAVE_STDINT_H]: Include <stdint.h>.

(_TRACE, TRACE, TRACE0, TRACE1, TRACE2, TRACE3, TRACE6): Cast tag
to (uintptr_t) before casting it to (void*) to silence GCC
warning.

* gpgme.h.in (_GPGME_DEPRECATED_OUTSIDE_GPGME): New macro.
* sign.c (_GPGME_IN_GPGME): Define it.
* keylist.c (_GPGME_IN_GPGME): Define it.

* debug.c (_gpgme_debug_begin, _gpgme_debug_add): Handle error in
vasprintf and asprintf.

* priv-io.h: Include <sys/socket.h>. Declare _gpgme_io_connect.

2009-06-18 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h.in (GPGME_CONF_PATHNAME): Revert last change, it's
back! (GPA still uses it...).

* gpgme.def: Fix stupid typo.
* w32-io.c (_gpgme_io_pipe): Add missing declaration.

* gpgme.h.in (GPGME_CONF_PATHNAME): Remove obsolete macro.

* w32-io.c (_gpgme_io_pipe): Allocate reader/writer thread right
away.
(_gpgme_io_read, _gpgme_io_write, _gpgme_io_select)
(_gpgme_io_dup): Never allocate threads here.
(find_writer, find_reader): Check return value of thread creation
function.

* context.h (CTX_OP_DATA_MAGIC): New macro.
(struct ctx_op_data): New member MAGIC.
* op-support.c (_gpgme_op_data_lookup): Initialize magic.
* gpgme.c (gpgme_result_unref, gpgme_result_ref): Check magic.

2009-06-16 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_result_unref): Hot fix to release a lock.

* gpgme.c (result_ref_lock): New global variable.
(gpgme_result_ref, gpgme_result_unref): use it.

2009-06-16 Werner Koch <wk@g10code.com>

* version.c: Include stdlib.h.
* gpgme.h.in (gpgme_data_encoding_t): Add GPGME_DATA_ENCODING_URL, GPGME_DATA_ENCODING_URL0.
  * data.c (gpgme_data_set_encoding): Adjust for new values.
  * engine-gpg.c (string_from_data): New.
    (gpg_import): Implement --fetch-key feature.

* gpgme.h.in (gpgme_op_export_keys_start, gpgme_op_export_keys): New.
  * gpgme.def, libgpgme.vers: Add them.
  * export.c (gpgme_op_export_keys_start, gpgme_op_export_keys): New.
    (export_keys_start): New.

* gpgme.h.in (gpgme_export_mode_t, GPGME_EXPORT_MODE_EXTERN): New.
  (gpgme_op_export_start, gpgme_op_export, gpgme_op_export_ext_start)
  (gpgme_op_export_ext): Change arg RESERVED to MODE of new compatible type.
* export.c (gpgme_op_export_ext_start, gpgme_op_export)
  (gpgme_op_export_ext_start, gpgme_op_export_ext): Ditto.
  (export_start): Ditto.
* engine.c (_gpgme_engine_op_export): Ditto.
* engine-backend.h (struct engine_ops): Ditto.
* engine-gpgsm.c (gpgsm_export, gpgsm_export_ext): Ditto.
* engine-gpg.c (gpg_export, gpg_export_ext): Ditto. Implement mode EXTERN.
  (gpg_export, gpg_export_ext): Factor common code out to ..
  (export_common): .. this.

* gpgme.h.in (gpgme_op_import_keys_start, gpgme_op_import_keys): New.
  * gpgme.def, libgpgme.vers: Add them.
  * import.c (gpgme_op_import_keys_start, gpgme_op_import_keys): New.
    (_gpgme_op_import_keys_start): New.
  * engine.c (_gpgme_engine_op_import): Add arg KEYARRAY.
  * engine-backend.h (struct engine_ops): Ditto.
  * engine-gpg.c (gpg_import): Ditto. Implement it.

2009-06-15 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h.in (gpgme_result_ref, gpgme_result_unref): Add prototypes.
  * gpgme.def, libgpgme.vers (gpgme_result_ref, gpgme_result_unref):
    Add these.
  * context.h (struct ctx_op_data): Add member "references".
  * gpgme.c (gpgme_result_ref, gpgme_result_unref): New functions.
    (_gpgme_release_result): Use gpgme_result_unref.
  * op-support.c (_gpgme_op_data_lookup): Initialize references.

2009-06-12 Werner Koch <wk@g10code.com>
* gpgme-w32spawn.c (translate_get_from_file): Parse optional spawn flags. Add new arg R_FLAGS. Fix segv on file w/o LF.
  (translate_handles): Add new arg R_FLAGS. Avoid possible segv.
  (main): Pass flags for my_spawn.
  (my_spawn): Add arg FLAGS and implement AllowSetForegroundWindow.

* w32-jo.c (_gpgme_io_spawn): Add arg FLAGS and implement it.
* w32-glib-jo.c (_gpgme_io_spawn): Ditto.
* w32-qt-jo.cpp (_gpgme_io_spawn): Ditto.
* posix-jo.c (_gpgme_io_spawn): Add dummy arg FLAGS.
* engine-gpg.c (start): Call spawn with new flag.

* w32-util.c (_gpgme_allow_set_foreground_window): Rename to
  _gpgme_allow_set_foreground_window. Change all callers.
* posix-util.c (_gpgme_allow_set_foreground_window): Ditto.

2009-06-10 Werner Koch <wk@g10code.com>

* w32-util.c (_gpgme_allow_set_foreground_window): Add trace support.

2009-06-09 Werner Koch <wk@g10code.com>

* engine-gpg.c (gpg_io_event): Test for cmd.fd.

* version.c (gpgme_check_version_internal): Make result const.

* gpgme.c: Include priv-io.h.
* libgpgme.vers (GPGME_1.1): Add them.
* gpgme.def: Ditto.

* Makefile.am (main_sources): Remove gpgme.h.
  (include_HEADERS): Rename to nodist_include_HEADERS so that a
  VPATH build won't use the distributed one.

* util.h (GPG_ERR_NOT_OPERATIONAL): Define.

2009-05-28 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h.in (gpgme_check_version_internal): New prototype.
  (gpgme_check_version): New macro, overriding function of the same
  name.
* libgpgme.vers, gpgme.def: Add gpgme_check_version_internal.o
* context.h (_gpgme_selftest): New variable declaration.
* version.c: Include "context.h".
  (gpgme_check_version): Set _gpgme_selftest on success.
  (gpgme_check_version_internal): New function.
* gpgme.c (_gpgme_selftest): Define it.
  (gpgme_new): Check the selftest result.

2009-05-18 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h.in (gpgme_encrypt_flags_t): Add
  GPGME_ENCRYPT_NO_ENCRYPT_TO.
* engine-gpg.c (gpg_encrypt): Pass --no-encrypt-to to gpg if
  GPGME_ENCRYPT_NO_ENCRYPT_TO flag is set.

2009-05-14 Werner Koch <wk@g10code.com>

* gpgme.h.in (gpgme_status_code_t): Explicitly initialize for
  better maintainability and to help debugging.

2009-05-05 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h.in: Add compile time check for _FILE_OFFSET_BITS.

2009-04-15 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c (_gpgme_io_connect): Fix stupid error.

2009-04-08 Marcus Brinkmann <marcus@g10code.de>

* w32-glib-io.c (giochannel_table): New members used, fd, socket.
  (find_channel): Drop CREATE argument.
  (new_dummy_channel_from_fd, new_channel_from_fd)
  (new_channel_from_socket): New functions.
  (_gpgm_io_fd2str): Implement for sockets.
  (_gpgme_io_write, _gpgme_io_read): Translate EAGAIN errors
  correctly.
  (_gpgme_io_pipe): Fix for new channel bookkeeping.
  (_gpgme_io_close, _gpgme_io_dup): Likewise.
* w32-io.c (MAX_READERS, MAX_WRITERS): Bump up to 40.
* version.c [HAVE_W32_SYSTEM]: Include "windows.h.
  (do_subsystem_inits) [HAVE_W32_SYSTEM]: Call WSAStartup.
* engine-assuan.c (llass_status_handler): Ignore EAGAIN errors.

2009-03-18 Werner Koch <wk@g10code.com>

* gpgme.h.in (GPGME_KEYLIST_MODE_EPHEMERAL): New.
* engine-gpgsm.c (gpgsm_keylist): Send new option.
2009-03-13 Werner Koch <wk@g10code.com>

* gpgme-config.in: Make sure locale is set to C.

2009-02-24 Werner Koch <wk@g10code.com>

* gpgme.h.in (struct _gpgme_op_assuan_result): New.
  (gpgme_assuan_result_t): New.
  (gpgme_op_assuan_result): Change return type.
  (struct _gpgme_assuan_sendfnc_ctx)
  (gpgme_assuan_sendfnc_ctx_t, gpgme_assuan_sendfnc_t): Remove.
  (gpgme_assuan_inquire_cb_t): Changed.
* opassuan.c (op_data_t): Make use of a result structure.
  (gpgme_op_assuan_result): Change return type.
  (opassuan_start): Use result structure.
  (result_cb): Ditto.
* engine-assuan.c (struct _gpgme_assuan_sendfnc_ctx): Remove.
  (inquire_cb_sendfnc): Remove.
  (lass_status_handler): Allow sending a CANCEL from the inquire CB.

2009-02-04 Werner Koch <wk@g10code.com>

* w32-glib-io.c (_gpgme_io_spawn): Make ARGV argument const to
  match prototype.
* w32-qt-io.cpp (_gpgme_io_spawn): Ditto.

2009-02-03 Werner Koch <wk@g10code.com>

* gpgme.h.in (struct _gpgme_subkey): Add fields IS_CARDKEY and
  CARD_NUMBER.
* key.c (gpgme_key_unref): Release field CARD_NUMBER.
* keylist.c (keylist_colon_handler): Factor common code out to ...
  (parse_sec_field15): New. Set card number.

2009-01-26 Werner Koch <wk@g10code.com>

* opassuan.c, dirinfo.c, engine-assuan.c: New.
* Makefile.am: Add them.
* engine-backend.h: Add _gpgme_engine_ops_assuan.
  (struct engine_ops): Add field OPASSUAN_TRANSACT. Update all
  engine intializers.
* Makefile.am (gpgsm_components): Add engine-assuan.c.
* gpgme.h.in (gpgme_protocol_t): Add GPGME_PROTOCOL_ASSUAN.
  (gpgme_assuan_data_cb_t, gpgme_assuan_sendfnc_ctx_t)
  (gpgme_assuan_inquire_cb_t, gpgme_assuan_status_cb_t): New.
  (gpgme_op_assuan_transact_start, gpgme_op_assuan_transact): New.
* gpgme.c (gpgme_get_protocol_name): Ditto.
(gpgme_set_protocol): Support it.
* engine.c (gpgme_get_engine_info): Ditto.
(engin_ops): Register it.
(_gpgme_engine_op_assuan_transact): New.
* libgpgme.vers (gpgme_op_assuan_transact_start)
(gpgme_op_assuan_transact): New.
* gpgme.def (gpgme_op_assuan_transact_start)
(gpgme_op_assuan_transact): New.
* engine-backend.h (struct engine_ops): Add GET_HOME_DIR and
initialize to NULL for all engines.
* engine.c (engine_get_home_dir): New.
(gpgme_get_engine_info): Use it.
(_gpgme_set_engine_info): Use it.
* engine.h (engine_assuan_result_cb_t): New.
* context.h (ctx_op_data_id_t): Add OPDATA_ASSUAN.
* util.h (GPG_ERR_UNFINISHED): Define if not yet defined.
* version.c (gpgme_check_version): Protect trace arg against NULL.

2009-01-19 Werner Koch  <wk@g10code.com>
* rungpg.c: Rename to engine-gpg.c
* Makefile.am (main_sources): Ditto.

2008-12-03 Marcus Brinkmann  <marcus@g10code.de>
* Makefile.am (status-table.h): Use $(builddir) to find gpgme.h.

2008-11-18 Werner Koch  <wk@g10code.com>
* version.c (doSubsystem_inits): Always initialize I/O
subsystem. Fixes regression from 2007-08-02.
* decrypt.c (_gpgme_decrypt_status_handler): Use
_gpgme_map_gnupg_error to parse the error code for decrypt.algorithm.

2008-10-30 Marcus Brinkmann  <marcus@g10code.de>
* wait-private.c (_gpgme_wait_on_condition): Remove unused
variable IDX.
* wait-global.c: Include ops.h to silence gcc warning.
(_gpgme_wait_global_event_cb): Pass error value directly.
* wait-user.c: Include ops.h to silence gcc warning.
* posix-io.c (_gpgme_io_spawn): Make ARGV argument const to
silence gcc warning. Cast argument to execv to silence warning.
* w32-io.c (_gpgme_io_spawn): Likewise.
* priv-io.h (_gpgme_io_spawn): Likewise for prototype.

2008-10-24 Werner Koch <wk@g10code.com>

* rungpg.c (gpg_keylist_preprocess): Escape backslashes too.

2008-10-23 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (gpg_keylist_preprocess): Convert percent escaped string to C coded string.

2008-10-20 Werner Koch <wk@g10code.com>

* Makefile.am (EXTRA_DIST): Add gpgme.h.in.

* gpgme.h: Rename to gpgme.h.in.
* gpgme.h.in (GPGME_VERSION): Use autoconf substitution.

*posix-io.c: Include sys/uio.h. Fixes bug #818.

2008-10-18 Marcus Brinkmann <marcus@g10code.com>

* w32-util.c (find_program_in_registry): Don't define.
(_gpgme_get_gpg_path, _gpgme_get_gpgsm_path)
(_gpgme_get_gpgconf_path): Do not check for fooProgram in the registry anymore. It is now no longer possible to overwrite the default location in that way.

2008-10-17 Werner Koch <wk@g10code.com>

* w32-glib-io.c (_gpgme_io_fd2str): Use "%d" and not "%ld" to work around a bug in mingw32.

2008-09-23 Marcus Brinkmann <marcus@g10code.com>

* gpgme.c (gpgme_sig_notation_clear): Clear CTX->sig_notations.
Submitted by "Daniel Mueller" <daniel@damm.de>

2008-09-16 Marcus Brinkmann <marcus@g10code.com>

* rungpg.c (gpg_new): Don't use errno with ttyname_r.

2008-08-11 Marcus Brinkmann <marcus@g10code.com>

* rungpg.c (gpg_cancel): Remove cmd fd before status fd.
* gpgme.c (_gpgme_cancel_with_err): New function.
(gpgme_cancel): Reimplement in terms of _gpgme_cancel_with_err.
* wait-private.c (_gpgme_wait_on_condition): Use
_gpgme_cancel_with_err.
* wait-user.c (_gpgme_user_io_cb_handler): Likewise.
* wait-global.c (_gpgme_wait_global_event_cb, gpgme_wait): Likewise.

2008-08-08 Marcus Brinkmann <marcus@g10code.com>

* rungpg.c (command_handler): Remove I/O callback on error, too.

2008-06-29 Marcus Brinkmann <marcus@g10code.com>

* gpgme.c (gpgme_cancel_async): Remove unused variable.

2008-06-27 Marcus Brinkmann <marcus@g10code.de>

* libgpgme.vers: Add gpgme_cancel_async.
* gpgme.def: Likewise.

* context.h: Include "sema.h".
(struct gpgme_context): New members lock and canceled.
* gpgme.c (gpgme_new): Initialize lock.
(gpgme_release): Destroy lock.
(gpgme_cancel_async): New function.
* op-support.c (_gpgme_op_reset): Reset the canceled flag.
* wait-global.c (gpgme_wait): Check cancel flag before processing
any I/O callbacks.
* wait-private.c (_gpgme_wait_on_condition): Likewise.
* wait-user.c (_gpgme_user_io_cb_handler): Likewise.

2008-06-26 Werner Koch <wk@g10code.com>

* w32-util.c (_gpgme_mkstemp): Replace sprint by stpcpy.
(mkstemp): Need to use GetSystemTimeAsFileTime for better
compatibility.

2008-06-25 Marcus Brinkmann <marcus@g10code.de>

* gpgme-w32spawn.c: New file.
* Makefile.am (libexec_PROGRAMS) [HAVE_W32_SYSTEM]: New variable
with gpgme-w32spawn.
* engine-gpgsm.c (gpgsm_new): Use server translated handles.
(gpgsm_set_locale): Return early if locale value is NULL.
* util.h (_gpgme_mkstemp)
(_gpgme_get_w32spawn_path) [HAVE_W32_SYSTEM]: New function
prototypes.
* w32-util.c: Include <stdio.h>, <sys/stat.h> and <unistd.h>.
(letters, mkstemp, _gpgme_mkstemp, _gpgme_get_w32spawn_path): New
functions.
* rungpg.c (gpg_decrypt, gpg_encrypt, gpg_encrypt_sign)
(gpg_genkey, gpg_import, gpg_verify, gpg_sign): Pass data over special filename FD rather than stdin.
(struct arg_and_data_s): Add member ARG_LOC.
(struct fd_data_map_s): Add member ARG_LOC.
(struct engine_gpg): Add member ARG_LOC to status and colon.
(_add_arg, add_arg_with_locp): New function.
(add_arg_ext): Reimplement in terms of _add_arg.
(gpg_new): Remember argument location for status FD.
(build_argv): Set argument location if requested. Also set argument location of fd_data_map for data items.
(start): Adjust caller of _gpgme_io_spawn.
* priv-io.h (struct spawn_fd_item_s): Add members peer_name and arg_loc.
(_gpgme_io_spawn): Remove parent fd list argument.
* posix-io.c (get_max_fds): New function.
(_gpgme_io_dup): Add tracing.
(_gpgme_io_spawn): Remove parent fd list. Change meaning of child fd list to contain all child fds that should be inherited. Close all other file descriptors after fork.
* w32-io.c, w32-glib-io.c, w32-qt-io.c(_gpgme_io_spawn): Remove parent fd list. Change meaning of child fd list to contain all child fds that should be inherited. Do not inherit any file descriptors, but DuplicateHandle them. Spawn process through wrapper process. Provide wrapper process with a temporary file containing handle translation data. Return translated handle names.
* w32-io.c (reader): Add more tracing output.
(_gpgme_io_read): Likewise.
* engine-gpgconf.c (gpgconf_read): Adjust caller of _gpgme_io_spawn.
* version.c (_gpgme_get_program_version): Likewise.

2008-06-20 Werner Koch <wk@g10code.com>


2008-06-19 Marcus Brinkmann <marcus@g10code.de>
* engine-gpgconf.c (gpgconf_parse_option): Fix comma detection.

2008-05-09 Werner Koch <wk@g10code.com>

* engine-gpgconf.c (gpgconf_read): Do not pass empty lines to the callback.

2008-05-07 Werner Koch <wk@g10code.com>


* rungpg.c (gpg_keylist, gpg_keylist_ext): Factor common code out to ...
  (gpg_build_keylist_options): .. new. Allow combination of extern and intern mode.
  (gpg_new): DFT_TTYNAME is an array, thus check the first character.

2008-05-06 Werner Koch <wk@g10code.com>

* version.c (extract_version_string): New.
  (_gpgme_get_program_version): Use it to allow for suffixes in the version line.

2008-04-28 Werner Koch <wk@g10code.com>

* engine-gpgconf.c (gpgconf_read): Fixed segv. Avoid memmove for each line.

2008-04-22 Marcus Brinkmann <marcus@g10code.de>

* w32-qt-io.cpp, kdpipeiodevice.cpp: New versions from Frank Osterfeld, implement blocking select.

2008-03-11 Marcus Brinkmann <marcus@g10code.de>

* data.c (gpgme_data_read, gpgme_data_write): Retry on EINTR.

2008-03-06 Marcus Brinkmann <marcus@g10code.de>

* key.c (_gpgme_key_add_sig): Terminate UID in case SRC is NULL.
  Reported by Marc Mutz.

2008-03-05 Marcus Brinkmann <marcus@g10code.de>

* decrypt.c (release_op_data): Release OPD->result.recipients.
  * encrypt.c (release_op_data): Release invalid_recipient.
2008-02-15 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgconf.c (gpgconf_read): Fix end-of-line handline.

2008-02-14 Werner Koch <wk@g10code.com>

* w32-io.c (_gpgme_io_spawn): Add arg R_PID to return the pid.
* posix-io.c (_gpgme_io_spawn): Ditto.
* w32-glib-io.c (_gpgme_io_spawn): Ditto.
* w32-qt-io.cpp (_gpgme_io_spawn): Ditto.
* priv-io.h (_gpgme_io_spawn): Adjust prototyp and change all callers.
* rungpg.c (start): Call _gpgme_allow_set_foreground_window.

* w32-util.c (_gpgme_allow_set_foreground_window): New.
* engine-gpgsm.c (default_inq_cb): New.
  (gpgsm_new) [W32]: Enable pinentry notifications.
  (status_handler): Handle inquiries.

2008-01-30 Marcus Brinkmann <marcus@g10code.de>

* kdpipeiodevice.cpp: New version by Frank Osterfeld, fixes race condition.

2008-01-28 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (map_input_enc): Rename to ...
  (map_data_enc): ... this. Also change all callers.
  (gpgsm_encrypt, gpgsm_export, gpgsm_export_ext, gpgsm_genkey)
  (gpgsm_sign): Set encoding for output.

2008-01-28 Werner Koch <wk@g10code.com>

* keylist.c (gpgme_get_key): Skip duplicated keys. Fixes bug 876.

2008-01-14 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgconf.c (gpgconf_config_load_cb): Fix program_name field.

2008-01-10 Marcus Brinkmann <marcus@g10code.de>

* kdpipeiodevice.cpp: New version from Frank Osterfeld.

* engine-gpgconf.c (gpgconf_config_load_cb2): Handle the flag
  NO_ARG_DESC.
* Makefile.am (gpgconf_components): New variable.
  (main_sources): Add gpgconf.c.
  * gpgme.h (gpgme_protocol_t): New protocol GPGME_PROTOCOL_GPGCONF.
  (gpgme_conf_level_t, gpgme_conf_type_t, gpgme_conf_arg_t)
  (gpgme_conf_opt_t, gpgme_conf_comp_t, gpgme_conf_arg_new)
  (gpgme_conf_release, gpgme_op_conf_load, gpgme_op_conf_save): New
  types.
  * gpgconf.c, engine-gpgconf.c: New files.
  * engine.h: (_gpgme_engine_op_conf_load,
  * op-support.c (_gpgme_op_reset): Ignore not implemented locale
  function.
  * posix-util.c (_gpgme_get_gpgconf_path): New function.
  * w32-util.c (_gpgme_get_gpgconf_path): New function.
  * engine-gpgsm.c:
    (_gpgme_engine_ops_gpgsm): Add stubs for conf_load and conf_save.
  * rungpg.c:
    (_gpgme_engine_ops_gpg): Add stubs for conf_load and conf_save.
  * gpgme.def: Add new gpgconf related interfaces.
  * libgpgme.vers: Likewise.
  * util.h (_gpgme_get_gpgconf_path): New prototype.
  * gpgme.h (gpgme_protocol_t): Add GPGME_PROTOCOL_GPGCONF.
  * engine-backend.h (_gpgme_engine_ops_gpgconf): New prototype.
  (struct engine_ops): Add members for conf_load and conf_save.
  * engine.c (engine_ops): Add _gpgme_engine_ops_gpgconf.
    (_gpgme_engine_op_conf_load,
    _gpgme_engine_op_conf_save): New functions.
  (gpgme_get_engine_info): Allow protocol GPGME_PROTOCOL_GPGCONF.

2007-11-28 Marcus Brinkmann <marcus@g10code.de>

* w32-util.c (_gpgme_get_gpg_path, _gpgme_get_gpgsm_path): Search
  for installation directory. Remove old fallback default.
  (find_program_in_inst_dir): New function.

2007-11-26 Werner Koch <wk@g10code.com>

* engine-gpgsm.c (struct engine_gpgsm): Add field INLINE_DATA and
  always reset it before calling start.
  (gpgsm_new): Clear it.
  (status_handler): Implement it.
  (gpgsm_getauditlog) [USE_DESCRIPTOR_PASSING]: Use INLINE_DATA.

2007-11-23 Werner Koch <wk@g10code.com>

* op-support.c (_gpgme_op_reset): Implement a no-reset flag.
* getauditlog.c (getauditlog_start): Use that flag.

2007-11-20 Werner Koch <wk@g10code.com>

* op-support.c (_gpgme_parse_inv_recp): Add new reason code 11.

2007-11-22 Werner Koch <wk@g10code.com>

* gpgme.h (gpgme_op_getauditlog_start, gpgme_op_getauditlog): New.
* libgpgme.vers: Ditto.
* gpgme.def: Ditto.
* getauditlog.c: New.
* engine-backend.h (struct engine_ops): Add member GETAUDITLOG.
* engine-gpgsm.c (gpgsm_getauditlog): New.
 (_gpgme_engine_ops_gpgsm): Insert new function.
(gpgsm_new): Try to enable audit log support.
* rungpg.c (_gpgme_engine_ops_gpg): Insert dummy entry.

2007-11-12 Marcus Brinkmann <marcus@g10code.de>

* kdpipeiodevice.cpp: New version from Frank Osterfeld.

2007-10-11 Marcus Brinkmann <marcus@g10code.de>

* kdpipeiodevice.cpp: New version from Frank Osterfeld.

2007-10-09 Marcus Brinkmann <marcus@g10code.de>

* kdpipeiodevice.cpp: New version from Frank Osterfeld and Marc Mutz.

2007-10-05 Marcus Brinkmann <marcus@g10code.de>

* kdpipeiodevice.cpp, w32-qt-io.cpp: New versions from Frank Osterfeld.

2007-10-04 Marcus Brinkmann <marcus@g10code.de>

* kdpipeiodevice.h, kdpipeiodevice.cpp, kdpipeiodevice.moc, 
w32-qt-io.cpp: New versions from Frank Osterfeld.

2007-10-02 Marcus Brinkmann <marcus@g10code.de>

* kdpipeiodevice.cpp, kdpipeiodevice.moc: New versions.
* w32-qt-io.cpp (_gpgme_io_fd2str): Print actual_fd if available.
 (_gpgme_io_dup): Only acquire a reference, do not actually dup.
Submitted by Frank Osterfeld.
* priv-io.h, engine-gpgsm.c: Add comments.
* w32-qt-io.cpp (gpgme_io_select): Remove code handling frozen FDs.
* w32-glib-io.c (gpgme_io_close): Always dereference the channel, even if not primary.

2007-09-28 Werner Koch <wk@g10code.com>

* engine-gpgsm.c (iocb_data_t): Add SERVER_FD_STR.
  (gpgsm_new): Set it.
  (gpgsm_set_fd): Use it.

* w32-glib-io.c (find_channel): Add a new primary flag.
  (_gpgme_io_close): Close channel only if primary.
  (_gpgme_io_dup): Put newfd into the table as shallow copy.

* priv-io.h (struct io_select_fd_s): Remove member FROZEN.
* w32-io.c (_gpgme_io_select): Ditto.
* w32-glib-io.c (_gpgme_io_select): Ditto.

* posix-io.c (_gpgme_io_select): Ditto.
* rungpg.c (read_status): Ditto.
* wait.c (fd_table_put): Ditto.

* rungpg.c (gpg_io_event): Add tracing.
  (start): Use gpg_io_event for sending the start event.
* engine-gpgsm.c (gpgsm_io_event): Add tracing.
  (start): Use gpgsm_io_event for sending the start event.
* wait.c (_gpgme_add_io_cb, _gpgme_run_io_cb): Add tracing.

2007-09-28 Marcus Brinkmann <marcus@g10code.de>


2007-09-27 Marcus Brinkmann <marcus@g10code.de>

* w32-glib-io.c (_gpgme_io_spawn),
  w32-qt-io.cpp (_gpgme_io_spawn), w32-io.c (_gpgme_io_spawn): Close the process handle, return 0.

* gpgme.h (gpgme_protocol_t): Add GPGME_PROTOCOL_UNKNOWN.
* gpgme.c (gpgme_get_protocol_name): Implement support for GPGME_PROTOCOL_UNKNOWN.

* kdpipeiodevice.h: Fix last change.

2007-09-25 Marcus Brinkmann <marcus@g10code.de>

* conversion.c, keylist.c: Include <sys/types.h>.

* kdpipeiodevice.h: Use namespace _gpgme_.
* kdpipeiodevice.cpp: Use namespace _gpgme_.
[Q_OS_WIN32 && NOMINMAX]: Do not define NOMINMAX again.
* w32-qt-io.cpp: Change namespace of KDPipeIODevice to _gpgme_::KDPipeIODevice.

2007-09-17 Werner Koch <wk@g10code.com>

* rungpg.c (gpg_new): Make robust against undefined ttyname or ttytype.

2007-09-14 Werner Koch <wk@g10code.com>

* data-mem.c (gpgme_data_release_and_get_mem): Fix tracing bug.

2007-09-14 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_release): Call gpgme_sig_notation_clear.

2007-09-13 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (gpg_new): Handle return value of _gpgme_getenv (fixes small memory leak).

2007-09-07 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (libgpgme_qt_la_SOURCES): Move moc_kdpipeiodevice.cpp to EXTRA_DIST, as this is only included by another file (it's more like a header file than a cpp file, but automake doesn't know that).

* w32-qt-io.cpp (_gpgme_io_spawn): Fix several cast errors and typos.
* w32-io.c (_gpgme_io_write): Use TRACE_SYSRES instead of TRACE_SYS.
(libgpgme_qt_la_LIBADD): Add QT4_CORE_LIBS, not QT4_CORE_LIB.

* kdpipeiodevice.h, kdpipeiodevice.cpp, moc_kdpipeiodevice.cpp, kdpipeiodevice moc, w32-qt-io.c: New files.
* Makefile.am (ltlib_gpgme_extra): Rename to ltlib_gpgme_glib.
(lib_lTLIBRARIES): Add $((ltlib_gpgme_qt).
(libgpgme_qt_la_SOURCES): New variable.
(AM_CPPFLAGS): Add @QT4_CORE_INCLUDES@ 
(AM_CFLAGS): Add @QT4_CORE_CFLAGS@.
(libgpgme_qt_la_LDFLAGS, libgpgme_qt_la_DEPENDENCIES)
(libgpgme_qt_la_LIBADD): New variables.

* sema.h (struct critsect_s): Rename "private" to "priv" to make 
C++ users happy. Change users.
* posix-sema.c (_gpgme_sema_cs_enter, _gpgme_sema_cs_leave) 
(_gpgme_sema_cs_destroy): Likewise.
* w32-sema.c (critsect_init, _gpgme_sema_cs_enter) 
* w32-glib-io.c (gpgme_get_giochannel): Change return type to 
void*.
(gpgme_get_fdptr): New function.
* w32-io.c (gpgme_get_fdptr): New function 
* gpgme.def: Add gpgme_get_fdptr.

2007-08-22 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c (_gpgme_io_write): Return early if COUNT is zero.
(writer): Remove superfluous check.

2007-08-20 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h: Move include of gpg-error.h out of extern "C".

2007-08-07 Werner Koch <wk@g10code.com>

* gpgme.h (struct _gpgme_signature): Add member CHAIN_MODEL.
* verify.c (parse_trust): Set Chain_MODEL.

2007-08-02 Werner Koch <wk@g10code.com>

* w32-glib-io.c (_gpgme_io_spawn): Use DETACHED_PROCESS flag.
* w32-io.c (_gpgme_io_spawn): Ditto.
(_gpgme_io_write): Map ERROR_NO_DATA to EPIPE.
* debug.c (_gpgme_debug): Enable assuan logging.
(_gpgme_debug_subsystem_init): New.
* version.c (do_subsystem_inits): Disable assuan logging and 
initialize the debug system.
(gpgme_check_version): Do not trace before the subsystems are 
initialized.

2007-07-17 Marcus Brinkmann <marcus@g10code.de>

* debug.c: Include <errno.h> and "debug.h".
(_gpgme_debug): Save and restore ERRNO.
(TOHEX): New macro.
(_gpgme_debug_buffer): New function.
* conversion.c, data-compat.c, data-mem.c, data.c, engine-gpgsm.c,
gpgme.c, keylist.c, posix-io.c, rungpg.c, sign.c, version.c,
w32-io.c, wait.c: Replace DEBUG macros by TRACE_* variants. In
most of these files, add many more tracepoints.

2007-07-16 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (status_handler): Do not send BYE here.

* w32-io.c (struct reader_context_s, struct writer_context_s): New
members REFCOUNT.
(create_reader, create_writer): Initialize C->refcount to 1.
(destroy_reader, destroy_writer): Only destroy if C->refcount
drops to 0.
(find_reader, find_writer, kill_reader, kill_writer): Beautify.
* w32-io.c (_gpgme_io_dup): Likewise.
* w32-glib-io.c (_gpgme_io_dup): Likewise.

2007-07-13 Marcus Brinkmann <marcus@g10code.de>

* data-user.c (user_read, user_write, user_seek): Set errno and
return -1 instead returning the error code directly.
* data-compat.c (old_user_seek): Likewise.
* gpgme.c (gpgme_sig_notation_add): Return error properly.

* Revert the "close_notify_handler" returns int stuff. Always
close in the _gpgme_io_close implementations.
* engine-gpgsm.c (status_handler): Try to terminate the connection
in case of error.
* w32-io.c (_gpgme_io_read): Return C->error_code in ERRNO.
(_gpgme_io_write): Likewise.

* priv-io.h (_gpgme_io_set_close_notify): Change type of HANDLER
to _gpgme_close_notify_handler.
(_gpgme_close_notify_handler): New type.
(_gpgme_io_dup): Remove prototype.
* posix-io.c (notify_table, _gpgme_io_set_close_notify): Change
type of HANDLER to _gpgme_close_notify_handler_t.
(_gpgme_io_close): Do not close the FD if handler returns 0.
(_gpgme_io_dup): Remove function.
* w32-io.c (notify_table, _gpgme_io_set_close_notify,
_gpgme_io_close): Change type of HANDLER to
_gpgme_close_notify_handler_t.
(_gpgme_io_close): Do not close the FD if handler returns 0.
(_gpgme_io_dup): Remove function.
* w32-glib-io.c (_gpgme_io_dup): Remove function.
(_gpgme_io_set_close_notify, notify_table): Change type of HANDLER
to _gpgme_close_notify_handler_t.
(_gpgme_io_close): Do not close the FD if handler returns 0.
* rungpg.c (close_notify_handler): Change return type to int,
return 1.
* engine-gpgsm.c (close_notify_handler): Change return type to
int, return 0 for status FD and 1 for all other FDs.
(start): Do not duplicate the status FD.

2007-07-12 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am: Replace implicit rule by suffix rule. Add
SUFFIXES for that.

2007-07-12 Werner Koch <wk@g10code.com>

* version.c (do_subsystem_inits) [W32]: Make sure that the socket
system has been started.

2007-07-10 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c (_gpgme_io_dup): Likewise.
* w32-glib-io.c (_gpgme_io_dup): Likewise.
* engine-gpgsm.c (start): Use _gpgme_dup() instead of dup().

2007-07-08 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c [HAVE_W32_SYSTEM]: Enable the bunch of the file.
* funopen.c (funopen): Rename to _gpgme_funopen.

2007-04-30 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_new): Fix error handling for ttynamer_r.
* rungpg.c (gpg_new): Likewise.
Submitted by Stephen Tether.

2007-02-26 Werner Koch <wk@g10code.com>

* verify.c (op_data_t): New element PLAINTEXT_SEEN.
(_gpgme_verify_status_handler): Return an error if more than one
plaintext has been seen.
(parse_error): New arg SET_STATUS. Also detect it based on an
ERROR status (gpg > 1.4.6).
2007-01-26 Werner Koch <wk@g10code.com>

* w32-io.c (build_commandline): Fixed stupid quoting bug.
* w32-glib-io.c (build_commandline): Ditto.

* rungpg.c (gpg_set_locale): Avoid dangling pointer after free.

* gpgme-config.in: New options --get-gpg and --get-gpgsm.

2007-01-18 Marcus Brinkmann <marcus@g10code.de>

* data.h (_gpgme_data_get_fd): Add prototype.
(gpgme_data_get_fd cb): New type.
(struct _gpgme_data_cbs): New member get_fd.
* data.c (_gpgme_data_get_fd): New function.
* data-fd.c (fd_get_fd): New function.
(fd_cbs): Add fd_get_fd.
* data-stream.c (stream_get_fd): New function.
(stream_cbs): Add stream_get_fd.
* data-mem.c (mem_cbs): Add NULL for get_fd callback.
* data-user.c (user_cbs): Likewise.
* engine-gpgsm.c (gpgsm_set_fd) [USE_DESCRIPTOR_PASSING]: Try to short-cut by passing the data descriptor directly.

2007-01-17 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c (build_commandline): Quote all command line arguments.
* w32-glib-io.c (build_commandline): Likewise.

2007-01-10 Werner Koch <wk@g10code.com>

* ttname_r.c (ttname_r) [W32]: Return a dummy name.

2007-01-08 Werner Koch <wk@g10code.com>

* version.c (do_subsystem_inits): Do assuan init only if building with Assuan.
* setenv.c: Include assuan-def.h only if building with Assuan support.

* op-support.c (_gpgme_op_reset): Set LC_MESSAGES only if defined.
* engine-gpgsm.c (gpgsm_set_locale): Ditto.
* rungpg.c (gpg_set_locale): Ditto.

2006-12-17 Marcus Brinkmann <marcus@g10code.de>
* gpgme.c (gpgme_set_protocol): Shut down the engine when switching protocols.
(gpgme_ctx_set_engine_info): Likewise for engine info.
* engine.h (gpgme_engine_reset): New function prototype.
* engine.c (gpgme_engine_reset): New function.
* engine-backend.h (struct engine_ops): New member RESET.
* rungpg.c (gpgme_engine_ops_gpg): Add NULL for reset function.
* engine-gpgsm.c (gpgme_engine_ops_gpgsm) [USE_DESCRIPTOR_PASSING]: Add gpgsm_reset for reset.
(gpgsm_reset) [USE_DESCRIPTOR_PASSING]: New function.
* op-support.c (gpgme_op_reset): Try to use the engine's reset function if available.
* engine-gpgsm.c (gpgsm_new): Move code to dup status_fd to ...
(start): ... here.

* engine.h (gpgme_engine_new): Remove arguments lc_ctype and lc_messages from prototype.
(gpgme_engine_set_locale): New prototype.
* engine.c (gpgme_engine_set_locale): New function.
* op-support.c (gpgme_op_reset): Call gpgme_engine_set_locale.
* engine-backend.h (struct engine_ops): Add new member SET_LOCALE.
Remove arguments lc_messages and lc_ctype from member NEW.
* engine-gpgsm.c (struct engine_gpgsm): New members lc_ctype_set and lc_messages_set.
(gpgsm_new): Remove lc_messages and lc_ctype arguments.
(gpgsm_set_locale): New function.
(gpgme_engine_ops_gpgsm): Add gpgsm_set_locale.
* rungpg.c (struct engine_gpg): Add new members lc_messages and lc_ctype.
(gpg_release): Release lc_messages and lc_ctype if set.
(gpg_new): Remove lc_messages and lc_ctype arguments.
(gpg_set_locale): New function.
(gpgme_engine_ops_gpg): Add gpg_set_locale.
(add_arg): Implement in terms of:
(add_arg_ext): New function.
(start): Set lc-messages and lc-ctype arguments here.

2006-12-03 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (struct engine_gpgsm): Move members input_fd_server, output_fd_server, message_fd_server to ...
(iocb_data): ... here (as server_fd).
(close_notify_handler): Reset tags as well.
(gpgsm_new): Implement support for descriptor
passing.
(fd_type_t): New type.
(gpgsm_clear_fd): New function. Use it instead of _gpgsm_io_close
for unused communication channels.
(gpgsm_set_fd): Rewritten to support descriptor passing. All
relevant callers adjusted as well (previously of _gpgme_io_close).

2006-12-02 Marcus Brinkmann <marcus@g10code.de>

* version.c: Include "assuan.h".
(do_subsystem_inits): Call assuan_set_assuan_err_source.

2006-12-01 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (libgpgme_real_la_SOURCES): Rename to main_sources.
(libgpgme_la_SOURCES, libgpgme_pthread_la_SOURCES,
libgpgme_glib_la_SOURCES, libgpgme_pth_la_SOURCES): Add
$(main_sources).
(libgpgme_la_DEPENDENCIES, libgpgme_la_LIBADD,
libgpgme_pthread_la_DEPENDENCIES, libgpgme_pthread_la_LIBADD,
libgpgme_pth_la_DEPENDENCIES, libgpgme_pth_la_LIBADD,
libgpgme_glib_la_DEPENDENCIES, libgpgme_glib_la_LIBADD): Remove
libgpgme-real.la.
(noinst_LTLIBRARIES): Removed.
(libgpgme_glib_la_CFLAGS, libgpgme_pth_la_CFLAGS): Removed.
(AM_CFLAGS): New variable.

2006-11-30 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c: Replace AssuanError with gpg_error_t and
ASSUAN_CONTEXT with assuan_context_t.

2006-11-29 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_new): Check return value of
assuan_pipe_connect.

* rungpg.c: Include <unistd.h>.
(gpg_new): Support --display, --ttyname, --ttytype, --lc-ctype and
--lc-messages. Fixes issue 734.

2006-10-24 Marcus Brinkmann <marcus@g10code.de>

* trustlist.c (gpgme_op_trustlist_next): Return error if OPD is
NULL.

2006-10-23 Marcus Brinkmann <marcus@g10code.de>
* wait-global.c (gpgme_wait): Unlock CTX_LIST_LOCK while calling _gpgme_engine_io_event().

* keylist.c (gpgme_op_keylist_next): Return error if OPD is NULL.

2006-09-25 Marcus Brinkmann <marcus@g10code.de>

* data-mem.c (gpgme_data_release_and_get_mem): Release the data object properly.

2006-09-22 Marcus Brinkmann <marcus@g10code.de>

* keylist.c (keylist_colon_handler): Move debug output after initialising KEY.

2006-07-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme-config.in (Options): Add NETLIBS.
* Makefile.am (libgpgme_la_LIBADD, libgpgme_pthread_la_LIBADD, libgpgme_pth_la_LIBADD, libgpgme_glib_la_LIBADD): Add NETLIBS.

* rungpg.c (read_status): Fix comparison disguising as an assignment.

2005-03-24 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_set_locale): Remove conditional on HAVE_W32_SYSTEM, and just check for LC_MESSAGES.

2006-07-16 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (read_status): Strip potential carriage return.
* genkey.c (get_key_parameter): Skip potential carriage return.
* version.c (_gpgme_get_program_version): Strip potential carriage return.

* data.c (gpgme_data_set_file_name): Allow to clear the file name by passing NULL.

2006-06-22 Marcus Brinkmann <marcus@g10code.de>

* keylist.c (gpgme_get_key): Also clone the engine info.

2006-03-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme-config.in (cflags_pth): Revert accidental removal of pthread support with last change.
2006-02-28 Marcus Brinkmann <marcus@g10code.de>

* w32-glib-io.c (O_BINARY) ![O_BINARY]: New macro.
  (_gpgme_io_pipe): Open pipes in binary mode.

2006-02-22 Marcus Brinkmann <marcus@g10code.de>

* engine.c (gpgme_engine_check_version): Reimplemented to allow
  checking the version correctly even after changing the engine
  information. Bug reported by Stéphane Corthesy.

* rungpg.c (read_colon_line): Invoke colon preprocess handler if
  it is set.
  (colon_preprocessor_t): New type.
  (struct engine_gpg): New member colon.preprocess_fnc.
  (gpg_keylist_preprocess): New function.
  * keylist.c (keylist_colon_handler): Allow short key IDs.

2006-02-15 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c (create_writer): Make C->have_data a manually reset
  event.
  (writer): Move code from end of if block to beginning, so it
  is also run the first time.
  (_gpgme_io_write): Move assert check after error check. Reset
  the is_empty event, and also do it eagerly.
  (_gpgme_io_select): Unconditionally wait for the is_empty event.

2006-01-26 Werner Koch <wk@g10code.com>

* w32-util.c (_gpgme_get_conf_int): New.
* w32-io.c (get_desired_thread_priority): New.
  (create_reader, create_writer): Use it here.

2006-01-04 Werner Koch <wk@g10code.com>

* debug.h (_gpgme_debug_srcname): New. Use it with the debug macros.

* w32-glib-io.c (_gpgme_io_set_nonblocking): Add debug
  statements. Disable error return for failed nonblocking call.

2006-01-03 Marcus Brinkmann <marcus@g10code.de>

* w32-glib-io.c (_gpgme_io_close): Only close fd if there is no
  channel for it.

2005-12-31 Marcus Brinkmann <marcus@g10code.de>
* w32-glib-io.c (find_channel): Set channel to unbuffered.
(_gpgme_io_select): Fix debug output.

2005-12-23 Werner Koch <wk@g10code.com>

* gpgme.h (struct _gpgme_signature): Append field PKA_ADDRESS.
* verify.c (release_op_data, _gpgme_verify_status_handler): Set this field.

2005-12-20 Werner Koch <wk@g10code.com>

* gpgme.h (gpgme_status_code_t): Added GPGME_STATUS_PKA_TRUST_BAD and GPGME_STATUS_PKA_TRUST_GOOD.
(struct _gpgme_signature): New field pka_trust.
* verify.c (_gpgme_verify_status_handler): Set pka_trust.

2005-12-06 Werner Koch <wk@g10code.com>

* keylist.c (keylist_colon_handler): Store fingerprints of the subkeys. Reset the secret flag of subkeys for stub secret keys.
(NR_FIELDS): Bumped up to 16

2005-11-27 Marcus Brinkmann <marcus@g10code.de>


2005-11-24 Marcus Brinkmann <marcus@g10code.de>

* w32-glib-io.c (_gpgme_io_fd2str): Remove debug printf.

2005-11-18 Werner Koch <wk@g10code.com>

* w32-glib-io.c: Include glib.h before windows to avoid a symbol shadowing warning.
(find_channel): Better use g_io_channel_win32_new_fd instead of the autodetection function g_io_channel_unix_new.
(_gpgme_io_select): Rewritten. It is now a fully working select implementation.

2005-11-18 Marcus Brinkmann <marcus@g10code.de>

* priv-io.h (_gpgme_io_fd2str): New prototype.
* w32-io.c (_gpgme_io_fd2str): New function.
* rungpg.c: Use this new function.
* w32-glib-io.c (_gpgme_io_fd2str): Rewrote the file handle code
Two's company, three's the musketeers.

* w32-glib-io.c: Rewrote the file handle code. We don't create system fds for every handle (doesn't work for inherited handles), but we create pseudo fds in a private namespace that designate a handle and potentially a giochannel.

2005-11-18 Werner Koch <wk@g10code.com>

* versioninfo.rc.in: Set file version to LT-version + Svn-revision.

2005-11-17 Marcus Brinkmann <marcus@g10code.de>

* gpgme.def (gpgme_get_giochannel): Add symbol.
* Makefile.am (system_components) [HAVE_DOSISH_SYSTEM]: Remove w32-io.c.
  (ltlib_gpgme_extra): New variable.
  (lib_LTLIBRARIES): Add $(ltlib_gpgme_extra).
  (system_components_not_extra): New variable.
  (libgpgme_la SOURCES, libgpgme_pthread_la SOURCES,
  libgpgme_pth_la SOURCES): Add $(system_components_not_extra).
  (libgpgme_glib_la LDFLAGS, libgpgme_glib_la DEPENDENCIES,
  libgpgme_glib_la LIBADD, libgpgme_glib_la CFLAGS)
  [BUILD_W32_GLIB]: New variables.
* gpgme-config.in (glib): New option.
* gpgme.m4 (AM_PATH_GPGME_GLIB): New macro.

2005-11-17 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c (_gpgme_io_waitpid, _gpgme_io_kill): Removed.
(_gpgme_io_waitpid): Declare static.

2005-10-24 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c (_gpgme_io_spawn): Don't minimize window, hide it.

2005-10-21 Werner Koch <wk@g10code.com>

* Makefile.am: Fixed cut+paste problem

2005-10-20 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am: Build versioninfo.lo, not versioninfo.o. Also, fix the whole mess.
2005-10-16 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (gpg_edit): Don't add a key argument if in card edit mode.

2005-10-06 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (gpgme.dll gpgme.dll.a): Use $(srcdir) for gpgme.def.

* gpgme.h (gpgme_free): New prototype.
* data-mem.c (gpgme_free): New function.
* libgpgme.vers (GPGME_1.1): Add gpgme_free.
* gpgme.def: Add gpgme_free.

2005-10-02 Marcus Brinkmann <marcus@g10code.de>

* util.h (_gpgme_decode_percent_string): Add new argument BINARY to prototype.
* verify.c (parse_notation): Likewise for invocation.
* conversion.c (_gpgme_decode_percent_string): Likewise to declaration. If set, do not replace '0' characters with a printable string.
* gpgme.h (struct _gpgme_key_sig): New field notations.
* ops.h (_gpgme_parse_notation): New prototype.
* sig-notation.c (_gpgme_parse_notation): New function.
* key.c (gpgme_key_unref): Free all signature notations.
* keylist.c (op_data_t): New member tmp_keysig.
  (finish_key): Clear OPD->tmp_keysig.
* gpgme.c (gpgme_set_keylist_mode): Remove check.
* rungpg.c (gpg_keylist): Support listing signature notations.
  (gpg_keylist_ext): Likewise.

2005-10-01 Marcus Brinkmann <marcus@g10code.de>

* engine.h (_gpgme_set_engine_info): Add prototype.
* engine-backend.h (struct engine_ops): Change return type of get_file_name() to const char * to silence gcc warning.
* engine.c (engine_get_file_name): Change return type to const char * to silence gcc warning.
  (gpgme_get_engine_info): Use transitional variable to go from const char * to char * to silence gcc warning.
  (_gpgme_set_engine_info): Likewise.
* engine-gpgsm.c (struct engine_gpgsm): Change type of LINE to char * to silence gcc warning.
  (gpgsm_new): Make ARGV a pointer to const char.
  (status_handler): Change type of SRC, END, DST, ALINE and NEWLINE to char * to silence gcc warning.
* gpgme.def: Add gpgme_data_set_file_name,
gpgme_data_get_file_name, gpgme_sig_notation_clear,
gpgme_sig_notation_add and gpgme_sig_notation_get.
* libgpgme.vers: Add gpgme_sig_notation_clear,
gpgme_sig_notation_add and gpgme_sig_notation_get.
* Makefile.am (libgpgme_real_la_SOURCES): Add sig-notation.c.
* context.h (struct gpgme_context): New field sig_notations.
* gpgme.h (struct _gpgme_sig_notation): New member value_len and
  critical.
(GPGME_SIG_NOTATION_CRITICAL): New symbol.
(gpgme_sig_notation_flags_t): New type.
(gpgme_sig_notation_add, gpgme_sig_notation_clear,
* ops.h (_gpgme_sig_notation_create, _gpgme_sig_notation_free):
  New prototypes.
* verify.c (parse_notation): Use support functions.
  (release_op_data): Likewise.
* rungpg.c (append_args_from_sig_notations): New function.
  (gpg_encrypt_sign, gpg_sign): Call it.

2005-09-30 Marcus Brinkmann <marcus@g10code.de>

* data.h (struct gpgme_data): New member file_name.
* data.c (gpgme_data_set_filename): New function.
  (_gpgme_data_release): Free DH->filename if necessary.
  (gpgme_data_get_filename): New function.
* rungpg.c (gpg_encrypt): Set filename option.
  (gpg_encrypt_sign): Likewise.
  (gpg_sign): Likewise.
* libgpgme.vers (GPGME_1.1): Add gpgme_data_set_file_name and
  gpgme_data_get_file_name.

* decryp.c, verify.c, gpgme.h: Replace plaintext_filename with
  file_name.

2005-09-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (struct _gpgme_key): Add field is_qualified.
  (struct _gpgme_subkey): Likewise.
* keylist.c (set_subkey_capability, set_mainkey_capability): Set
  field is_qualified.

2005-09-23 Werner Koch <wk@g10code.com>

* w32-io.c (_gpgme_io_pipe): Removed use of environment variable
  again.
(create_reader, create_writer): Set thread priority higher.

2005-09-19 Werner Koch <wk@g10code.com>

* w32-io.c (_gpgme_io_pipe): New environment variable to change
  the size of the pipe buffer.

2005-09-13 Werner Koch <wk@g10code.com>

* ath.c: Changes to make it work under W32.

2005-09-12 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (libgpgme_la_SOURCES): Set to ath.h and ath.c.
  (ath_pth_src, ath_pthread_src): Removed.
  (w32_o_files): Replace ath-compat.o with ath.o.
  (libgpgme_pth_la_CFLAGS): New variable.
* ath-compat.c, ath-pthread-compat.c, ath-pth-compat.c: Removed.
* ath.h (ath_pthread_available, ath_pth_available): Removed.
  (ath_init) !_ATH_EXT_SYM_PREFIX]: Do not define macro.
  (struct ath_ops, ath_init) _ATH_COMPAT]: Removed.
  (_ATH_COMPAT): Macro removed.
* posix-sema.c (_gpgme_sema_subsystem_init): Do not call
  _gpgme_ath_init.

2005-09-12 Marcus Brinkmann <marcus@g10code.de>

* keylist.c (release_op_data): Do not free opd->tmp_uid.

2005-09-07 Werner Koch <wk@g10code.com>

* w32-io.c (build_commandline): Quote argv[0].

2005-08-26 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (command_handler): Use _gpgme_io_write instead of write.

* edit.c (command_handler): Do not depend on PROCESSED being
  available.

* engine.h (engine_command_handler_t): Add new argument processed.
* ops.h (_gpgme_passphrase_command_handler_internal): Rename
  prototype to ...
  (_gpgme_passphrase_command_handler): ... this one.
* passphrase.c (_gpgme_passphrase_command_handler_internal):
  Rename to ...
  (_gpgme_passphrase_command_handler): ... this one.
* edit.c (command_handler): Add new argument processed. Remove
local variable with the same name. Always return processed as true.
* rungpg.c (command_handler): Send a newline character if the handler did not.

2005-08-26 Werner Koch  <wk@g10code.com>

* w32-util.c (read_w32_registry_string): Updated from code used by GnuPG. This allows for expanding strings and features the implicit fallback key.
(w32_shgetfolderpath, find_program_at_standard_place): New.
(_gpgme_get_gpg_path, _gpgme_get_gpgsm_path): With no registry entry, locate the programs at the standard place.
(dlopen, dl sym, dl close): New, so that we can keep on using what we are accustomed to.

* debug.c (debug_init): Use PATHSEP_C so that under W32 a semicolon is used which allows us to create files with drive letters.

* w32-io.c (_gpgme_io_read, _gpgme_io_write): Print content in debug mode too.

2005-07-27 Marcus Brinkmann  <marcus@g10code.de>

* gpgme.h (gpgme_status_code_t): Add GPGME_STATUS_PLAINTEXT.
(struct _gpgme_op_decrypt_result): New member plaintext_filename.
(struct _gpgme_op_verify_result): Likewise.
* ops.h (_gpgme_parse_plaintext): Add prototype.
* op-support.c (_gpgme_parse_plaintext): New function.
* decrypt.c (release_op_data): Release OPD->result.plaintext_filename.
(_gpgme_decrypt_status_handler): Handle GPGME_STATUS_PLAINTEXT.
* verify.c (release_op_data): Release OPD->result.plaintext_filename.
(_gpgme_verify_status_handler): Handle GPGME_STATUS_PLAINTEXT.

2005-08-08 Werner Koch  <wk@g10code.com>

* util.h (stpcpy): Renamed to ..
(_gpgme_stpcpy): .. this and made inline. This avoids duplicate definitions when linking statically.
* stpcpy.c: Removed.

2005-08-19 Werner Koch  <wk@g10code.com>

* gpgme.def: New.
* versioninfo.rc.in: New.
* Makefile.am: Adds support for building a W32 DLL.

* ttyname_r.c (ttyname_r) [W32]: Return error.
* ath-compat.c [W32]: select and co are not yet supported; return error.
* data-stream.c (stream_seek): Use ftell if ftello is not available.

2005-07-26 Marcus Brinkmann  <marcus@g10code.de>

* keylist.c (gpgme_get_key): Allow key IDs.

2005-06-20 Marcus Brinkmann  <marcus@g10code.de>

* gpgme.m4: Only call GPGME_CONFIG if found.

2005-06-03 Marcus Brinkmann  <marcus@g10code.de>

* gpgme.h (struct _gpgme_signature): New members pubkey_algo and hash_algo.
* verify.c (parse_valid_sig): Parse pubkey and hash algo numbers.
  (parse_new_sig): Parse pubkey, hash algo and timestamp for ERRSIG.

(_gpgme_decrypt_status_handler): Fix last change.

* gpgme.h (struct _gpgme_recipient): New structure.
  (gpgme_recipient_t): New type.
  (struct _gpgme_op_decrypt_result): Add member recipients.
* decrypt.c (op_data_t): New member last_recipient_p.
  (_gpgme_op_decrypt_init_result): Initialize last_recipient_p.
  (parse_enc_to): New function.
  (_gpgme_decrypt_status_handler): Handle status ENC_TO and NO_SECKEY.

* wait-global.c (gpgme_wait): Break out of the fd processing loop after an error.
Reported by Igor Belyi <gpgme@katehok.ac93.org>.

2005-06-02 Marcus Brinkmann  <marcus@g10code.de>

* wait.h (_gpgme_run_io_cb): New prototype.
* wait.c (_gpgme_run_io_cb): New function.
* wait-global.c (gpgme_wait): Call it.
* wait-user.c (_gpgme_user_io_cb_handler): Likewise.
* wait-private.c (_gpgme_wait_on_condition): Likewise.

2005-06-02 Werner Koch  <wk@g10code.com>

* passphrase.c (_gpgme_passphrase_status_handler): Take care of
GPGME_STATUS_NEED_PASSPHRASE_PIN.
(_gpgme_passphrase_command_handler_internal): Also act on the key
"passphrase.pin.ask".

* gpgme.h: Added status codes GPGME_STATUS_SIG_SUBPACKET,
  GPGME_STATUS_NEED_PASSPHRASE_PIN, GPGME_STATUS_SC_OP_FAILURE,
  GPGME_STATUS_SC_OP_SUCCESS, GPGME_STATUS_CARDCTRL,
  GPGME_STATUS_BACKUP_KEY_CREATED.

2005-05-28 Marcus Brinkmann <marcus@g10code.de>

* data-user.c: Include <errno.h>.

2005-05-17 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_new): Set the CTX->include_certs default to the
default.

2005-05-11 Marcus Brinkmann <marcus@g10code.de>

* w32-io.c (_gpgme_io_select): Fix loop increment.

2005-05-05 Marcus Brinkmann <marcus@g10code.de>

* data-user.c (user_release): Only call user hook if provided.
  (user_seek): Return EBADF if no user hook is provided.
  (user_read): Likewise.
  (user_write): Likewise.

2005-04-28 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (GPGME_INCLUDE_CERTS_DEFAULT): New macro.
  * engine-gpgsm.c (gpgsm_sign): Send the include-certs option after
    the reset, just for cleanliness, and do not send it at all if the
    default is requested.
  * gpgme.c (gpgme_set_include_certs): Allow to use
    GPGME_INCLUDE_CERTS_DEFAULT.

2005-04-21 Werner Koch <wk@g10code.com>

* verify.c (calc_sig_summary): Set the key revoked bit.

2005-04-14 Marcus Brinkmann <marcus@g10code.de>

* wait-global.c (gpgme_wait): Use LI->ctx when checking a context
  in the list, not the user-provided CTX.
  Reported by Igor Belyi <gpgme@katehok.ac93.org>.
* wait-global.c (gpgme_wait): If no context is found, and we should not hang, set *status to 0 and return NULL. Reported by Igor Belyi <gpgme@katehok.ac93.org>.

2005-03-24 Marcus Brinkmann <marcus@g10code.de>

* data.h (EOPNOTSUPP) [_WIN32]: Remove definition.
* data.c (EOPNOTSUPP) [HAVE_W32_SYSTEM]: Remove definition.
   (gpgme_data_read, gpgme_data_write, gpgme_data_seek): Return ENOSYS instead EOPNOTSUPP.
* data-compat.c (EOPNOTSUPP) [HAVE_W32_SYSTEM]: Remove definition.
   (gpgme_error_to_errno): Map GPG_ERR_NOT_SUPPORTED to ENOSYS.

2005-03-24 Marcus Brinkmann <marcus@g10code.de>

* io.h: Rename to ...
* priv-io.h: ... this.
* Makefile.am (libgpgme_real_la_SOURCES): Change io.h to priv-io.h.
* data.c, engine-gpgsm.c, posix-io.c, runpg.c, version.c,
 w32-io.c, wait-private.c, wait-global.c, wait-user.c, wait.c:
   Change all includes of "io.h" to "priv-io.h"

2005-03-09 Werner Koch <wk@g10code.com>

* w32-util.c (_gpgme_get_gpg_path, _gpgme_get_gpgsm_path): Do not cast away type checks.

* io.h [W32]: Do not include stdio.h. If it is needed do it at the right place.

* data.h [W32]: Removed kludge for EOPNOTSUP.
* data.c, data-compat.c [W32]: Explicitly test for it here.

Replaced use of _WIN32 by HAVE_W32_SYSTEM except for public header files.

2005-03-07 Timo Schulz <twoaday@g10code.de>

* gpgme.h: [_WIN32] Removed ssize_t typedef.
* ath.h: [_WIN32] Added some (dummy) types.
* io.h: [_WIN32] include stdio.h.
* data.h: [_WIN32] Define EOPNOTSUPP.
* gpgme.c [_WIN32] (gpgme_set_locale): Disabled.

2004-12-12 Marcus Brinkmann <marcus@g10code.de>
* engine.c (_gpgme_set_engine_info): Fix assertion.

2004-12-11 Marcus Brinkmann  <marcus@g10code.de>

* util.h [HAVE_CONFIG_H && HAVE_TTYNAME_R] (ttyname_r): Define prototype.
* ttyname_r.c: New file.

2004-12-07 Marcus Brinkmann  <marcus@g10code.de>

* putc_unlocked.c, funopen.c: I just claim copyright on these files and change their license to LGPL, because they are totally trivial wrapper functions.
* isascii.c: Change copyright notice to the one from ctype/ctype.h in the GNU C Library (CVS Head 2004-10-10), where isascii is defined as a macro doing exactly the same as the function in this file.
* memrchr.c: Update from the GNU C Library (CVS Head 2001-07-06).
* stpcpy.c: Update from the GNU C Library (CVS Head 2004-10-10).
* ath.c, ath-compat.c, ath.h, ath-pth.c, ath-pth-compat.c, ath-pthread.c, ath-pthread-compat.c, context.h, conversion.c, data.c, data-compat.c, data-fd.c, data.h, data-mem.c, data-stream.c, data-user.c, debug.c, debug.h, decrypt.c, decrypt-verify.c, delete.c, edit.c, encrypt.c, encrypt-sign.c, engine-backend.h, engine.c, engine-gpgsm.c, engine.h, error.c, export.c, genkey.c, get-env.c, gpgme.c, gpgme.h, import.c, io.h, key.c, keylist.c, mkstatus, Makefile.am, ops.h, op-support.c, passphrase.c, posix-io.c, posix-sema.c, posix-util.c, progress.c, rungpg.c, sema.h, sign.c, signers.c, trust-item.c, trustlist.c, util.h, verify.c, version.c, w32-io.c, w32-sema.c, w32-util.c, wait.c, wait-global.c, wait.h, wait-private.c, wait-user.c: Change license to LGPL.

2004-12-07 Marcus Brinkmann  <marcus@g10code.de>

* libgpgme.vers (GPGME_1.1): New version.
* engine-backend.h (struct engine_ops): Add argument FILE_NAME to member get_version(). Add arguments FILE_NAME and HOME_DIR to member new(). Change return type of get_file_name and get_version to char *.
* engine-gpgsm.c (gpgsm_get_version): Change return type to char pointer. Do not cache result.
* gpg_get_version): Change return type to char pointer, and do not cache result.
* rungpg.c (struct engine_gpg): New member file_name.
* gpg_release): Free gpg->file_name.
(gpg_new): Take new arguments file_name and home_dir. Set the
--homedir argument if HOME_DIR is not NULL. Set gpg->file_name.
(start): Use gpg->file_name instead_gpgme_get_gpg_path, if set.
* engine.h (_gpgme_engine_info_copy, _gpgme_engine_info_release):
New prototypes.
(_gpgme_engine_new): Change first argument to gpgme_engine_info_t
info.
* engine.c: Include <assert.h>.
(gpgme_get_engine_info): Set *INFO within the lock. Move
ENGINE_INFO and ENGINE_INFO_LOCK to ....
(engine_info, engine_info_lock): ... here. New static variables.
(engine_get_version): Add file_name argument to
get_version invocation. Change return type to char pointer.
(gpgme_engine_check_version): Rewritten to free() the return value
of engine_get_version after using it.
(_gpgme_engine_info_release): New function.
(gpgme_get_engine_info): Rewritten.
(_gpgme_engine_info_copy): New function.
(_gpgme_set_engine_info): New function.
(gpgme_set_engine_info): New function.
(_gpgme_engine_new): Change first argument to gpgme_engine_info_t
info, and use that.
* gpgme.h (struct _gpgme_engine_info): Change type of file_name
and version to char * (remove the const). New member home_dir.
(gpgme_set_engine_info, gpgme_ctx_get_engine_info,
* context.h (struct gpgme_context): New member engine_info.
* gpgme.c (gpgme_new): Allocate CTX->engine_info.
(gpgme_release): Deallocate CTX->engine_info.
(gpgme_ctx_get_engine_info, gpgme_ctx_set_engine_info): New
functions.
* op-support.c (_gpgme_op_reset): Look for correct engine info and
pass it to _gpgme_engine_new.
* version.c (gpgme_check_version): Adjust to
_gpgme_compare_versions returning an int.
(_gpgme_compare_versions): Return an int value, not a const char
pointer.
* ops.h (_gpgme_compare_versions): Same for prototype.

2004-10-03 Marcus Brinkmann <marcus@g10code.de>

* verify.c (parse_trust): If no reason is provided, set
SIG->validity_reason to 0.
(calc_sig_summary): Set GPGME_SIGSUM_CRL_TOO_OLD if appropriate.

2004-10-22 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (map_assuan_error): Return 0 if ERR is 0.
(start): Call map_assuan_error on return value of assuan_write_line.

2004-10-05 Marcus Brinkmann <marcus@g10code.de>

* op-support.c (_gpgme_op_data_lookup): Use char pointer for pointer arithmetic.

2004-09-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.m4: Implement the --api-version check.

* rungpg.c (read_status): Move the polling of the output data pipe to just before removing the command fd, from just before adding it. This avoids buffering problems.

* data.c (_gpgme_data_inbound_handler): Use _gpgme_io_read, not read, to improve debug output.

2004-09-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (GPGME_IMPORT_NEW, GPGME_IMPORT_UID, GPGME_IMPORT_SIG, GPGME_IMPORT_SUBKEY, GPGME_IMPORT_SECRET, (GPGME_KEYLIST_MODE_LOCAL, GPGME_KEYLIST_MODERN_EXTERN, GPGME_KEYLIST_MODE_SIGS, GPGME_KEYLIST_MODE_VALIDATE): Change from enum to macros.
  (gpgme_keylist_mode_t): Define as unsigned int.
  (gpgme_key_t): Change type of keylist_mode to gpgme_keylist_mode_t.

2004-09-23 Marcus Brinkmann <marcus@g10code.de>

* data.c (_gpgme_data_outbound_handler): Close the file descriptor if we get an EPIPE.

* data-stream.c (stream_seek): Call ftello and return the current offset.
* data.h (struct gpgme_data): Change type of data.mem.offset to off_t.
* data.c (gpgme_data_seek): Check dh->cbs->seek callback, not read callback. If SEEK_CUR, adjust the offset by the pending buffer size. Clear pending buffer on success.

2004-09-14 Marcus Brinkmann <marcus@g10code.de>

* gpgme.m4: Add copyright notice.
2004-08-18 Marcus Brinkmann  <marcus@g10code.de>

* passphrase.c (_gpgme_passphrase_status_handler): Always run the status handler.

2004-08-17 Marcus Brinkmann  <marcus@g10code.de>

* rungpg.c (build_argv): Use --no-sk-comment, not --no-comment.

2004-06-23 Marcus Brinkmann  <marcus@g10code.de>

* key.c (_gpgme_key_append_name): Make sure tail points to the byte following the uid.
  (_gpgme_key_add_sig): Likewise. Don't use calloc, but malloc and memset.

2004-06-02 Marcus Brinkmann  <marcus@g10code.de>

* libgpgme.vers: Remove C-style comment, which is not supported by older binutils.

2004-05-21 Marcus Brinkmann  <marcus@g10code.de>

* gpgme-config.in (Options): Support --api-version.

* libgpgme.vers: List all gpgme symbols under version GPGME_1.0.

* decrypt.c (_gpgme_decrypt_status_handler): Fix last change.
  * verify.c (parse_error): Likewise.

* verify.c (parse_error): Do not skip location of where token.

* gpgme.h (gpgme_status_code_t): Add GPGME_STATUS_REVKEYSIG.
  * verify.c (_gpgme_verify_status_handler): Add handling of GPGME_STATUS_REVKEYSIG.
  (parse_trust): Likewise.

2004-05-21 Marcus Brinkmann  <marcus@g10code.de>

* gpgme.h (struct _gpgme_decrypt_result): New fields wrong_key_usage and _unused.
  * decrypt.c (_gpgme_decrypt_status_handler): Don't skip over character after a matched string, as in a protocol error this could skip over the trailing binary zero.
  Handle decrypt.keyusage error notifications.

* gpgme.h (struct _gpgme_key): New member keylist_mode.
  * keylist.c (keylist_colon_handler): Set the keylist_mode of KEY.
2004-04-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (struct _gpgme_signature): Change member WRONG_KEY_USAGE to unsigned int. Same for member _unused.

* keylist.c (set_mainkey_trust_info): Rewritten.
  (set_subkey_capability): Handle 'd' (disabled).
  (set_mainkey_capability): Rewritten.

2004-04-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.m4: Quote first argument to AC_DEFUN.

2004-04-21 Werner Koch <wk@gnupg.org>

* key.c (gpgme_key_unref): Allow passing NULL like free does.
  The rule of least surprise.

2004-04-15 Werner Koch <wk@gnupg.org>

* verify.c (prepare_new_sig, _gpgme_verify_status_handler): Remove unused result.signatures items.

* keylist.c (gpgme_get_key): Return an error if FPR is NULL.

2004-04-08 Werner Koch <wk@gnupg.org>

* verify.c (_gpgme_verify_status_handler): Ignore the error status if we can't process it.
* decrypt-verify.c (decrypt_verify_status_handler): Backed out yesterday's hack. It is not any longer required.

2004-04-07 Werner Koch <wk@gnupg.org>

* decrypt-verify.c (decrypt_verify_status_handler): Hack to cope with meaningless error codes from the verify status function.

2004-04-05 Werner Koch <wk@gnupg.org>

* gpgme.h: Add GPGME_STATUS_NEWSIG.

* verify.c (parse_error): Compare only the last part of the where token.
  (prepare_new_sig): New.
  (parse_new_sig): Use prepare_new_sig when required.
  (_gpgme_verify_status_handler): Handle STATUS_NEWSIG.

2004-03-23 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_new): Protect _only_ tty related code with isatty(). Submitted by Bernhard Herzog.

2004-03-11 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_new): Protect all tty related code with isatty().

* rungpg.c (gpg_cancel): Set GPG->fd_data_map to NULL after releasing it.
* engine-gpgsm.c (gpgsm_cancel): Only call assuan_disconnect if GPGSM->assuan_ctx is not NULL. Set it to NULL afterwards.

2004-03-07 Marcus Brinkmann <marcus@g10code.de>

* gpgme-config.in: Do not emit include and lib directory for prefix "/usr" or "".

2004-03-03 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (gpgsm_export_ext): Properly insert a space between patterns.

2004-02-18 Werner Koch <wk@gnupg.org>

* gpgme-config.in: Ignore setting of --prefix.

2004-02-25 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (gpg_cancel): New function.
  (gpg_release): Call it here.
  (_gpgme_engine_ops_gpg): Add it here.
* engine-gpgsm.c (gpgsm_cancel): Fix last change.

2004-02-24 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_cancel): New function.
* engine-backend.h (struct engine_ops): New member cancel.
* engine.h (_gpgme_engine_cancel): New prototype.
* engine.c (_gpgme_engine_cancel): New function.
* engine-gpgsm.c (_gpgme_engine_ops_gpgsm): Add new member cancel.
  (gpgsm_cancel): New function.
(gpgsm_release): Use it.
* rungpg.c (_gpgme_engine_ops_gpg): Add new member cancel.

2004-02-17 Werner Koch <wk@gnupg.org>

* gpgme.h: Add GPGME_KEYLIST_MODE_VALIDATE.
* engine-gpgsm.c (gpgsm_keylist): Send this to gpgsm.

2004-02-15 Werner Koch <wk@gnupg.org>

* memrchr.c (memrchr): Fixed implementation. Problem pointed out by Adriaan de Groot.

2004-02-01 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (build_argv): Use --no-comment, not --comment "".

* data-compat.c (gpgme_data_new_from_filepart): Call fseeko if available.
* data-stream.c (stream_seek): Likewise.

2004-01-16 Werner Koch <wk@gnupg.org>

* conversion.c (_gpgme_map_gnupg_error): Handle numerical codes as used by GnuPG 1.9.x

2004-01-13 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (struct _gpgme_key_sig): Fix comment on REVOKED.

2004-01-12 Werner Koch <wk@gnupg.org>

* sign.c: Include util.h for prototype of _gpgme_parse_timestamp.

2003-12-25 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (_GPGME_D_CLASS): Revert this change.
  (struct _gpgme_key_sig): For C++ compilers, rename class member to _obsolete_class. Add new member sig_class.
  (struct _gpgme_new_signature): Same here.
* key.c (gpgme_key_sig_get_ulong_attr): Use CERTSIG->sig_class, not CERTSIG->class.
* keylist.c (keylist_colon_handler): Likewise for KEYSIG, but keep setting KEYSIG->class, too. Rename variable CLASS to SIG_CLASS.
* sign.c (parse_sig_created): Set SIG->sig_class.

2003-12-22 Werner Koch <wk@gnupg.org>
* gpgme.h (_GPGME_D_CLASS): Kludge for C++ compatibility without changing the C API.

2003-11-19 Werner Koch <wk@gnupg.org>

* conversion.c (_gpgme_parse_timestamp): New.
(atoi_1, atoi_2, atoi_4): New.
* keylist.c (parse_timestamp): Removed. Changed all callers to use the new function.
* verify.c (parse_valid_sig): Ditto. Repalced the errno check.
* sign.c (parse_sig_created): Ditto.

2003-10-31 Werner Koch <wk@gnupg.org>

* keylist.c (parse_timestamp): Detect ISO 8601 timestamps and try to convert them.

2003-10-10 Marcus Brinkmann <marcus@g10code.de>

* genkey.c (get_key_parameter): Make a copy of the key parameters.
Submitted by Miguel Coca <e970095@zipi.fi.upm.es>.

2003-10-06 Marcus Brinkmann <marcus@g10code.de>

* data-compat.c: Include <sys/time.h> before <sys/stat.h> for broken systems.

* engine-gpgsm.c (map_assuan_error): If ERR is -1, return sensible error.

* posix-io.c (_gpgme_io_subsystem_init): Add function.
(_gpgme_io_spawn): Do not fixup signal handler here.
* version.c (do_subsystem_inits): Call _gpgme_io_subsystem_init.

* debug.c (debug_init): Drop const qualifier from E.

* ath.h (struct ath_ops): Make ADDR argument of CONNECT prototype const.
(ath_connect): Make ADDR argument const.
* ath-pthread.c (ath_connect): Likewise.
* ath-pth.c (ath_connect): Likewise.
* ath-compat.c (ath_connect): Likewise.
* ath.c (ath_connect): Likewise.

* ath.h [HAVE_SYS_SELECT_H]: Include <sys/select.h> for fd_set.
[!HAVE_SYS_SELECT_H]: Include <sys/time.h>.
* conversion.c (_gpgme_hextobyte): Drop "unsigned" from type of SRC argument.
* util.h (_gpgme_hextobyte): Likewise for prototype.

* gpgme.h: Remove trailing comma in enum.

* rungpg.c: Do not include <time.h>, <sys/time.h>, <sys/types.h>, <signal.h>, <fcntl.h>, or "unistd.h".

2003-10-02 Marcus Brinkmann <marcus@g10code.de>

* engine-backend.h (struct engine_ops): Add argument TYPE.
* engine.c (_gpgme_engine_op_edit): Likewise.
* engine.h: Likewise.
* rungpg.c (gpg>Edit): Likewise. Use it.
* edit.c (edit_start): Likewise. Pass it on.
(gpgme_op_edit_start, gpgme_op_edit): Likewise.
(gpgme_op_card_edit_start, gpgme_op_card_edit): New functions.

2003-09-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (gpg_strerror_r): Change prototype to match gpg_strerror_r change.
* error.c (gpg_strerror_r): Likewise, also update implementation.

* gpgme.c (gpgme_hash_algo_name): Change name of RMD160 to RIPEMD160, name of TIGER to TIGER192, name of CRC32-RFC1510 to CRC32RFC1510, and name of CRC24-RFC2440 to CRC24RFC2440.

2003-09-14 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h: Add prototype for gpgme_set_locale.

* gpgme.h: Define macro _GPGME_INLINE depending on the compiler characteristics and use that instead __inline__.

* context.h (struct gpgme_context): New members lc_ctype and lc_messages.
* gpgme.c: Include <locale.h>.
(def_lc_lock, def_lc_ctype, def_lc_messages): New static variables.
(gpgme_set_locale): New function.
* engine.c (_gpgme_engine_new): Add arguments lc_ctype and lc_messages.
* engine.h (_gpgme_engine_new): Likewise.
* engine-gpgsm.c (gpgsm_new): Likewise.
* rungpg.c (gpg_new): Likewise.
* engine-backend.h (struct engine_ops): Likewise to NEW.
* op-support.c (_gpgme_op_reset): Likewise to invocation of _gpgme_engine_new.

2003-09-13 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (gpgme_strerror_r): New prototype.
* error.c (gpgme_strerror_r): New function.

* util.h (_gpgme_getenv): Add prototype.
* Makefile.am (libgpgme_real_la_SOURCES): Add get-env.c.
* rungpg.c (build_argv): Use _gpgme_getenv.
* debug.c (debug_init): Likewise.
* engine-gpgsm.c (gpgsm_new): Like wise. (gpgsm_new): Use ttyname_r.
* w32-io.c (_gpgme_io_spawn): Disable debugging for now.

2003-09-03 Marcus Brinkmann <marcus@g10code.de>

* gpgme-config.in: Use $libdir, not @libdir@, for the echo command.

* gpgme-config.in: Rewritten.
* gpgme.m4: Rewritten.

2003-08-19 Marcus Brinkmann <marcus@g10code.de>

The ath files (ath.h, ath.c, ath-pth.c, ath-pthread.c, ath-compat.c, ath-pth-compat.c and ath-pthread-compat.c) have been updated to have better thread support, and the Makefile.am was changed to reflect that.

* util.h ![HAVE_FOPENCookie]: Remove fopencookie declaration.
* engine-gpgsm.c (gpgsm_assuan_simple_command): Set ERR to return value of status_fnc.
* rungpg.c (start): Return SAVED_ERRNO, not errno.

2003-08-18 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (start): Use saved_errno instead errno.

2003-08-18 Marcus Brinkmann <marcus@g10code.de>

* funopen.c, putc_unlocked.c, isascll.c, memchr.c: New files.
* fopencookie.c: File removed.

2003-08-15 Marcus Brinkmann <marcus@g10code.de>
* gpgme-config.in: Put gpg-error related flags after gpgme's.

2003-08-14 Marcus Brinkmann  <marcus@g10code.de>

* gpgme.h (struct _gpgme_new_signature): Rename member CLASS to _OBSOLETE_CLASS, add member CLASS with type unsigned int.
* sign.c (parse_sig_created): Also set SIG->_unused_class for backward compatibility.

2003-08-04 Marcus Brinkmann  <marcus@g10code.de>

* verify.c (parse_new_sig): Fix status parsing case.

2003-07-31 Marcus Brinkmann  <marcus@g10code.de>

* gpgme.h (struct _gpgme_subkey): Add flag CAN_AUTHENTICATE. LowerUNUSED to 23 bits.
  (struct _gpgme_key): Likewise.
* keylist.c (set_mainkey_capability): Support 'a' and 'A'.
  (set_subkey_capability): Support 'a'.

* keylist.c (gpgme_get_key): Check if there is more than one key listed, and return GPG_ERR_AMBIGUOUS_NAME in that case.

* util.h (_gpgme_decode_c_string): Change type of LEN argument to size_t.
  (_gpgme_decode_percent_string): Likewise.
* conversion.c (_gpgme_decode_c_string): Likewise.
  (_gpgme_decode_percent_string): Likewise.
  (_gpgme_map_gnupg_error): Change type of I to unsigned int.
* signers.c (gpgme_signers_clear): Likewise.
  (gpgme_signers_enum): New unsigned variable SEQNO, set to SEQ. Use SEQNO instead SEQ.
* wait.c (fd_table_put): Change type of I and J to unsigned int.
* wait-global.c (_gpgme_wait_global_event_cb): Change type of IDX to unsigned int.
  (gpgme_wait): Change type of I and IDX to unsigned int.
* wait-private.c (_gpgme_wait_on_condition): Change type of IDX and I to unsigned int.
* posix-io.c (_gpgme_io_close): Cast return value of macro DIM to int to suppress gcc warning.
  (_gpgme_io_set_close_notify): Likewise.
  (_gpgme_io_select): Change type of I to unsigned int.
* engine.c (gpgme_get_engine_info): Change type of PROTO to unsigned int.
* wait-user.c (_gpgme_user_io_cb_handler): Change type of IDX and I to unsigned int.
* decrypt-verify.c (decrypt_verify_status_handler): Expand silly and wrong expression.
* encrypt-sign.c (encrypt_sign_status_handler): Likewise.
* encrypt.c (encrypt_sym_status_handler): Likewise.
* sign.c (sign_status_handler): Likewise.
* verify.c (verify_status_handler): Likewise.
* decrypt.c (decrypt_status_handler): Likewise.

* engine.c (gpgme_get_engine_info): Initialize NULL.

* gpgme-config.in (gpg_error_libs): Quote GPG_ERROR_CFLAGS and GPG_ERROR_LIBS when setting the corresponding variables.
  Reported by Stphane Corthsy.

* engine-gpgsm.c (set_recipients): Move declaration of NEWLEN to the beginning of the block.

* data-mem.c (mem_write): Copy original buffer content.

* gpgme.h (gpgme_user_ids_release, gpgme_user_ids_append): Remove prototypes.

* Makefile.am (AM_CPPFLAGS): Add @GPG_ERROR_CFLAGS@.
* gpgme-config.in (gpg_error_libs, gpg_error_cflags): New variables.
  Print them.

* op-support.c (_gpgme_parse_inv_userid): Rename to _gpgme_parse_inv_recp and change to new datatype.
* ops.h (_gpgme_parse_inv_key): Fix prototype.
* gpgme.h (struct _gpgme_invalid_user_id): Rename to __gpgme_invalid_key. Rename field ID to KEY.
  (gpgme_invalid_user_id_t): Rename to gpgme_invalid_key_t.
  (struct _gpgme_op_encrypt_result): Here, too.
  (struct _gpgme_op_sign_result): Likewise.
* encrypt.c (struct op_data): Likewise.
  (release_op_data): Likewise.
* sign.c (struct op_data): Likewise.
  (release_op_data): Likewise.

* posix-io.c (_gpgme_io_read): Save errno across debug calls.
  (_gpgme_io_write): Likewise.
  (_gpgme_io_pipe): Likewise.
  (_gpgme_io_select): Likewise.

* rungpg.c (struct engine_gpg): Remove arg_error.
  (add_arg): Don't set arg_error.
  (add_data): Likewise.
  (start): Don't check arg_error.
  (gpg_new): Check return value of add_arg.
* verify.c (parse_notation): Free allocated memory at error.

2003-06-05 Marcus Brinkmann <marcus@g10code.de>

Everywhere: Use libgpg-error error codes.

* Makefile.am (EXTRA_DIST): Remove mkerrors.
  (BUILT_SOURCES): Remove errors.c.
  (MOSTLYCLEANFILES): Likewise.
  (libgpgme_la_SOURCES): Likewise. Add error.c.
  (errors.c): Remove target.
* mkerrors: File removed.
* error.c: New file.

* gpgme.h (gpgme_error.t): Change to type gpg_error_t.
  (gpgme_err_code_t, gpgme_err_source_t): New types.
  (gpgme_err_code, gpgme_err_source, gpgme_error, gpgme_err_make):
    New static inline functions.
  (gpgme_strsource, gpgme_err_code_from_errno,
   gpgme_err_code_to_errno, gpgme_err_make_from_errno,
   gpgme_error_from_errno): New prototypes.

2003-05-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (gpgme_op_export_start): Change second arg to const char *.
  (gpgme_op_export): Likewise.
  (gpgme_op_export_ext_start): New prototype.
  (gpgme_op_export_ext): Likewise.
* engine.h: Likewise for _gpgme_engine_op_export and
  _gpgme_engine_op_export_ext.
* engine-backend.h (struct engine_ops): Change second argument of
  prototype of export to const char *, and add reserved int as
  third argument. Add prototype for export_ext.
* engine.c (_gpgme_engine_op_export_ext): New function.
  (_gpgme_engine_op_export): Change second argument of prototype of
export to const char *, and add reserved int as third argument.
* rungpg.c (gpg_export): Change second argument of prototype of
export to const char *, and add reserved int as third argument.
(gpg_export_ext): New function.
(gpg_keylist_ext): Break loop at error.
(_gpgme_engine_ops_gpg): Add gpg_export_ext.
* engine-gpgsm.c (gpgsm_export): Change second argument of
prototype of export to const char *, and add reserved int as
third argument.
(gpgsm_export_ext): New function.
(_gpgme_engine_ops_gpgsm): Add gpgsm_export_ext.
* export.c (export_start): Change second argument of prototype of
export to const char *, and add reserved int as third argument.
(gpgme_op_export_start): Likewise.
(export_ext_start): New function.
(gpgme_op_export_ext_start): Likewise.
(gpgme_op_export_ext): Likewise.

* gpgme.h (gpgme_keylist_mode_t): New type for anonymous enum.
(gpgme_sigsum_t): New type for anonymous enum.

* encrypt-sign.c (encrypt_sign_start): Check for errors earlier,
and return an error if RECP is not set.

* Makefile.am (libgpgme_la_SOURCES): Remove user-id.c.
* user-id.c: Remove file.
* ops.h: Remove prototype for _gpgme_user_ids_all_valid.
* gpgme.h (gpgme_encrypt_flags_t): New type.
(gpgme_op_encrypt_start): Change second parameter to type
gpgme_key_t[], and add third parameter.
(gpgme_op_encrypt): Likewise.
(gpgme_op_encrypt_sign_start): Likewise.
(gpgme_op_encrypt_sign): Likewise.
* encrypt.c (encrypt_start): Likewise.
(gpgme_op_encrypt_start): Likewise.
(gpgme_op_encrypt): Likewise. Pass flags to engine.
* encrypt-sign.c (encrypt_sign_start): Likewise.
(gpgme_op_encrypt_sign_start): Likewise.
(gpgme_op_encrypt_sign): Likewise.
* engine-backend.h (struct engine_ops): Likewise for prototypes of
encrypt and encrypt_sign.
* engine.h: Likewise for prototypes of _gpgme_engine_op_encrypt
and _gpgme_engine_op_encrypt_sign.
* engine.c (_gpgme_engine_op_encrypt): Likewise.
(_gpgme_engine_op_encrypt_sign): Likewise.
* rungpg.c (gpg_encrypt): Likewise.
(gpg_encrypt_sign): Likewise.
* rungpg.c (gpg_encrypt): Check flags for always trust option.
* engine-gpgsm.c (gpgsm_encrypt): Likewise.
  (set_recipients): Rewritten to use keys instead user IDs.
* rungpg.c (append_args_from_recipients): Rewritten to use keys instead user IDs.
* encrypt.c (_gpgme_encrypt_status_handler): Change errors returned to GPGME_Invalid_Key and GPGME_General_Error.

2003-05-28 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c: Rename GpgsmObject to engine_gpgsm_t.
  (struct gpgsm_object_s): Rename to struct engine_gpgsm.
* rungpg.c: Rename GpgObject to engine_gpg_t.
  (struct gpg_object_s): Rename to struct engine_gpg.

* context.h (struct gpgme_context): Change EngineObject to engine_object_t.
  (enum ctx_op_data_type): Rename to ctx_op_data_id_t.
  (ctx_op_data_t): New type.
  (struct gpgme_context): Use it.
* ops.h (_gpgme_op_data_lookup): Use new type name.
  * op-support.c (_gpgme_op_data_lookup): Likewise.
* engine.c: Rename EngineObject to engine_t in the file. Also EngineStatusHandler to engine_status_handler_t,
  EngineCommandHandler to engine_command_handler_t and EngineColonLineHandler to engine_colon_line_handler.
* rungpg.c (start): Likewise.
  * engine-gpgsm.c: Likewise.
* engine-backend.h (struct engine_ops): Likewise
* engine.h (struct engine_object_s): Rename to struct engine.
  (EngineObject): Rename to engine_t. Also everywhere else in the file.
  (EngineStatusHandler): Rename to engine_status_handler_t.
  (EngineColonLineHandler): Rename to engine_colon_line_handler_t.
  (EngineCommandHandler): Rename to engine_command_handler_t.

* engine-gpgsm.c (gpgsm_export): Fix bug in last change.

* Makefile.am (libgpgme_la_SOURCES): Remove recipient.c, add user-id.c.
* gpgme.h (gpgme_recipients_t): Removed.
  (gpgme_recipients_new, gpgme_recipients_release,
  gpgme_recipients_add_name,
  gpgme_recipients_add_name_with_validity, gpgme_recipients_count,
  gpgme_recipients_enum_open, gpgme_recipients_enum_read,
  gpgme_recipients_enum_close): Removed.
  (gpgme_op_encrypt, gpgme_op_encrypt_start, gpgme_op_encrypt_sign,
  gpgme_op_encrypt_sign_start, gpgme_op_export_start,
  gpgme_op_export): Change second argument to gpgme_user_id_t.
(gpgme_user_ids_release): New prototype.
(gpgme_user_ids_append): Likewise.
* ops.h (_gpgme_recipients_all_valid): Remove.
(_gpgme_user_ids_all_valid): Add.
* context.h (struct gpgme_recipients): Removed.
* user-id.c: New file.
* recipient.c: Removed file.
* rungpg.c (append_args_from_recipients): Change last arg to
gpgme_user_id_t. Reimplement.
(gpg_encrypt): Change second arg to gpgme_user_id_t.
(gpg_encrypt_sign): Likewise.
(gpg_export): Likewise. Rewrite user ID list code.
* engine.c (_gpgme_engine_op_encrypt): Change second arg to
gpgme_user_id_t.
(_gpgme_engine_op_encrypt_sign): Likewise.
(_gpgme_engine_op_export): Likewise.
* engine.h (_gpgme_engine_op_encrypt, _gpgme_engine_op_encrypt_sign,
_gpgme_engine_op_export): Likewise.
* engine-gpgsm.c (set_recipients): Likewise. Rewrite loop code.
(gpgsm_encrypt): Likewise.
(gpgsm_export): Likewise.
* engine-backend.h (struct engine_ops): Likewise for members
ENCRYPT, ENCRYPT_SIGN and EXPORT.
* export.c (export_start, gpgme_op_export_start, gpgme_op_export):
Likewise.
* encrypt.c (encrypt_start): Likewise. Don’t check for count of
recipients.
(gpgme_op_encrypt_start): Likewise.
(gpgme_op_encrypt): Likewise.
* encrypt-sign.c (encrypt_sign_start): Likewise.
(gpgme_op_encrypt_sign): Likewise.
(gpgme_op_encrypt_sign_start): Likewise.

2003-05-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (struct _gpgme_op_import_result): Add skipped_new_keys.
* import.c (parse_import_res): Add skipped_new_keys parser.

* op-support.c (_gpgme_parse_inv_userid): Add missing break
statements.
* encrypt.c (gpgme_op_encrypt): Use gpgme_error_t instead of int.

2003-05-27 Marcus Brinkmann <marcus@g10code.de>

* encrypt.c (gpgme_op_encrypt_result): Use intermediate variable
HOOK to avoid compiler warning. Don’t ask, you don’t want to know.
(_gpgme_encrypt_status_handler): Likewise.
(_gpgme_op_encrypt_init_result): Likewise.
* decrypt.c (gpgme_op_decrypt_result): Likewise.
  (_gpgme_decrypt_status_handler): Likewise.
  (_gpgme_op_decrypt_init_result): Likewise.
* verify.c (gpgme_op_verify_result): Likewise.
  (_gpgme_verify_status_handler): Likewise.
  (_gpgme_op_verify_init_result): Likewise.
* edit.c (edit_status_handler): Likewise.
  (command_handler): Likewise.
  (edit_start): Likewise.
* genkey.c (gpgme_op_genkey_result): Likewise.
  (genkey_status_handler): Likewise.
  (genkey_start): Likewise.
* import.c (gpgme_op_import_result): Likewise.
  (import_status_handler): Likewise.
  (_gpgme_op_import_start): Likewise.
* trustlist.c (gpgme_op_trustlist_next): Likewise.
  (_gpgme_op_trustlist_event_cb): Likewise.
  (gpgme_op_trustlist_start): Likewise.
* keylist.c (gpgme_op_keylist_result): Likewise.
  (keylist_status_handler): Likewise.
  (keylist_start): Likewise.
  (_gpgme_op_keylist_event_cb): Likewise.
  (gpgme_op_keylist_start): Likewise.
  (gpgme_op_keylist_ext_start): Likewise.
  (gpgme_op_keylist_next): Likewise.
* passphrase.c (_gpgme_passphrase_status_handler): Likewise.
  (_gpgme_passphrase_command_handler_internal): Likewise.
* sign.c (gpgme_op_sign_result): Likewise.
  (_gpgme_sign_status_handler): Likewise.
  (_gpgme_op_sign_init_result): Likewise.

* passphrase.c (_gpgme_passphrase_command_handler_internal): Fix
  access to pointer type.

2003-05-26 Marcus Brinkmann <marcus@g10code.de>

* engine.h (EngineCommandHandler): Change last argument to int fd.
* gpgme.h (gpgme_passphrase_cb_t): Rewritten to take parts of the
  description and fd.
  (gpgme_edit_cb_t): Change last argument to int fd.
* ops.h (_gpgme_passphrase_command_handler_internal): New prototype.
* passphrase.c: Include <assert.h>.
  (op_data_t): Rename userid_hint to uid_hint, remove last_pw_handle.
  (release_op_data): Check values before calling free.
  (_gpgme_passphrase_status_handler): Likewise.
  (_gpgme_passphrase_command_handler_internal): New function.
  (_gpgme_passphrase_command_handler): Rewritten.
* edit.c (edit_status_handler): Pass -1 as fd argument.
(command_handler): Update prototype. New variable processed. Use it to store return value of
_gpgme_passphrase_command_handler_internal which is now used instead _gpgme_passphrase_command_handler. Use it also to check if we should call the user's edit function. Pass fd to user's edit function.

* rungpg.c (struct gpg_object_s): Change type of cmd.cb_data to void *.

(gpg_release): Check value before calling free. Do not release cmd.cb_data.

(command_cb): Function removed.

(command_handler): New function. Thus we don't use a data object for command handler stuff anymore, but handle it directly. This allows proper error reporting (cancel of passphrase requests, for example). Also all callbacks work via direct writes to the file descriptor (so that passphrases are not kept in insecure memory).

(gpg_set_command_handler): Rewritten to use even more ugly hacks.

(read_status): Check cmd.keyword before calling free. Install command_handler as the I/O callback handler with GPG as private data.

* rungpg.c (gpg_new): Add --enable-progress-filter to gpg invocation.

* decrypt-verify.c (_gpgme_op_decrypt_verify_start): Rename to decrypt_verify_start.

(gpgme_op_decrypt_verify_start): Call decrypt_verify_start.

(gpgme_op_decrypt_verify): Likewise.

* verify.c (verify_status_handler): New function that also calls progress status handler.

(_gpgme_op_verify_start): Set status handler to verify_status_handler. Rename to (verify_start).

(gpgme_op_verify_start): Call verify.start.

(gpgme_op_verify): Likewise.

* encrypt.c (encrypt_status_handler): New function.

(_gpgme_encrypt_sym_status_handler): Call progress status handler. Make static. Rename to encrypt_sym_status_handler.

(encrypt_start): Set status handler to encrypt_sym_status_handler or encrypt_status_handler.

* sign.c (sign_status_handler): New function.

(sign_start): Set status handler to sign_status_handler.

* decrypt.c (decrypt_status_handler): New function that also calls progress status handler.

(decrypt_start): Set status handler to decrypt_status_handler.

* encrypt-sign.c (encrypt_sign_status_handler): Likewise.

* decrypt-verify.c (decrypt_verify_status_handler): Call _gpgme_progress_status_handler.

* conversion.c (_gpgme_decode_e_string): Add missing break
* recipient.c (gpgme_recipients_add_name_with_validity): Add one to buffer to allocate.

2003-05-19 Marcus Brinkmann <marcus@g10code.de>

* verify.c (parse_new_sig): Fix ERRSIG case.
Submitted by Benjamin Lee <benjaminlee@users.sf.net>.

2003-05-18 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h: The following types are renamed. The old name is kept as a deprecated typedef.
  (GpgmeCtx): Rename to gpgme_ctx_t.
  (GpgmeData): Rename to gpgme_data_t.
  (GpgmeRecipients): Rename to gpgme_recipients_t.
  (GpgmeError): Rename to gpgme_error_t.
  (GpgmeDataEncoding): Rename to gpgme_data_encoding_t.
  (GpgmePubKeyAlgo): Rename to gpgme_pubkey_algo_t.
  (GpgmeHashAlgo): Rename to gpgme_hash_algo_t.
  (GpgmeSigStat): Rename to gpgme_sig_stat_t.
  (GpgmeSigMode): Rename to gpgme_sig_mode_t.
  (GpgmeAttr): Rename to gpgme_attr_t.
  (GpgmeValidity): Rename to gpgme_validity_t.
  (GpgmeProtocol): Rename to gpgme_protocol_t.
  (GpgmeStatusCode): Rename to gpgme_status_code_t.
  (GpgmeEngineInfo): Rename to gpgme_engine_info_t.
  (GpgmeSubkey): Rename to gpgme_subkey_t.
  (GpgmeKeySig): Rename to gpgme_keysig_t.
  (GpgmeUserID): Rename to gpgme_user_id_t.
  (GpgmePassphraseCb): Rename to gpgme_passphrase_cb_t.
  (GpgmeProgressCb): Rename to gpgme_progress_cb_t.
  (GpgmeEditCb): Rename to gpgme_edit_cb_t.
  (GpgmeIOCb): Rename to gpgme_io_cb_t.
  (GpgmeRegisterIOCb): Rename to gpgme_register_io_cb_t.
  (GpgmeRemoveIOCb): Rename to gpgme_remove_io_cb_t.
  (GpgmeEventIO): Rename to gpgme_event_io_t.
  (GpgmeEventIOCb): Rename to gpgme_event_io_cb_t.
  (GpgmeIOCs): Rename to gpgme_io_cbs.
  (gpgme_io_cbs_t): New type.
  (GpgmeDataReadCb): Rename to gpgme_data_read_cb_t.
  (GpgmeDataWriteCb): Rename to gpgme_data_write_cb_t.
  (GpgmeDataSeekCb): Rename to gpgme_data_seek_cb_t.
  (GpgmeDataReleaseCb): Rename to gpgme_data_release_cb_t.
  (GpgmeDataCbs): Rename to gpgme_data_cbs.
  (gpgme_data_cbs_t): New type.
  (GpgmeInvalidUserID): Rename to gpgme_invalid_user_id_t.
(GpgmeEncryptResult): Rename to gpgme_encrypt_result_t.
(GpgmeDecryptResult): Rename to gpgme_decrypt_result_t.
(GpgmeNewSignature): Rename to gpgme_new_signature_t.
(GpgmeSignResult): Rename to gpgme_sign_result_t.
(GpgmeSigNotation): Rename to gpgme_sig_notation_t.
(GpgmeSignature): Rename to gpgme_signature_t.
(GpgmeVerifyResult): Rename to gpgme_verify_result_t.
(GpgmeImportStatus): Rename to gpgme_import_status_t.
(GpgmeImportResult): Rename to gpgme_import_result_t.
(GpgmeGenKeyResult): Rename to gpgme_genkey_result_t.
(GpgmeKeyListResult): Rename to gpgme_keylist_result_t.
(GpgmeTrustItem): Rename to gpgme_trust_item_t.

* gpgme.h (gpgme_deprecated_error_t): New type, swallowing macros
GPGME_No_Recipients, GPGME_Invalid_Recipient and
GPGME_No_Passphrase.
* data.h (struct gpgme_data_s): Rename to struct gpgme_data.
* context.h (struct gpgme_context_s): Rename to struct
  gpgme_context.
(struct gpgme_recipients_s): Rename to gpgme_recipients.

2003-05-18 Marcus Brinkmann <marcus@g10code.de>

* keylist.c (finish_key): Clear OPD->tmp_uid.

2003-05-18 Marcus Brinkmann <marcus@g10code.de>

* verify.c (_gpgme_verify_status_handler): Return GPGME_No_Data
  for NODATA status without signatures.

2003-05-05 Marcus Brinkmann <marcus@g10code.de>

* key.c (_gpgme_key_append_name): Use decoded string to parse user id.
  (_gpgme_key_add_sig): Likewise.

2003-05-04 Marcus Brinkmann <marcus@g10code.de>

* context.h (struct gpgme_context_s): Remove member op_info.

* key.c (_gpgme_key_add_sig): Initialize SIG->uid.

* gpgme.h (GpgmeError): Add deprecated values for
  GPGME_Invalid_Type and GPGME_Invalid_Mode.

2003-04-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (gpgme_get_op_info): Remove prototype.
* ops.h (_gpgme_set_op_info,
  _gpgme_data_release_and_return_string, _gpgme_data_get_as_string,
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_gpgme_data_append, _gpgme_data_append_string,
_gpgme_data_append_string_for_xml, _gpgme_data_append_for_xml,
_gpgme_data_append_percentstring_for_xml): Likewise.
(gpgme_progress_status_handler): Change first arg to void *.
* progress.c (_gpgme_progress_status_handler): Likewise.
* conversion.c: Do not include <string.h>, <errno.h>, <ctype.h>,
and <sys/types.h>, but <string.h>.
(_gpgme_data_append): Remove function.
(_gpgme_data_append_string): Likewise.
(_gpgme_data_append_for_xml): Likewise.
(_gpgme_data_append_string_for_xml): Likewise.
(_gpgme_data_append_percentstring_for_xml): Likewise.
* data-mem.c (_gpgme_data_get_as_string): Likewise.
(_gpgme_data_release_and_return_string): Likewise.
* gpgme.c (gpgme_get_op_info): Likewise.
(_gpgme_set_op_info): Likewise.

* gpgme.h (struct _gpgme_key): New structure.
(GpgmeKey): Define using _gpgme_key.
(struct _gpgme_subkey): New structure.
(GpgmeSubKey): New type.
(struct _gpgme_key_sig): New structure.
(GpgmeKeySig): New type.
(struct _gpgme_user_id): New structure.
(GpgmeUserID): New type.
(struct _gpgme_op_keylist_result): New structure.
(GpgmeOpKeylistResult): New type.
(gpgme_op_keylist_result): New function.
(gpgme_key_get_as_xml): Remove prototype.
* context.h (struct gpgme_context_s): Remove members tmp_key,
tmp_uid, key_cond and key_queue.
(struct key_queue_item_s): Remove structure.
(struct user_id_s): Remove structure.
(struct gpgme_recipients_s): Replace with simple
GpgmeUserID list.
* gpgme.c (gpgme_release): Do not release CTX->tmp_key.
* ops.h (_gpgme_key_add_subkey, _gpgme_key_append_name,
_gpgme_key_add_sig, _gpgme_trust_item_new): New prototypes.
* rungpg.c (command_cb): Return GpgmeError instead int.
New variable ERR. Use it to hold return value of cmd handler.
(gpg_delete): Access fingerprint of key directly.
(append_args_from_signers): Likewise.
(gpg_edit): Likewise.
(append_args_from_recipients): Use GpgmeUserID for recipient list.
* engine-gpgsm.c: Do not include "key.h".
(gpgsm_delete): Access fingerprint of key directly.
(gpgsm_sign): Likewise.
(set_recipients): Use GpgmeUserID for recipients. Invert invalid
user ID flag.
* key.h: File removed.
* key.c: Completely reworked to use exposed GpgmeKey data types.
* keylist.c: Likewise.
* recipient.c: Completely reworked to use GpgmeUserID.

2003-04-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (gpgme_get_key): Remove force_update argument.
* key-cache.c: File removed.
* Makefile.am (libgpgme_la_SOURCES): Remove key-cache.c.
* ops.h (_gpgme_key_cache_add, _gpgme_key_cache_get): Remove prototypes.
* keylist.c (_gpgme_op_keylist_event_cb): Don't call
  _gpgme_key_cache_add.
(gpgme_get_key): New function.
* verify.c (gpgme_get_sig_key): Remove last argument to
  gpgme_get_key invocation.

* gpgme.h (struct _gpgme_trust_item): New structure.
  (GpgmeTrustItem): New type.
  (gpgme_trust_item_ref, gpgme_trust_item_unref): New prototypes.
* context.h (struct trust_queue_item_s): Remove structure.
  (struct gpgme_context_s): Remove trust_queue member.
* Makefile.am (libgpgme_la_SOURCES): Add trust-item.c.
* trust-item.c: New file.
* trustlist.c: Do not include <stdio.h> or <time.h>, but
  "gpgme.h".
  (struct trust_queue_item_s): Change to new type op_data_t.
  (trust_status_handler): Change first argument to void *.
  (trustColon_handler): Likewise.
  (_gpgme_op_trustlist_event_cb): Use op_data_t type.
  (gpgme_op_trustlist_start): Use op_data_t and rework error
  handling.
  (gpgme_op_trustlist_next): Use op_data_t.
  (gpgme_trust_item_release): Remove function.
  (gpgme_trust_item_get_string_attr): Likewise.
  (gpgme_trust_item_get_int_attr): Likewise.

* verify.c (calc_sig_summary): Do not set GPGME_SIGSUM_SYS_ERROR
  for bad signatures.

2003-04-28 Marcus Brinkmann <marcus@g10code.de>

* context.h: Remove OPDATA_VERIFY_COLLECTING.
  (struct gpgme_context_s): Remove member notation.
* gpgme.h: Make enum for GPGME_KEYLIST_MODE_ * values.
* gpgme.h (struct _gpgme_sig_notation): New structure.
  (GpgmeSigNotation): New type.
  (struct _gpgme_signature): New structure.
  (GpgmeSignature): New type.
  (struct _gpgme_op_verify_result): New structure.
  (GpgmeVerifyResult): New type.
  (gpgme_op_verify_result): New prototype.
  (gpgme_get_notation): Remove prototype.
  * ops.h (_gpgme_op_verify_init_result): New prototype.
  (_gpgme_verify_status_handler): Change first argument to void *.
  * util.h (_gpgme_decode_percent_string, _gpgme_map_gnupg_error):
    New prototypes.
  * conversion.c (_gpgme_decode_percent_string): New function.
  (gnupg_errors): New static global.
  (_gpgme_map_gnupg_error): New function.
  * gpgme.c (gpgme_release): Don't release CTX->notation.
  (gpgme_get_notation): Remove function.
  * decrypt-verify.c (_gpgme_op_decrypt_verify_start): Call
    _gpgme_op_verify_init_result.
  * verify.c: Do not include <stdio.h>, <assert.h> and "key.h", but
do include "gpgme.h".
  (struct verify_result): Replace with ...
  (op_data_t): ... this type.
  (release_verify_result): Remove function.
  (release_op_data): New function.
  (is_token): Remove function.
  (skip_token): Remove function.
  (copy_token): Remove function.
  (gpgme_op_verify_result): New function.
  (calc_sig_summary): Rewritten.
  (finish_sig): Remove function.
  (parse_new_sig): New function.
  (parse_valid_sig): New function.
  (parse_notation): New function.
  (parse_trust): New function.
  (parse_error): New function.
  (_gpgme_verify_status_handler): Rewritten. Change first argument
to void *.
  (_gpgme_op_verify_start): Rework error handling. Call
    _gpgme_op_verify_init_result.
  (gpgme_op_verify): Do not release or clear CTX->notation.
  (gpgme_get_sig_status): Rewritten.
  (gpgme_get_sig_string_attr): Likewise.
  (gpgme_get_sig_ulong_attr): Likewise.
  (gpgme_get_sig_key): Likewise.

* gpgme.h (struct _gpgme_decrypt_result): New structure.
  (GpgmeDecryptResult): New type.
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(gpgme_op_decrypt_result): New prototype.
* ops.h (_gpgme_op_decrypt_init_result): New prototype.
(_gpgme_decrypt_status_handler): Fix prototype.
(_gpgme_decrypt_start): Remove prototype.
* decrypt-verify.c: Do not include <stdio.h>, <stdlib.h>,
<string.h> and <assert.h>, "util.h" and "context.h", but
"gpgme.h".
(decrypt_verify_status_handler): Change first argument to void *,
and rework error handling.
(_gpgme_op_decrypt_verify_start): New function.
(gpgme_op_decrypt_verify_start): Rewrite using
_gpgme_op_decrypt_verify_start.
(gpgme_op_decrypt_verify): Likewise.
* decrypt.c: Include <string.h>, "gpgme.h" and "util.h".
(struct decrypt_result): Change to typedef op_data_t, rewritten.
(is_token): Remove function.
(release_op_data): New function.
(skip_token): Remove function.
(gpgme_op_decrypt_result): New function.
(_gpgme_decrypt_status_handler): Change first argument to void *.
Rework error handling.
(_gpgme_decrypt_start): Rename to ...
(decrypt_start): ... this. Call _gpgme_op_decrypt_init_result.
(_gpgme_decrypt_init_result): New function.
(gpgme_op_decrypt_start): Use decrypt_start.
(gpgme_op_decrypt): Likewise.

2003-04-27  Marcus Brinkmann  <marcus@g10code.de>

* encrypt-sign.c: Do not include <stddef.h>, <stdio.h>,
<stdlib.h>, <string.h>, <assert.h> and "util.h", but "gpgme.h".
(_gpgme_op_encrypt_sign_start): Rename to ...
(encrypt_sign_start): ... this.
(gpgme_op_encrypt_sign_start): Use encrypt_sign_start, not
_gpgme_op_encrypt_sign_start.
(gpgme_op_encrypt_sign): Likewise.

* gpgme.h (GpgmeEncryptResult): New data type.
(gpgme_op_encrypt_result): New prototype.
* ops.h (_gpgme_op_encrypt_init_result): New prototype.
(_gpgme_encrypt_status_handler): Fix prototype.
* encrypt-sign.c (_gpgme_op_encrypt_sign_start): Call
_gpgme_op_encrypt_init_result.
* encrypt.c: Do not include <stdio.h>, <assert.h>, "util.h" and
"wait.h". Include <errno.h> and "gpgme.h".
(SKIP_TOKEN_OR_RETURN): Remove macro.
(struct encrypt_result): Rename to ...
(op_data_t): ... new data type. Rewrite for user result data.
(append_xml_encinfo): Remove function.
(release_op_data): New function.
(gpgme_op_encrypt_result): New function.
(_gpgme_op_encrypt_status_handler): Change first argument to void *
Rewrite result parsing.
(_gpgme_op_encrypt_sym_status_handler): Change first argument to void *.
(_gpgme_op_encrypt_init_result): New function.
(_gpgme_op_encrypt_start): Rename to ...
(encrypt_start): ... this.
(gpgme_op_encrypt_start): Use encrypt_start, not gpgme_op_encrypt_start.
(gpgme_op_encrypt): Likewise.

* gpgme.h (GpgmePubKeyAlgo, GpgmeHashAlgo, GpgmeInvalidUserID, GpgmeNewSignature, GpgmeSignResult): New data types.
(gpgme_op_sign_result, gpgme_pubkey_algo_name, gpgme_hash_algo_name): New prototypes.
* gpgme.c (gpgme_pubkey_algo_name): New function.
(gpgme_hash_algo_name): Likewise.
* ops.h (_gpgme_parse_inv_userid, _gpgme_op_sign_init_result): New prototype.
(_gpgme_op_sign_status_handler): Fix prototype.
* op-support.c: Include <errno.h> and <string.h>.
(_gpgme_parse_inv_userid): New function.
* sign.c: Include <errno.h> and "gpgme.h", but not <stdio.h>, <assert.h> and "util.h".
(SKIP_TOKEN_OR_RETURN): Remove macro.
(struct sign_result): Change to op_data_t type and rework it.
(release_sign_result): Rename to ...
(release_op_data): ... this and rewrite it.
(append_xml_info): Remove function.
(gpgme_op_sign_result): New function.
(parse_sig_created): New function.
(_gpgme_sign_status_handler): Change first argument to void *
Rewrite the function to use the new result structure and functions.
(_gpgme_op_sign_init_result): New function.
(_gpgme_op_sign_start): Rename to ...
(sign_start): ... this. Call _gpgme_op_sign_init_result.
(gpgme_op_sign_start): Use sign_start instead _gpgme_op_sign_start.
(gpgme_op_sign): Likewise.
* encrypt-sign.c (_gpgme_op_encrypt_sign_start): Call
  _gpgme_op_sign_init_result.

* delete.c: Include <errno.h> and "gpgme.h", but not "util.h" or "key.h".
  (enum delete_problem): Move into function delete_status_handler.
  (delete_status_handler): Change first argument to void *.
  Parse
delete problem with strtol instead atoi. Return better error values.
(_gpgme_op_delete_start): Rename to ...
(delete_start): ... this. Rework error handling.
(gpgme_op_delete_start): Use delete_start instead
_gpgme_op_delete_start.
(gpgme_op_delete): Likewise.
* gpgme.h (GpgmeDataType): Removed.

2003-04-25 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h: Change GPGME_IMPORT_PRIVATE to GPGME_IMPORT_SECRET.
* import.c (parse_import_res): Parse unchanged field.

* gpgme.h: New enum for GPGME_IMPORT_NEW, GPGME_IMPORT_UID,
  GPGME_IMPORT_SIG, GPGME_IMPORT_SUBKEY, GPGME_IMPORT_PRIVATE.
(GpgmeError): GPGME_Unknown_Reason, GPGME_Not_Found,
GPGME_Ambiguous_Specification, GPGME_Wrong_Key_Usage,
GPGME_Key_Revoked, GPGME_Key_Expired, GPGME_No_CRL_Known,
GPGME_CRL_Too_Old, GPGME_Policy_Mismatch, GPGME_No_Secret_Key,
GPGME_Key_Not_Trusted, GPGME_Issuer_Missing, GPGME_Chain_Too_Long,
GPGME_Unsupported_Algorithm, GPGME_Sig_Expired,
GPGME_Bad_Signature, GPGME_No_Public_Key added as new error codes.
(struct _gpgme_import_status): New structure.
(GpgmeImportStatus): New type.
(struct gpgme_op_import_result): New structure.
(GpgmeImportResult): New type.
(gpgme_op_import_result): New function.
* import.c: Include <errno.h> and "gpgme.h", but not "util.h".
(struct import_result): Change to typedef for op_data_t.
(release_import_result): Rename to ...
(release_op_data): ... this.
(append_xml_impinfo): Function removed.
(gpgme_op_import_result): New function.
(parse_import): New function.
(parse_import_res): Likewise.
(import_status_handler): Change first argument to void *. Rewrite
to use new functions.
(_gpgme_op_import_start): Rework error handling.

* edit.c: Do not include <assert.h>, "util.h", but "gpgme.h".
(edit_result): Change to typedef for op_data_t.
(edit_status_handler): Change first argument to void *.
Rework error handling.
(command_handler): Rework error handling.
(_gpgme_op_edit_start): Rename to ...
(edit_start): ... this. Rework error handling.
(gpgme_op_edit_start): Rewrite using edit_start.
(gpgme_op_edit): Likewise.

* ops.h (_gpgme_passphrase_start): Remove prototype.  
* passphrase.c: Do not include <assert.h>, "util.h" or 
"debug.h", but "gpgme.h".   
(struct passphrase_result): Change to typedef for op_data_t.   
(release_passphrase_result): Rename to release_op_data.   
(_gpgme_passphrase_status_handler): Change first argument to void *.   
Use new op_data_t type.   
(_gpgme_passphrase_command_handler): Use new op_data_t type.   
(_gpgme_passphrase_start): Remove function.   
* decrypt.c (_gpgme_decrypt_start): Rewrite error handling. Do 
not call _gpgme_passphrase_start, but install command handler.   
* encrypt.c (_gpgme_op_encrypt_start): Likewise.   
* encrypt-sign.c (_gpgme_op_encrypt_sign_start): Likewise.   
* sign.c (_gpgme_op_sign_start): Likewise.   

* context.h (struct gpgme_context_s): Remove member initialized, 
use_cms and help_data_1. Add member protocol. Make use_armor and 
use_textmode bit flags. Make keylist_mode, include_certs, 
signers_len and signers_size unsigned.   
* gpgme.c (gpgme_new): Initialize CTX->protocol.   
(gpgme_set_protocol): Do not check CTX. Use CTX->protocol.   
(gpgme_get_protocol): Likewise.   
(gpgme_release): Do not release CTX->help_data_1.   
* op-support.c (_gpgme_op_reset): Use CTX->protocol.   

* wait-private.c (_gpgme_wait_private_event_cb): Remove variable CTX.   

* data.c: Do not include <assert.h>, but "gpgme.h".   
(_gpgme_data_inbound_handler): Expand _gpgme_data_append, because 
it will go. Do not assert DH.   
(_gpgme_data_outbound_handler): Do not assert DH.   

* export.c: Do not include <stdlib.h>, "debug.h" and "util.h", but 
"gpgme.h".   
(export_status_handler): Change type of first argument to void *.   
(_gpgme_op_export_start): Rename to ...   
(export_start): ... this. Rework error handling.   
(gpgme_op_export_start): Rewritten to use export_start instead 
_gpgme_op_export_start.   
(gpgme_op_export): Likewise.   

* gpgme.h (GpgmeError): Add GPGME_Busy, GPGME_No_Request.   
(GPGME_No_Recipients, GPGME_Invalid_Recipient,   
GPGME_No_Passphrase): New macros.   

* key.c (gpgme_key_get_string_attr): Fix validity attribute.
[36x36]Open Source Used In BGP TE Controller Version 4.3.0  16416

2003-04-24  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.h (struct _gpgme_op_genkey_result): New structure.
  (GpgmeGenKeyResult): New type.
  (gpgme_op_genkey): Drop last argument.
  (gpgme_op_genkey_result): New function.
* genkey.c: Do not include "util.h", but "gpgme.h".
  (struct genkey_result): Replace with ...
  (op_data_t): ... this new type.
  (release_genkey_result): Replace with ...
  (release_op_data): ... this new function.
  (gpgme_op_genkey_result): New function.
  (genkey_status_handler): Rewritten using new op_data_t type.
  (get_key_parameter): New function.
  (_gpgme_op_genkey_start): Renamed to
  (genkey_start): ... this and rewritten.
  (gpgme_op_genkey_start): Use genkey_start instead
  _gpgme_op_genkey_start.
  (gpgme_op_genkey): Rewritten. Remove FPR argument.

* context.h (struct gpgme_context_s): Remove member verbosity.
* gpgme.c (gpgme_new): Do not set member verbosity.
* engine.h (_gpgme_engine_set_verbosity): Remove prototype.
* engine.c (_gpgme_engine_set_verbosity): Remove function.
* engine-backend.h (struct engine_ops): Remove set_verbosity.
* engine-gpgsm.c (_gpgme_engine_ops_gpgsm): Remove set_verbosity member.
* rungpg.c (_gpgme_engine_ops_gpg): Likewise.
  (gpg_set_verbosity): Remove function.
* decrypt.c (_gpgme_decrypt_start): Don't call
  _gpgme_engine_set_verbosity.
* delete.c (_gpgme_op_delete_start): Likewise.
* edit.c (_gpgme_op_edit_start): Likewise.
* encrypt.c (_gpgme_op_encrypt_start): Likewise.
* encrypt-sign.c (_gpgme_op_encrypt_sign_start): Likewise.
* export.c (_gpgme_op_export_start): Likewise.
* genkey.c (_gpgme_op_genkey_start): Likewise.
* import.c (_gpgme_op_import_start): Likewise.
* keylist.c (gpgme_op_keylist_start): Likewise.
  (gpgme_op_keylist_ext_start): Likewise.
* sign.c (_gpgme_op_sign_start): Likewise.
* verify.c (_gpgme_op_verify_start): Likewise.

* Makefile.am (libgpgme_la_SOURCES): Add key-cache.c.
* key.c (key_cache_initialized, key_cache_size,
  key_cache_max_chain_length, ): Removed.
  (struct key_cache_item_s, key_cache_lock, key_cache,
  key_cache_unused_items, hash_key, _gpgme_key_cache_add,
_gpgme_key_cache_get, gpgme_get_key): Moved to ...
* key-cache.c: ... here. New file.
* key.h (_gpgme_key_cache_init): Remove prototypes.
(_gpgme_key_cache_add, _gpgme_key_cache_get): Move to ...
* ops.h: ... here.
* version.c: Do not include "key.h".
(doSubsystem_inits): Do not call _gpgme_key_cache_init.

* mkstatus: Strip trailing comma.
* gpgme.h (GpgmeStatus): Pretty print.

* gpgme.h (GpgmeError): Rename GPGME_No_Passphrase to
  GPGME_Bad_Passphrase.
* passphrase.c (_gpgme_passphrase_status_handler): Use
  GPGME_Bad_Passphrase instead GPGME_No_Passphrase.

* gpgme.h (GpgmeError): Rename GPGME_No_Recipients to
  GPGME_No_UserID and GPGME_Invalid_Recipient to
  GPGME_Invalid UserID.
* encrypt.c (_gpgme_encrypt_status_handler): Use GPGME_No_UserID
  instead GPGME_No_Recipients and GPGME_Invalid_Recipient instead
  GPGME_Invalid_Recipient.
(_gpgme_op_encrypt_start): Likewise.

* gpgme.h (GpgmeError): Remove GPGME_Busy and GPGME_No_Request.
* wait-user.c (_gpgme_wait_user_event_cb): Don't clear CTX->pending.
* wait-private.c (_gpgme_wait_private_event_cb): Likewise.
* wait-global.c (gpgme_wait): Likewise.
* verify.c (_gpgme_op_verify_start): Likewise.
  (gpgme_get_sig_status): Don't check pending flag.
  (gpgme_get_sig_string_attr): Likewise.
  (gpgme_get_sig_ulong_attr): Likewise.
  (gpgme_get_sig_key): Likewise.
* op-support.c (_gpgme_op_reset): Likewise.
* trustlist.c (gpgme_op_trustlist_start): Don't clear pending flag.
  (gpgme_op_trustlist_next): Don't check or clear pending flag.
  (gpgme_op_trustlist_end): Likewise.
* sign.c (_gpgme_op_sign_start): Likewise.
* context.h (struct gpgme_context_s): Remove member PENDING.
* decrypt.c (_gpgme_decrypt_start): Likewise.
* delete.c (_gpgme_op_delete_start): Likewise.
* edit.c (_gpgme_op_edit_start): Likewise.
* encrypt.c (_gpgme_op_encrypt_start): Likewise.
* encrypt-sign.c (_gpgme_op_encrypt_sign_start): Likewise.
* export.c (_gpgme_op_export_start): Likewise.
* genkey.c (_gpgme_op_genkey_start): Likewise.
* import.c (_gpgme_op_import_start): Likewise.
* key.c (gpgme_get_key): Likewise.
* keylist.c (gpgme_op_keylist_start): Likewise.
  (gpgme_op_keylist_ext_start): Likewise.
  (gpgme_op_keylist_next): Likewise.
  (gpgme_op_keylist_end): Likewise.
* data-compat.c (gpgme_error_to_errno): Don’t convert EBUSY.

2003-02-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (GpgmePassphraseCb): Change type to return GpgmeError,
  and add argument for returning the result string.
  (gpgme_cancel): Remove prototype.
* gpgme.c (gpgme_cancel): Remove function.
* context.h (struct gpgme_context_s): Remove member cancel.
* passphrase.c (_gpgme_passphrase_command_handler): Call the
  passphrase callback in the new way.

2003-01-30 Marcus Brinkmann <marcus@g10code.de>

* edit.c (_gpgme_edit_status_handler): Call the progress status
  handler.

2003-02-05 Marcus Brinkmann <marcus@g10code.de>

* wait-user.c (_gpgme_wait_user_remove_io_cb): Move check for no
  I/O handlers left to ...
  (_gpgme_user_io_cb_handler): ... here.

2003-02-04 Marcus Brinkmann <marcus@g10code.de>

* trustlist.c (trustlist_colon_handler): Release ITEM if name
  could not be allocated.
  (gpgme_trust_item_release): Only release name if it is allocated.
  Reported by Marc Mutz <Marc.Mutz@uni-bielefeld.de>.

2003-02-04 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (read_status): If he status handler returns an error,
  return it.
  (status_handler): If read_status fails, just return the error.

2003-02-01 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (start): Handle all errors, not only most of
  them.
  (xtoi_1, xtoi_2): Remove macro.
  (status_handler): Replace use of xtoi_2 with_gpgme_hextobyte.
* engine-gpgsm.c (map_assuan_error): Replace
  ASSUAN_Bad_Certificate_Path with ASSUAN_Bad_Certificate_Chain.
  (gpgsm_new): Use assuan_pipe_connect instead assuan_pipe_connect2.

* util.h (DIMof): Remove macro.

* ops.h (_gpgme_op_event_cb, _gpgme_op_event_cb_user,
  _gpgme_data_unread): Prototypes removed.

2003-01-30 Marcus Brinkmann <marcus@g10code.de>

* types.h: File removed.
  * Makefile.am (libgpgme_la_SOURCES): Remove types.h.
  * io.h (struct spawn_fd_item_s): Do not include "types.h".
  * key.h: Likewise.
  * context.h: Likewise.
  * cengine-gpgsm.h: Likewise.
  * engine.h: Include "gpgme.h" instead "types.h". Add prototypes
    for EngineStatusHandler, EngineColonLineHandler and
    EngineCommandHandler.
  (_gpgme_engine_set_status_handler): Change parameter type from
    GpgmeStatusHandler to EngineStatusHandler.
  (_gpgme_engine_set_command_handler): Change parameter type from
    GpgmeCommandHandler to EngineCommandHandler.
  (_gpgme_engine_set_colon_line_handler): Change parameter type from
    GpgmeColonLineHandler to EngineColonLineHandler.
  * engine-backend.h: Include "engine.h" instead "types.h".
  (struct engine_ops): Change Gpgme*Handler parameters in members
    set_command_handler, set_colon_line_handler and set_status_handler
    to Engine*Handler.
  * engine.c (_gpgme_engine_set_status_handler): Change parameter
    type from GpgmeStatusHandler to EngineStatusHandler.
  (_gpgme_engine_set_command_handler): Change parameter type from
    GpgmeCommandHandler to EngineCommandHandler.
  (_gpgme_engine_set_colon_line_handler): Change parameter type from
    GpgmeColonLineHandler to EngineColonLineHandler.
  * rungpg.c (struct gpg_object_s): Change type of member status.fnc
    from GpgmeStatusHandler to EngineStatusHandler. Change type of
    member colon.fnc from GpgmeColonLineHandler to
    EngineColonLineHandler. Change type of member cmd.fnc from
    GpgmeCommandHandler to EngineCommandHandler.
  * engine-gpgsm.c (struct gpgsm_object_s): Likewise.
  * rungpg.c (gpg_set_status_handler): Change parameter type from
    GpgmeStatusHandler to EngineStatusHandler.
  * engine-gpgsm.c (gpgsm_set_status_handler): Likewise.
  (assuan_simple_command): Likewise.
  * rungpg.c (gpg_set_colon_line_handler): Change parameter type
from GpgmeColonLineHandler to EngineColonLineHandler.
* engine-gpgsm.c (gpgsm_set_colon_line_handler): Likewise.
* rungpg.c (gpg_set_command_handler): Change parameter type from
  GpgmeCommandHandler to EngineCommandHandler.

* engine-gpgsm.c (status_handler): Do not close status fd at end
  of function.

* ops.h (_gpgme_op_data_lookup): Add prototype.
* op-support.c: Include <stdlib.h>.
  (_gpgme_op_data_lookup): New function.
* decrypt.c (_gpgme_release_decrypt_result): Function removed.
  (struct decrypt_result_s): Rename to ...
  (struct decrypt_result): ... this.
  (DecryptResult): New type.
  (_gpgme_decrypt_status_handler): Don't use
test_and_allocate_result, but use _gpgme_op_data_lookup to
retrieve result data object.
* sign.c (_gpgme_release_sign_result): Function removed.
  (release_sign_result): New function.
  (struct sign_result_s): Rename to ...
  (struct sign_result): ... this.
  (SignResult): New type.
  (_gpgme_sign_status_handler): Don't use
test_andAllocate_result, but use _gpgme_op_data_lookup to
retrieve result data object.
* encrypt.c (struct encrypt_result_s): Rename to ...
  (struct encrypt_result): ... this.
  (_gpgme_release_encrypt_result): Function removed.
  (release_encrypt_result): New function.
  (_gpgme_encrypt_status_handler): Don't use
test_andAllocate_result, but use _gpgme_op_data_lookup to
retrieve result data object.
* verify.c (struct verify_result_s): Rename to ...
  (struct verify_result): ... this. Remove member next.
  (VerifyResult): New type.
  (_gpgme_release_verify_result): Function removed.
  (release_verify_result): New function.
  (finish_sig): Change first argument to type VerifyResult. Diddle
the type of the op_data structure.
  (add_notation): Change first argument to type VerifyResult.
  (_gpgme_verify_status_handler): Don't use
test_andAllocate_result, but use _gpgme_op_data_lookup to
retrieve result data object.
* passphrase.c (struct passphrase_result_s): Rename to ...
  (struct passphrase_result): ... this. Remove member next.
  (PassphraseResult): New type.
  (_gpgme_release_passphrase_result): Function removed.
(release_passphrase_result): New function.
(_gpgme_passphrase_status_handler): Don’t use
test_and_allocate_result, but use _gpgme_op_data_lookup to
retrieve result data object.
(_gpgme_passphrase_command_handler): Likewise.
  * keylist.c (struct keylist_result_s): Rename to ...
(struct keylist_result): ... this. Remove member next.
(KeyListResult): New type.
(_gpgme_release_keylist_result): Function removed.
(release_keylist_result): New function.
(keylist_status_handler): Don’t use
test_and_allocate_result, but use _gpgme_op_data_lookup to
retrieve result data object.
  * edit.c (struct edit_result_s): Rename to ...
(struct edit_result): ... this. Remove member next.
(EditResult): New type.
(_gpgme_release_edit_result): Function removed.
(release_edit_result): New function.
(edit_status_handler): Don’t use
test_and_allocate_result, but use _gpgme_op_data_lookup to
retrieve result data object.
(command_handler): Likewise.
  * types.h (DecryptResult, SignResult, EncryptResult,
  PassphraseResult, ImportResult, DeleteResult, GenKeyResult,
  KeylistResult, EditResult): Types removed.
  * ops.h: Don’t include "types.h", but "gpgme.h" and "context.h".
  (test_andAllocate_result): Remove macro.
(_gpgme_release_decrypt_result): Remove prototype.
(_gpgme_decrypt_result): Remove prototype.
(_gpgme_release_sign_result): Remove prototype.
(_gpgme_release_encrypt_result): Remove prototype.
(_gpgme_release_passphrase_result): Remove prototype.
(_gpgme_release_import_result): Remove prototype.
(_gpgme_release_delete_result): Remove prototype.
(_gpgme_release_genkey_result): Remove prototype.
(_gpgme_release_keylist_result): Remove prototype.
(_gpgme_release_edit_result): Remove prototype.
(_gpgme_release_verify_result): Remove prototype.
  * gpgme.c (_gpgme_release_result): Rewritten.
  * context.h (enum ctx_op_data_type): New enum.
  (struct ctx_op_data): New structure.
  (struct gpgme_context_s): Replace the member result with a member
  op_data.
(fail_on_pending_request): Remove macro.
  * op-support.c (_gpgme_op_reset): Expand macro
fail_on_pending_request.
  * util.h: Don’t include "types.h" or "debug.h", but include "gpgme.h".
* rungpg.c (_gpgme_engine_ops_gpg): Remove gpg_start.
  (gpg_start): Rename to ...
  (start): ... this function. Change arguments to GpgObject.
  (gpg_decrypt): Call start.
  (gpg_edit): Likewise.
  (gpg_encrypt): Likewise.
  (gpg_encrypt_sign): Likewise.
  (gpg_export): Likewise.
  (gpg_import): Likewise.
  (gpg_keylist): Likewise.
  (gpg_keylist_ext): Likewise.
  (gpg_trustlist): Likewise.
  (gpg_verify): Likewise.

* engine-gpgsm.c (_gpgme_engine_ops_encrypt): Remove gpgsm_start.
  (gpgsm_start): Rename to ...
  (struct gpgsm_object_s): Remove member command.
  (gpgsm_release): Don't free command.
  (start): ... this function. Change arguments to GpgsmObject and
  const char *.
  (gpgsm_decrypt): Call start.
  (gpgsm_delete): Likewise.
  (gpgsm_encrypt): Likewise.
  (gpgsmExport): Likewise.
  (gpgsm_genkey): Likewise.
  (gpgsm_import): Likewise.
  (gpgsm_keylist): Likewise.
  (gpgsm_keylist_ext): Likewise.
  (gpgsm_verify): Likewise.

* decrypt.c (_gpgme_decrypt_start): Don't call
  _gpgme_engine_start.
* delete.c (_gpgme_op_delete_start): Likewise.
* edit.c (_gpgme_op_edit_start): Likewise.
* encrypt.c (_gpgme_op_encrypt_start):
  * encrypt-sign.c (_gpgme_op_encrypt_sign_start):
  * export.c (_gpgme_op_export_start): Likewise.
  * genkey.c (_gpgme_op_genkey_start): Likewise.
  * import.c (_gpgme_op_import_start): Likewise.
  * keylist.c (gpgme_op_keylist_start): Likewise.
    (gpgme_op_keylist_ext_start): Likewise.
  * sign.c (_gpgme_op_sign_start): Likewise.
  * trustlist.c (gpgme_op_trustlist_start): Likewise.
  * verify.c (_gpgme_op_verify_start): Likewise.

* engine-backend.h (struct engine_ops): Remove member start.
* engine.h (_gpgme_engine_start): Remove prototype.
* engine.c (_gpgme_engine_start): Remove function.

2003-01-19 Miguel Coca <mcoca@gnu.org>

* w32-io.c (_gpgme_io_select): Add missing argument in calls to DEBUG_BEGIN.
  * w32-util.c: Include "sema.h".
  (find_program_in_registry): Change DEBUG1 to DEBUG2, fixes compilation error.

2003-01-29 Marcus Brinkmann <marcus@g10code.de>

* types.h: Remove byte and ulong types.
* util.h (_gpgme_hextobyte): Change prototype to unsigned char instead byte.
* conversion.c (_gpgme_hextobyte): Change argument to unsigned char instead byte.
  (_gpgme_decode_c_string): Likewise, and beautify. Also support a few more escaped characters. Be more strict about buffer size.
  (_gpgme_data_append_percentstring_for_xml): Change type of SRC, BUF and DST to unsigned char instead byte.
* progress.c (_gpgme_progress_status_handler): Use unsigned char instead byte.
* debug.c (trim_spaces): Likewise.

* util.h (mk_error): Remove macro.
* conversion.c, data.c, data-compat.c, decrypt.c, delete.c, edit.c, encrypt.c, encrypt-sign.c, engine.c, engine-gpgsm.c, export.c, genkey.c, gpgme.c, import.c, key.c, keylist.c, passphrase.c, progress.c, recipient.c, runpgc.c, sign.c, signers.c, trustlist.c, verify.c, wait.c, wait-global.c, wait-private (literally everywhere): Expand the mk_error macro.

* context.h (wait_on_request_or_fail): Remove macro.

* context.h (gpgme_context_s): Remove member ERROR.
* types.h (GpgmeStatusHandler): Change return type to GpgmeError.
  (GpgmeCommandHandler): Change return type to GpgmeError and add new argument RESULT.
* gpgme.h (GpgmeIOCb): Change return type to GpgmeError.
  (GpgmeEventHandler): New event GPGME_EVENT_START.
  (GpgmeIdleFunc): Remove type.
  (gpgme_register_idle): Remove prototype.
* data.c: Include <assert.h>.
  (_gpgme_data_inbound_handler): Change return type to GpgmeError.
  Return any error instead ignoring it, don't close file descriptor
on error.
(_gpgme_data_outbound_handler): Likewise.
* decrypt.c: Do not include <stdio.h>, <string.h> and <assert.h>.
(_gpgme_decrypt_status_handler): Change return type to GpgmeError.
Return error instead setting ctx->error. Return success at end of
function.
(gpgme_op_decrypt): Don't work around the old kludge anymore.
* decrypt-verify.c (decrypt_verify_status_handler): Change return
type to GpgmeError. Return possible errors.
* delete.c: Do not include <stdio.h>, <string.h>, <time.h> and
<assert.h>.
(delete_status_handler): Change return type to GpgmeError. Return
error instead setting ctx->error. Return success at end of
function.
* edit.c: Do not include <stdio.h> and <string.h>.
(_gpgme_edit_status_handler): Change type to GpgmeError,
make static and rename to ...
(edit_status_handler): ... this. Return error directly.
(command_handler): Change return type to GpgmeError, add result
argument. Return error directly.
* encrypt.c (status_handler_finish): Remove function.
(_gpgme_encrypt_status_handler): Change return type to GpgmeError.
Return error directly.
(_gpgme_encrypt_sym_status_handler): Likewise.
* encrypt-sign.c (encrypt_sign_status_handler): Likewise.
* engine-gpgsm.c (close_notify_handler): Do not signal done event
anymore.
(status_handler): Change return type to GpgmeError. Diddle things
around a bit to return errors directly.
(start): Send start event.
* export.c: Do not include <stdio.h>, <string.h> and <assert.h>.
(export_status_handler): Change return type to GpgmeError. Don't
check ctx->error.
* genkey.c: Do not include <stdio.h> and <assert.h>.
(genkey_status_handler): Change return type to GpgmeError. Don't
check ctx->error. Return errors directly.
* gpgme.c (_gpgme_release_result): Do not initialize ctx->error.
(_gpgme_op_event_cb): Function removed.
(_gpgme_op_event_cb_user): Likewise.
* import.c: Do not include <stdio.h>, <string.h> and <assert.h>.
(import_status_handler): Change return type to GpgmeError. Don't
check ctx->error.
* keylist.c (keylist_colon_handler, keylist_status_handler, finish_key):
Change return type to GpgmeError, return error directly.
* Makefile (libgpgme_la_SOURCES): Add wait-global.c,
wait-private.c and wait-user.c
* ops.h (test_and_allocate_result): Return error instead setting
ctx->error.
(_gpgme_data_inbound_handler, _gpgme_data_outbound_handler,
_gpgme_verify_status_handler, _gpgme_decrypt_status_handler,
_gpgme_sign_status_handler, _gpgme_encrypt_status_handler,
_gpgme_passphrase_status_handler, _gpgme_progress_status_handler):
Change return type to GpgmeError.
(_gpgme_passphase_command_handler): Change return type to
GpgmeError and add new argument RESULT.
* op-support.c: Use new callback functions, and change private
data to ctx everywhere.
* passphrase.c (_gpgme_passphrase_status_handler): Change return
   type to GpgmeError, return error directly.
(_gpgme_passphrase_command_handler): Change return type to
GpgmeError, add result argument. Return results accordingly.
* progress.c (_gpgme_progress_status_handler): Change return type
to GpgmeError, return errors directly.
* rungpg.c (status_handler): Change return type to GpgmeError.
   Return error directly.
(close_notify_handler): Don’t send done event.
(colon_line_handler): Change return type to GpgmeError, return
errors directly.
* rungpg.c (start): Send start event.
* sign.c (_gpgme_sign_status_handler): Change return type to
GpgmeError, return errors directly.
* trustlist.c (trustlist_status_handler): Change return type to
GpgmeError. Return 0.
(trustlist_colon_handler): Change return type GpgmeError. Return
errors directly.
* verify.c (add_notation): Change return type to GpgmeError,
return errors directly.
(_gpgme_verify_status_handler): Likewise.
* wait.h (struct fd_table): Remove lock member.
(struct wait_item_s): Moved here from wait.c.
(struct tag): New structure.
(_gpgme_wait_event_cb): Remove prototype.
(_gpgme_wait_private_event_cb, _gpgme_wait_global_event_cb,
_gpgme_wait_user_add_io_cb, _gpgme_wait_user_remove_io_cb,
_gpgme_wait_user_event_io_cb): New prototypes.
* wait.c: Don’t include <stdio.h>.
(ftd_global, ctx_done_list, ctx_done_list_size,
ctx_done_list_length, ctx_done_list_lock, idle_function): Remove
global variable.
(gpgme_register_idle, do_select, _gpgme_wait_event_cb): Remove
function.
(gpgme_wait): Move to file wait-global.c.
(_gpgme_add_io_cb): Take ctx as private argument, initialize ctx
member in wait item and tag.
(_gpgme_remove_io_cb): Take ctx from tag. Don’t use FDT lock.
(_gpgme_wait_one, _gpgme_wait_on_condition): Move to
wait-private.c.
(gpgme_fd_table_init): Don't initialize FDT->lock.
(gpgme_fd_table_deinit): Don't destroy FDT->lock.
(_gpgme_fd_table_put): Make static and rename to ...
(fd_table_put): ... this function. Don't use FDT->lock.
(struct wait_item_s): Move to wait.h.
* wait-global.c: New file.
* wait-private.c: New file.
* wait-user.c: New file.

* key.c (gpgme_key_sig_get_string_attr): Use validity_to_string
instead of trust_to_string to calculate validity.

2003-01-30 Marcus Brinkmann <marcus@g10code.de>

* types.h (EngineObject): Move typedef to ...
* engine.h: ... here.
* types.h (GpgObject): Move typedef to ...
* rungpg.c: ... here.
* types.h (GpgsmObject): Move typedef to ...
* engine-gpgsm.c: ... here.

* util.h (return_if_fail, return_null_if_fail,
return_val_if_fail): Remove macro.
* gpgme.c (gpgme_cancel): Don't use return_if_fail.
* key.c (gpgme_key_ref): Likewise.
* signers.c (gpgme_signers_enum): Likewise.
(gpgme_signers_clear): Likewise.

* engine-backend.h (struct engine_ops): Rename get_path to
get_file_name.
* gpgme.h (struct _gpgme_engine_info): Rename member path to
file_name.
* version.c: Do not include <stdio.h>, <stdlib.h>, context.h and
util.h. Other clean ups.
(parse_version_number): Protect more seriously against
overflow.
(gpgme_get_engine_info): Move to ...
* engine.c (gpgme_get_engine_info): ... here.
(_gpgme_engine_get_info): Function removed.
(_gpgme_engine_get_path): Make static and rename to ...
(engine_get_file_name): .. this.
(_gpgme_engine_get_version): Make static and rename to ...
(engine_get_version): ... this.
(_gpgme_engine_get_req_version): Make static and rename to ...
(engine_get_req_version): ... this.
* engine.h (_gpgme_engine_get_path, _gpgme_engine_get_version,
_gpgme_engine_req_version, _gpgme_engine_get_info): Remove
prototypes.

* gpgme.h (enum GpgmeProtocol): Remove GPGME_PROTOCOL_AUTO.
* gpgme.c (gpgme_set_protocol): Don't handle GPGME_PROTOCOL_AUTO.
  (gpgme_get_protocol_name): New function.

* engine-backend.h (struct engine_ops): New member
  get_req_version, remove member check_version.
* engine.h (_gpgme_Engine_get_version): New prototype.
* rungpg.c (gpg_get_req_version): New function.
  (gpg_check_version): Function removed.
  (_gpgme_engine_ops_gpg): Add gpg_get_req_version, remove
  gpg_check_version.
* engine-gpgsm.c (gpgsm_get_req_version): New function.
  (gpgsm_check_version): Function removed.
  (_gpgme_engine_ops_gpgsm): Add gpgsm_get_req_version, remove
  gpgsm_check_version.
* engine.c: Include ops.h.
  (_gpgme_engine_get_req_version): New function.
  (gpgme_engine_check_version): Rewritten.
* version.c (gpgme_get_engine_info): Rewritten.
  (GpgmeEngineInfo): New type.

2003-01-06 Werner Koch <wk@gnupg.org>

* keylist.c (set_mainkey_capability): Handle 'd' and 'D' used
  since gpg 1.3 to denote disabled keys.

2003-01-06 Marcus Brinkmann <marcus@g10code.de>

* data-mem.c: Include <string.h>.
* engine.c: Likewise.

2003-01-06 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (libgpgme_la_DEPENDENCIES): Correct bug in last change.

2002-12-24 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (gpgme_op_verify, gpgme_op_decrypt_verify): Drop R_STAT
  argument.
* decrypt-verify.c (gpgme_op_decrypt_verify): Drop R_STAT
  argument.
* verify.c (gpgme_op_verify): Drop R_STAT argument.
  (_gpgme_intersect_stati): Function removed.
* ops.h (_gpgme_intersect_stati): Remove prototype.
2002-12-24 Marcus Brinkmann  <marcus@g10code.de>

* libgpgme.vers: New file.  
* Makefile.am (EXTRA_DIST): Add libgpgme.vers.  
(libgpgme_version_script_cmd): New variable.  
(libgpgme_la_LDFLAGS): Add libgpgme_version_script_cmd here.  
(libgpgme_la_DEPENDENCIES): New variable.

2002-12-23 Marcus Brinkmann  <marcus@g10code.de>

* key.c (gpgme_key_get_string_attr): Don't accept GPGME_ATTR_IS_SECRET.  
(otrust_to_string): New function.  
(gpgme_key_get_as_xml): Use it.  
(validity_to_string): New function.  
(gpgme_key_get_string_attr): Beautify using above functions.  
(gpgme_key_get_ulong_attr): Likewise.

2002-12-23 Marcus Brinkmann  <marcus@g10code.de>

* data-mem.c (mem_release): Fix gcc warning.  
* data-user.c (user_release): Likewise.

2002-12-06 Marcus Brinkmann  <marcus@g10code.de>

* data.h (gpgme_data_release_cb): Change return type to void.  
(gpgme_data_read_cb): Change return type to ssize_t.  
* data.c (gpgme_data_read): Likewise.  
* data-stream.c (stream_read): Likewise.  
* data-fd.c (fd_read): Likewise.  
* data-mem.c (mem_read): Likewise.  
(mem_release): Change return type to void.  
* data-user.c (user_read): Change return type to ssize_t.  
(user_release): Change return type to void.  
* data-compat.c (old_user_read): Change return type to ssize_t.  
* gpgme.h (GpgmeDataReadCb): Likewise.  
(gpgme_data_read): Likewise.  
(GpgmeDataSeekCb): Change return type to off_t.

2002-12-04 Marcus Brinkmann  <marcus@g10code.de>

* gpgme.h: Add prototype for gpgme_get_key.  
* key.c (gpgme_get_key): New function.  
* verify.c (gpgme_get_sig_key): Rewrite using gpgme_get_key.

* gpgme.h: Add prototypes for new interfaces  
gpgme_key_sig_get_string_attr and gpgme_key_get_ulong_attr.  
(enum GpgmeAttr): New attribute GPGME_ATTR_SIG_CLASS.  
* gpgme.c (gpgme_set_keylist_mode): Allow GPGME_KEYLIST_MODE_SIGS.
* key.h (struct certsig_s): New members ALGO, NAME_PART, EMAIL_PART, COMMENT_PART, NAME, SIG_STAT and SIG_CLASS.

* conversion.c (_gpgme_decode_c_string): Add new parameter LEN. Use that to determine if allocation is desired or not.
* util.h: Adjust prototype of _gpgme_decode_c_string.
* keylist.c (keylist_colon_handler): Adjust caller of _gpgme_decode_c_string.

* key.h (struct gpgme_key_s): New member last_uid.
* key.c (_gpgme_key_append_name): Rewritten using _gpgme_decode_c_string and the last_uid pointer.
    (my_isdigit): Macro removed.
    (ALLOC_CHUNK): Likewise.
* keylist.c (set_userid_flags): Use last_uid member of KEY.

* context.h (struct user_id_s): New member last_certsig.
* key.h: Add prototype for _gpgme_key_add_certsig.
* key.c (_gpgme_key_add_certsig): New function.
    (set_user_id_part): Move function before _gpgme_key_add_certsig.
    (parse_user_id): Change first argument to SRC, add new arguments NAME, EMAIL and COMMENT. Change code to use these arguments instead going through UID. Move function before _gpgme_add_certsig.
    (parse_x509_user_id): Likewise.
    (_gpgme_key_append_name): Adjust arguments to parse_x509_user_id and parse_user_id invocation.
    (one_certsig_as_xml): New function.
    (one_uid_as_xml): Print signatures.
* context.h (struct gpgme_context_s): New member TMP_UID.
* keylist.c (keylist_colon_handler): Rewritten, implement "sig" record entries.

* key.c (get_certsig): New function.
    (gpgme_key_sig_get_string_attr): Likewise.
    (gpgme_key_sig_get_ulong_attr): Likewise.

* keylist.c: Include <ctype.h>.
    (my_isdigit): Macro removed.
    (set_mainkey_trust_info): Use isdigit, not my_isdigit.
    (set_userid_flags): Likewise.
    (set_subkey_trust_info): Likewise.
    (set_ownertrust): Likewise.
    (finish_key): Move function up a bit and remove prototype.

* rungpg.c (gpg_keylist_ext): Correct precedence of signature listing mode.
    (gpg_keylist_ext): Implement signature listing mode.
2002-11-25 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (_gpgme_gpg_spawn): Do not set parent fds to -1.
* posix-io.c (_gpgme_io_spawn): Call _gpgme_io_close instead close
  for parent fds.
* w32-io.c (_gpgme_io_spawn): Call _gpgme_io_close instead 
  CloseHandle for parent fds.

2002-11-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h [__MSC_VER]: Define ssize_t as long.

2002-11-22 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (_gpgme_gpgsm_new): Save the result of a first
  setlocale before doing another setlocale.

2002-11-21 Marcus Brinkmann <marcus@g10code.de>

* decrypt.c: Some beautyfication.

* verify.c (_gpgme_verify_status_handler): Treat
  GPGME_STATUS_UNEXPECTED like GPGME_STATUS_NODATA.
  Reported by Miguel Coca <e970095@zipi.fi.upm.es>.

2002-11-19 Marcus Brinkmann <marcus@g10code.de>

* genkey.c: Only include <config.h> if [HAVE_CONFIG_H].
  (struct genkey_result_s): Add new member FPR.
  (_gpgme_release_genkey_result): Free RESULT->fpr if set.
  (genkey_status_handler): Extract the fingerprint from the status
  line.
  (gpgme_op_genkey): Add new argument FPR and return the fingerprint
  in it.
* gpgme.h: Adjust prototype of gpgme_op_genkey.

2002-11-19 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (gpg_keylist): Add --with-fingerprint to gpg invocation 
  twice, to get fingerprints on subkeys. Suggested by Timo Schulz
  <twoaday@freakmail.de>.
  (gpg_keylist_ext): Likewise.

2002-11-05 Marcus Brinkmann <marcus@g10code.de>

* import.c (append_xml_impinfo): Use
  _gpgme_data_append_string_for_xml rather than
_gpgme_data_append_string for the field content.
Submitted by Miguel Coca <e970095@zipi.fi.upm.es>.

2002-10-10 Marcus Brinkmann <marcus@gl00code.de>

* rungpg.h, engine-gpgsm.h: File removed.
* Makefile.am (gpgsm_components): New variable, set depending on
  automake conditional HAVE_GPGSM.
(libgpgme_la_SOURCES): Add engine-backend.h, remove rungpg.h and
  engine-gpgsm.h. Replace engine-gpgsm.c with $[gpgsm_components].
(status-table.h): Depend on gpgme.h, not rungpg.h.
* conversion.c: Include <stdlib.h>.
* engine-gpgsm.c: Do not set ENABLE_GPGSM here. Include
  "engine-backend.h" instead "engine-gpgsm.h". Reorder some
  functions and remove all function prototypes.
(_gpgme_gpgsm_get_version): Make static and rename to ...
(gpgsm_get_version): ... this.
(_gpgme_gpgsm_check_version): Make static and rename to ...
(gpgsm_check_version): ... this.
(_gpgme_gpgsm_new): Make static. Change argument type from
GpsmObject * to void **. Call gpgsm_release instead
  _gpgme_gpgsm_release.
(_gpgme_gpgsm_op_decrypt): Make static and rename to ...
(gpgsm_decrypt): ... this.
(_gpgme_gpgsm_op_decrypt): Make static and rename to ...
(gpgsm_decrypt): ... this.
(_gpgme_gpgsm_set_recipients): Make static and rename to ...
(gpgsm_set_recipients): ... this.
(_gpgme_gpgsm_op_encrypt): Make static and rename to ...
(gpgsm_encrypt): ... this.
(_gpgme_gpgsm_op_export): Make static and rename to ...
(gpgsm_export): ... this.
(_gpgme_gpgsm_op_genkey): Make static and rename to ...
(gpgsm_genkey): ... this.
(_gpgme_gpgsm_op_import): Make static and rename to ...
(gpgsm_import): ... this.
(_gpgme_gpgsm_op_keylist): Make static and rename to ...
(gpgsm_keylist): ... this.
(_gpgme_gpgsm_op_keylist_ext): Make static and rename to ...
(gpgsm_keylist_ext): ... this.
(_gpgme_gpgsm_op_sign): Make static and rename to ...
(gpgsm_sign): ... this.
(_gpgme_gpgsm_op_trustlist): Make static and rename to ...
(gpgsm_trustlist): ... this.
(_gpgme_gpgsm_op_verify): Make static and rename to ...
(gpgsm_verify): ... this.
(gpgsm_status_handler): Rename to ...
(status_handler): ... this.
(_gpgme_gpgsm_set_status_handler): Make static and rename to ...
(gpgsm_set_status_handler): ... this.
(_gpgme_gpgsm_set_colon_line_handler): Make static and rename to ...
(gpgsm_set_colon_line_handler): ... this.
(_gpgme_gpgsm_add_io_cb): Rename to ...
(add_io_cb): ... this.
(_gpgme_gpgsm_start): Make static and rename to ...
(gpgsm_start): ... this.
(_gpgme_gpgsm_set_io_cb): Make static and rename to ...
(gpgsm_set_io_cb): ... this.
(_gpgme_gpgsm_io_event): Make static and rename to ...
(gpgsm_io_event): ... this.
(struct _gpgme_engine_ops_gpgsm): New variable.
[!ENABLE_GPGSM]: Removed.
* engine.c: Do not include <time.h>, <sys/types.h>, <string.h>,
<assert.h>, "io.h", "rungpg.h" and "engine-gpgsm.h". Include
<stdio.h> and "engine-backend.h".
(struct engine_object_s): Rewritten.
(engine_ops): New variable.
* engine.c (_gpgme_engine_get_path, _gpgme_engine_get_version,
_gpgme_engine_check_version, _gpgme_engine_new,
_gpgme_engine_release, _gpgme_engine_set_verbosity,
_gpgme_engine_set_status_handler,
_gpgme_engine_set_command_handler,
_gpgme_engine_set_colon_line_handler, _gpgme_engine_op_decrypt,
_gpgme_engine_op_delete, _gpgme_engine_op_edit,
_gpgme_engine_op_encrypt, _gpgme_engine_op_encrypt_sign,
_gpgme_engine_op_export, _gpgme_engine_op_genkey,
_gpgme_engine_op_import, _gpgme_engine_op_keylist,
_gpgme_engine_op_keylist_ext, _gpgme_engine_op_sign,
_gpgme_engine_op_trustlist, _gpgme_engine_op_verify,
_gpgme_engine_start, _gpgme_engine_set_io_cbs,
_gpgme_engine_io_event): Reimplement.
* engine.h: Fix a few comments and a variable name in a prototype.
* ops.h: Do not include "rungpg.h".
* passphrase.c: Include config.h only if [HAVE_CONFIG_H]. Do not
include "rungpg.h".
* recipient.c: Likewise.
* signers.c: Likewise.
* version.c: Likewise.
* rungpg.c: Likewise. Include "engine-backend.h". Reorder
functions and remove prototypes.
(_gpgme_gpg_get_version): Make static and rename to ...
(gpg_get_version): ... this.
(_gpgme_gpg_check_version): Make static and rename to ...
(gpg_check_version): ... this.
(_gpgme_gpg_new): Make static. Change argument type from
GpgObject * to void **. Call gpg_release instead
_gpgme_gpg_release.
(_gpgme_gpg_op_decrypt): Make static and rename to ...
gpg_check_decrypt): ... this.
(_gpgme_gpg_op_delete): Make static and rename to ...
gpg_check_delete): ... this.
(_gpgme_gpg_set_recipients): Make static and rename to ...
gpg_check_set_recipients): ... this.
(_gpgme_gpg_op_encrypt): Make static and rename to ...
gpg_encrypt): ... this.
(_gpgme_gpg_op_export): Make static and rename to ...
gpg_export): ... this.
(_gpgme_gpg_op_genkey): Make static and rename to ...
gpg_genkey): ... this.
(_gpgme_gpg_op_import): Make static and rename to ...
gpg_import): ... this.
(_gpgme_gpg_op_keylist): Make static and rename to ...
gpg_keylist): ... this.
(_gpgme_gpg_op_keylist_ext): Make static and rename to ...
gpg_keylist_ext): ... this.
(_gpgme_gpg_op_sign): Make static and rename to ...
gpg_sign): ... this.
(_gpgme_gpg_op_trustlist): Make static and rename to ...
gpg_trustlist): ... this.
(_gpgme_gpg_op_verify): Make static and rename to ...
gpg_verify): ... this.
(gpg_status_handler): Rename to ...
(status_handler): ... this.
(_gpgme_gpg_set_status_handler): Make static and rename to ...
gpg_set_status_handler): ... this.
(_gpgme_gpg_set_colon_line_handler): Make static and rename to ...
gpg_set_colon_line_handler): ... this.
gpgme_gpg_add_io_cb): Rename to ...
(add_io_cb): ... this.
(_gpgme_gpg_start): Make static and rename to ...
gpg_start): ... this.
(_gpgme_gpg_set_io_cb): Make static and rename to ...
gpg_set_io_cb): ... this.
(_gpgme_gpg_io_event): Make static and rename to ...
gpg_io_event): ... this.
(struct _gpgme_engine_ops_gpg): New variable.

2002-10-10 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_op_verify) [!ENABLE_GPGSM]: Add
missing argument.

2002-10-09 Marcus Brinkmann <marcus@g10code.de>
* data.h, data-user.c, data-stream.c, data-mem.c, data-fd.c, data-compat.c: New file. Really check them in this time, completes 2002-10-08 change.

* rungpg.h (GpgStatusHandler): Rename type to GpgmeStatusHandler and move to ...
* types.h (GpgmeStatusHandler): ... here.
* rungpg.h (GpgColonLineHandler): Rename type to GpgmeColonLineHandler and move to ...
* types.h (GpgmeColonLineHandler): ... here.
* rungpg.h (GpgCommandHandler): Rename type to GpgmeCommandHandler and move to ...
* types.h (GpgmeCommandHandler): ... here.
* engine.h: Don't include "rungpg.h".
  (_gpgme_engine_set_status_handler): Change type of argument from GpgStatusHandler to GpgmeStatusHandler.
  (_gpgme_engine_set_colon_line_handler): Change type of argument from GpgColonLineHandler to GpgmeColonLineHandler.
  (_gpgme_engine_set_command_handler): Change type of argument from GpgCommandHandler to GpgmeCommandHandler.
* engine-gpgsm.h: Don't include "rungpg.h".
  (_gpgme_gpgsm_set_status_handler): Change type of argument from GpgStatusHandler to GpgmeStatusHandler.
  (_gpgme_gpgsm_set_colon_line_handler): Change type of argument from GpgColonLineHandler to GpgmeColonLineHandler.
* engine-gpgsm.c: Do not include "rungpg.h".
  (struct gpgsm_object_s): Change type of status.fnc to GpgmeStatusHandler. Change type of colon.fnc to GpgmeColonLineHandler.
  (gpgsm_assuan_simple_command): Change type of argument from GpgStatusHandler to GpgmeStatusHandler.
  (_gpgme_gpgsm_set_status_handler): Likewise.
  (_gpgme_gpgsm_set_colon_line_handler): Change type of argument from GpgColonLineHandler to GpgmeColonLineHandler.
* rungpg.h (_gpgme_gpg_set_status_handler): Change type of argument from GpgStatusHandler to GpgmeStatusHandler.
  (_gpgme_gpg_set_colon_line_handler): Change type of argument from GpgColonLineHandler to GpgmeColonLineHandler.
  (_gpgme_gpg_set_command_handler): Change type of argument from GpgCommandHandler to GpgmeCommandHandler.
* rungpg.c (struct gpg_object_s): Change type of status.fnc to GpgmeStatusHandler. Change type of colon.fnc to GpgmeColonLineHandler. Change type of cmd.fnc to GpgmeCommandLineHandler.
  (_gpgme_gpg_set_status_handler): Change type of argument FNC to GpgmeStatusHandler.
  (_gpgme_gpg_set_colon_line_handler): Change type of argument FNC to GpgmeColonLineHandler.
to GpgmeColonLineHandler.
(_gpgme_gpg_set_command_handler): Change type of argument FNC to
GpgmeCommandHandler.

* engine.c (_gpgme_engine_set_status_handler): Change type of
argument FNC to GpgmeStatusHandler.
(_gpgme_engine_set_colon_line_handler): Change type of argument FNC
to GpgmeColonLineHandler.
(_gpgme_engine_set_command_handler): Change type of argument FNC to
GpgmeCommandHandler.

* rungpg.h (_gpgme_gpg_enable_pipemode): Remove prototype.
* rungpg.c (struct gpg_object_s): Remove PM.
(pipemode_cb): Prototype removed.
(add_pm_data): Function removed.
(_gpgme_gpg_enable_pipemode): Likewise.
(pipemode_copy): Likewise.
(pipemode_cb): Likewise.
(add_arg): Don't check for pipemode.
(add_data): Likewise.
(_gpgme_gpg_set_status_handler): Likewise.
(_gpgme_gpg_set_colon_line_handler): Likewise.
(_gpgme_gpg_set_command_handler): Likewise.
(_gpgme_gpg_spawn): Likewise.
(_gpgme_gpg_spawn): Don't set PM.active.
(_gpgme_gpg_op_verify): Remove pipemode case.
* verify.c (_gpgme_op_verify_start): Remove pipemode case.

* rungpg.h (_gpgme_gpg_add_arg, _gpgme_gpg_add_data,
_gpgme_gpg_add_pm_data, _gpgme_gpg_housecleaning,
_gpgme_gpg_set_simple_line_handler): Prototype removed.
(_gpgme_gpg_set_verbosity): New prototype.
* rungpg.c (_gpgme_gpg_add_data): Make static and rename to ...
(add_data): ... this.
(_gpgme_gpg_add_pm_data): Call add_data, not _gpgme_gpg_add_data.
(_gpgme_gpg_set_command_handler): Likewise.
(_gpgme_gpg_op_decrypt, _gpgme_gpg_op_edit, _gpgme_gpg_op_encrypt,
_gpgme_gpg_op_encrypt_sign, _gpgme_gpg_op_export,
_gpgme_gpg_op_genkey, _gpgme_gpg_op_import, _gpgme_gpg_op_sign,
_gpgme_gpg_op_verify): Likewise.
(_gpgme_gpg_add_pm_data): Rename to ...
(add_pm_data): ... this.
(_gpgme_gpg_op_verify): Call add_pm_data, not
_gpgme_gpg_add_pm_data.
(_gpgme_gpg_add_arg): Make static and rename to ...
(add_arg): ... this.
(_gpgme_gpg_set_command_handler, _gpgme_gpg_new,
_gpgme_gpg_op_decrypt, _gpgme_gpg_op_delete,
_gpgme_append_gpg_args_from_signers, _gpgme_gpg_op_edit,
_gpgme_append_gpg_args_from_recipients, _gpgme_gpg_op_encrypt,
_gpgme_gpg_op_encrypt_sign, _gpgme_gpg_op_export,
_gpgme_gpg_op_genkey, _gpgme_gpg_op_import, _gpgme_gpg_op_keylist,
_gpgme_gpg_op_keylist_ext, _gpgme_gpg_op_trustlist,
_gpgme_gpg_op_sign, _gpgme_gpg_op_verify): Use add_arg, not
_gpgme_gpg_add_arg.
(struct gpg_object_s): Remove member simple from colon.
(_gpgme_gpg_set_colon_line_handler): Don't initialize simple.
(_gpgme_gpg_set_simple_line_handler): Removed function.
(read_colon_line): Don't check the GPG->colon.simple.
* engine.c (_gpgme_engine_set_verbosity): Call
_gpgme_gpg_set_verbosity instead _gpgme_gpg_add_arg.

2002-10-08 Marcus Brinkmann <marcus@g10code.de>

* util.h (_gpgme_malloc, _gpgme_realloc, _gpgme_calloc,
_gpgme_strdup, _gpgme_free): Remove prototypes.
(xtrymalloc, xtryalloc, xtryrealloc, xtrystrdup, xfree): Remove
macros.
* util.c: File removed.
* Makefile.am (libgpgme_la_SOURCES): Remove util.h.
* conversion.c (_gpgme_decode_c_string): Use malloc instead of
xtrymalloc, realloc instead of xtryrealloc, calloc instead of
xtrycalloc, free instead of xfree.
(_gpgme_data_append_percentstring_for_xml): Likewise.
* data.c (_gpgme_data_new, _gpgme_data_release): Likewise.
* data-compat.c (gpgme_data_new_from_filepart): Likewise.
* data-mem.c (mem_write, mem_release, gpgme_data_new_from_mem,
_gpgme_data_get_as_string): Likewise.
* debug.c (debug_init): Likewise.
* decrypt.c (_gpgme_release_decrypt_result): Likewise.
* delete.c (_gpgme_release_delete_result): Likewise.
* edit.c (_gpgme_release_edit_result, _gpgme_op_edit_start):
Likewise.
* encrypt.c (_gpgme_release_encrypt_result): Likewise.
* engine.c (_gpgme_engine_get_info, _gpgme_engine_new,
_gpgme_engine_release): Likewise.
* engine-gpgsm.c (_gpgme_gpgsm_new, _gpgme_gpgsm_release,
_gpgme_gpgsm_op_decrypt, _gpgme_gpgsm_op_delete,
gpgsm_set_recipients, _gpgme_gpgsm_op_encrypt,
_gpgme_gpgsm_op_export, _gpgme_gpgsm_op_genkey,
_gpgsm_op_op_import, _gpgme_gpgsm_op_keylist,
_gpgme_gpgsm_op_keylist_ext, _gpgme_gpgsm_op_sign,
_gpgme_gpgsm_op_verify, gpgsm_status_handler): Likewise.
* genkey.c (_gpgme_release_genkey_result): Likewise.
* gpgme.c (gpgme_new, gpgme_release): Likewise.
* import.c (_gpgme_release_import_result): Likewise.
* key.c (_gpgme_key_cache_init, _gpgme_key_cache_add, key_new, add_subkey, gpgme_key_release, _gpgme_key_append_name): Likewise.
* keylist.c (_gpgme_release_keylist_result, keylist_colon_handler, _gpgme_op_keylist_event_cb, gpgme_op_keylist_next): Likewise.
* ops.h (test_and_allocate_result): Likewise.
* passphrase.c (_gpgme_release_passphrase_result, _gpgme_passphrase_status_handler, _gpgme_passphrase_command_handler): Likewise.
* progress.c (_gpgme_progress_status_handler): Likewise.
* recipient.c (gpgme_recipients_new, gpgme_recipients_release, gpgme_recipients_add_name_with_validity): Likewise.
* rungpg.c (_gpgme_gpg_new, _gpgme_gpg_release, _gpgme_gpg_add_arg, _gpgme_gpg_add_data, _gpgme_gpg_set_colon_line_handler, free_argv, free_fd_data_map, build_argv, _gpgme_gpg_spawn, read_status, read_colon_line): Likewise.
* sign.c (_gpgme_release_sign_result): Likewise.
* signers.c (_gpgme_signers_add): Likewise.
* trustlist.c (trust_item_new, trustlist_colon_handler, _gpgme_op_trustlist_event_cb, gpgme_op_trustlist_next, gpgme_trustitem_release): Likewise.
* verify.c (_gpgme_release_verify_result, finish_sig): Likewise.
* version.c (gpgme_get_engine_info, _gpgme_get_program_version): Likewise.
* w32-io.c (create_reader, create_writer, destroy_reader, destroy_writer, build_commandline, _gpgme_io_spawn): Likewise.
* w32-sema.c (critsect_init, _gpgme_sema_cs_destroy): Likewise.
* w32-util.c (read_w32_registry_string): Likewise.
* wait.c (_gpgme_fd_table_deinit, _gpgme_fd_table_put, _gpgme_wait_event_cb, _gpgme_add_io_cb, _gpgme_remove_io_cb)
* data-compat.c: Include <stdlib.h>.

2002-10-08 Marcus Brinkmann <marcus@g10code.de>

New data object component:

* gpgme.h (GpgmeDataReadCb, GpgmeDataWriteCb, GpgmeDataSeekCb, GpgmeDataReleaseCb): New types.
  (struct GpgmeDataCbs): New structure.
  (gpgme_data_read): Changed prototype to match that of read() closely.
  (gpgme_data_write): Similar for write().
  (gpgme_data_seek, gpgme_data_new_from_cbs, gpgme_data_new_from_fd, gpgme_data_new_from_stream): New prototypes.
  (gpgme_data_get_type, gpgme_check_engine): Prototype removed.

  * Makefile.am (libgpgme_la_SOURCES): Add data.h, data-fd.c, data-stream.c, data-mem.c, data-user.c and data-compat.c.
  * data.c: Reimplemented from scratch.
* (data-compat.c, data-fd.c, data.h, data-mem.c, data-stream.c, data-user.c): New file.
* context.h (struct gpgme_data_s): Removed.
* conversion.c: Include <errno.h> and <sys/types.h>.
* data.c (_gpgme_data_append_string): Move to ...
* conversion.c (_gpgme_data_append_string): ... here.
* data.c (_gpgme_data_append_for_xml): Move to ...
* conversion.c (_gpgme_data_append_for_xml): ... here.
* data.c (_gpgme_data_append_string_for_xml): Move to ...
* conversion.c (_gpgme_data_append_string_for_xml): ... here.
* data.c (_gpgme_data_append_percentstring_for_xml): Move to ...
* conversion.c (_gpgme_data_append_percentstring_for_xml): ... here.

* ops.h (_gpgme_data_get_mode, _gpgme_data_set_mode): Prototype removed.
* types.h (GpgmeDataMode): Type removed.

* decrypt.c (_gpgme_decrypt_start): Don't check data type or mode.
* edit.c (_gpgme_op_edit_start): Likewise.
* encrypt.c (_gpgme_op_encrypt_start): Likewise.
* encrypt-sign.c (_gpgme_op_encrypt_sign_start): Likewise.
* export.c (_gpgme_op_export_start): Likewise.
* genkey.c (_gpgme_op_genkey_start): Likewise.
* import.c (_gpgme_op_import_start): Likewise.
* sign.c (_gpgme_op_sign_start): Likewise.
* verify.c (_gpgme_op_verify_start): Likewise.

* encrypt.c (gpgme_op_encrypt): Remove hack that returns invalid no recipient if no data was returned.
* encrypt-sign.c (gpgme_op_encrypt_sign): Remove hack that returns no recipient if no data was returned.
* encrypt-sign.c (gpgme_op_encrypt_sign): Remove hack that returns no recipient if no data was returned.

* engine.c (_gpgme_engine_op_verify): Add new argument to differentiate detached from normal signatures.
* engine.h (_gpgme_engine_op_verify): Likewise for prototype.
* engine-gpgsm.c (_gpgme_gpgsm_op_verify): Likewise. Don't check mode of data argument.
* engine-gpgsm.h (_gpgme_gpgsm_op_verify): Likewise for prototype.
* gpgme.h (gpgme_op_verify_start): Likewise for prototype.
  (gpgme_op_verify): Likewise for prototype.
* rungpg.c (_gpgme_gpg_op_verify): Likewise.
* rungpg.h (_gpgme_gpg_op_verify): Likewise for prototype.
* verify.c (_gpgme_op_verify_start): Likewise.
  (gpgme_op_verify_start): Likewise.
(gpgme_op_verify): Likewise.

* rungpg.c (struct arg_and_data_s): New member INBOUND to hold direction of data object.

(_gpgme_gpg_add_data): Add new argument INBOUND. Use it to determine direction of data object.

(_gpgme_gpg_add_pm_data, _gpgme_gpg_set_command_handler, _gpgme_gpg_op_decrypt, _gpgme_gpg_op_decrypt, _gpgme_gpg_op_encrypt, _gpgme_gpg_op_encrypt_sign, _gpgme_gpg_op_export, _gpgme_gpg_op_genkey, _gpgme_gpg_op_import, _gpgme_gpg_op_op_verify): Add new argument to _gpgme_gpg_add_data invocation.

(build_argv): Use new member INBOUND to determine direction of file descriptor. Don't check the data type.

* rungpg.h (_gpgme_gpg_add_data): Add new argument to prototype.

* gpgme.c (gpgme_get_op_info): Don't call _gpgme_data_get_as_string if CTX->op_info is NULL.

* version.c (gpgme_check_engine): Function removed.

2002-09-30 Werner Koch <wk@gnupg.org>

* keylist.c (keylist_colon_handler): Take care when printing a NULL with the DEBUG.

* engine-gpgsm.c (struct gpgsm_object_s): New member ANY.

(gpgsm_status_handler): Run the colon function to indicate EOF.

(_gpgme_gpgsm_set_colon_line_handler): Better reset ANY here.

2002-09-28 Marcus Brinkmann <marcus@g10code.de>


* keylist.c (gpgme_op_keylist_ext_start): Use private asynchronous operation type in invocation of _gpgme_op_reset.

2002-09-20 Werner Koch <wk@gnupg.org>

* ath.c: Include sys/time.h if sys/select.h is not available.

2002-09-13 Marcus Brinkmann <marcus@g10code.de>

* keylist.c (keylist_status_handler): Do not call finish_key() here.

(gpgme_op_keylist_ext_start): Set CTX->tmp_key to NULL.

2002-09-03 Marcus Brinkmann <marcus@g10code.de>
* Makefile.am (assuan_libobjs): Remove @LTLIBOBS@ as we link them into gpgme unconditionally.
(libgpgme_la_LIBADD): Change @LIBOBS@ into @LTLIBOBS@.

2002-09-02 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (assuan_libobjs): Use @LTLIBOBS@ instead @LIBOBS@.

2002-09-02 Marcus Brinkmann <marcus@g10code.de>

* debug.c (_gpgme_debug_add): Test *LINE, not LINE.
(_gpgme_debug_end): Likewise.
Reported by Dr. Stefan Dalibor <Dr.Stefan.Dalibor@bfa.de>.

2002-09-02 Marcus Brinkmann <marcus@g10code.de>

* posix-io.c (_gpgme_io_select): Don't use a non-constant struct initializer.
* version.c (_gpgme_get_program_version): Likewise.
Reported by Dr. Stefan Dalibor <Dr.Stefan.Dalibor@bfa.de>.

2002-09-02 Marcus Brinkmann <marcus@g10code.de>

* conversion.c (_gpgme_decode_c_string): Set DESTP before modifying DEST.

* conversion.c (_gpgme_decode_c_string): Fix off by one error in last change.
* rungpg.c (_gpgme_append_gpg_args_from_signers): Move before _gpgme_op_edit so its prototype is known early on.

2002-09-01 Marcus Brinkmann <marcus@g10code.de>

* op-support.c (_gpgme_op_reset): Set CTX->pending after calling _gpgme_engine_release, as this will reset pending to zero in the event done callback on cancelled operations.
2002-08-30 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (_gpgme_gpg_op_edit): Add args from signers.
  Suggested by Miguel Coca <e970095@zipi.fi.upm.es>.

* rungpg.c (_gpgme_gpg_op_edit): Add bogus ctx argument.
  * rungpg.h: Also to prototype.
* engine.c (_gpgme_engine_op_edit): Likewise.
* engine.h: Likewise.
* edit.c (_gpgme_op_edit_start): Likewise.

2002-08-29 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (_gpgme_gpgsm_op_sign): Implement signer selection.
* vasprintf.c (va_copy): Define macro if not yet defined.

2002-08-29 Marcus Brinkmann <marcus@g10code.de>

* passphrase.c (_gpgme_passphrase_status_handler): Reset
  CTX->result.passphrase->no_passphrase if passphrase is given (good
  or bad). Submitted by Jean DIRAISON <jean.diraison@free.fr>.

2002-08-28 Marcus Brinkmann <marcus@g10code.de>

* posix-io.c (_gpgme_io_spawn): Use a double-fork approach.
  Return 0 on success, -1 on error.
* version.c (_gpgme_get_program_version): Don't wait for the child.
* engine.c (_gpgme_engine_housecleaning): Function removed.
  (do_reaping): Likewise.
  (_gpgme_engine_add_child_to_reap_list): Likewise.
  (struct reap_s): Removed.
  (reap_list): Likewise.
  (reap_list_lock): Likewise.
* engine.h (_gpgme_engine_io_event): Remove prototypes for
  _gpgme_engine_housecleaning and
  _gpgme_engine_add_child_to_reap_list.
* rungpg.c (_gpgme_gpg_release): Don't add child to reap list.
  (struct gpg_object_s): Remove PID member.
  (_gpgme_gpg_new): Don't initialize GPG->pid.
  (_gpgme_gpg_spawn): Don't set GPG->pid.
* wait.c (run_idle): Removed.
  (gpgme_wait): Run idle_function directly.

2002-08-21 Marcus Brinkmann <marcus@g10code.de>

* encrypt-sign.c (encrypt_sign_status_handler): Remove dead variables encrypt_info and encrypt_info_len.
* trustlist.c (gpgme_op_trustlist_start): Set colon line handler.
* posix-sema.c (sema_fatal): Remove function.
All these reported by Stphane Corthsy.

2002-08-23 Werner Koch <wk@gnupg.org>
* gpgme-config.in: Made --prefix work for --libs.

2002-08-21 Marcus Brinkmann <marcus@g10code.de>
* ath.h: Update list of symbols that get a prefix: Rename the ath_mutex_*_available symbols to ath_*_available.

2002-08-21 Marcus Brinkmann <marcus@g10code.de>
* stpcpy.c: New file from gnuilb.
* Makefile.am (assuan_libobjs): Remove jnlib.

2002-08-20 Marcus Brinkmann <marcus@g10code.de>
* gpgme.h: Add prototype for gpgme_op_import_ext.
* import.c (struct import_result_s): New member `nr_considered'. Rename `any_imported' to `nr_imported'.
  (import_status_handler): Increment nr_imported. Set nr_considered if appropriate.
  (gpgme_op_import_ext): New function.
  (gpgme_op_import): Implement in terms of gpgme_op_import_ext.

2002-08-20 Werner Koch <wk@gnupg.org>
* gpgme.m4: Replaced with a new and faster version. This does not anymore try to build test programs. If we really need test programs, we should add an option to gpgme-config to do so.
* vasprintf.c (int_vasprintf): Hack to handle NULL passed for %s.

2002-08-20 Marcus Brinkmann <marcus@g10code.de>
* gpgme.c (_gpgme_set_op_info): Append data on subsequent calls.
* encrypt-sign.c (encrypt_sign_status_handler): Remove op_info handling.

2002-08-19 Werner Koch <wk@gnupg.org>
* decrypt.c (is_token,skip_token): Duplicated from verify.c
  (gpgme_op_decrypt): Hack to properly return Decryption_Failed..
  (_gpgme_decrypt_status_handler): Create an operation info.
2002-08-14 Werner Koch <wk@gnupg.org>

* key.h (struct certsig_s): New. Use it in gpgme_key_s.
* key.c (gpgme_key_release): Release it. We need to add more code
  of course.
  (_gpgme_key_append_name): Use memset to initialize the struct.
* gpgme.h (GPGME_KEYLIST_MODE_SIGS): New.
* rungpg.c (_gpgme_gpg_op_keylist): Include sigs in listing depending
  non the list mode.

* key.c (gpgme_key_get_string_attr): Use GPGME_ATTR_TYPE to return
  information about the key type (PGP or X.509).
(gpgme_key_get_ulong_attr): Likewise.

* keylist.c (keylist_colon_handler): Include 1 in the check for
  valid algorithms so that RSA is usable. Store the issuer name and
  serial number also for "crs" records. Parse the expire date for
  subkeys.
(set_userid_flags): Put them onto the last appended key.

2002-07-29 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (_gpgme_gpg_op_edit): Use --with-colons.

2002-07-28 Marcus Brinkmann <marcus@g10code.de>

* data.c (gpgme_data_read): For GPGME_DATA_TYPE_NONE, return EOF
  instead an error.

The following changes make it possible to flush an inbound data
pipe before invoking a command handler:

* posix-io.c (_gpgme_io_select): Accept new argument NONBLOCK to
  _gpgme_io_select. Set timeout of 0 if this is set.
* w32-io.c (_gpgme_io_select): Likewise.
* io.h: Add new argument NONBLOCK to _gpgme_io_select prototype.
* wait.c (do_select): Add new argument to _gpgme_io_select
  invocation.
* rungpg.h (_gpgme_gpg_set_command_handler): Add new argument
  linked_data to prototype.
* engine.h (_gpgme_engine_set_command_handler): Likewise.
* engine.c (_gpgme_engine_set_command_handler): Likewise.
* passphrase.c (_gpgme_passphrase_start): Pass NULL as linked_data
  argument to _gpgme_engine_set_command_handler.
* rungpg.c (struct gpg_object_s): New members linked_data and
  linked_idx in CMD.
(_gpgme_gpg_new): Initialize those new members.
(_gpgme_gpg_set_command_handler): Accept new argument linked_data.
(build_argv): Handle linked_data in the same hack as cb_data.
(read_status): If linked_data is in use, flush the pipe before
activating the command handler.
* gpgme.h: Add prototypes for gpgme_op_edit_start and
gpgme_op_edit.

The next changes export the status codes to the user:

* decrypt.c (_gpgme_decrypt_status_handler): Likewise, also prefix
  all STATUS_ with GPGME_.
* delete.c (delete_status_handler): Likewise.
* decrypt-verify.c (decrypt_verify_status_handler): Likewise.
* encrypt.c (_gpgme_encrypt_status_handler): Likewise.
  (_gpgme_encrypt_sym_status_handler): Likewise.
* encrypt-sign.c (encrypt_sign_status_handler): Likewise.
* engine-gpgsm.c (parse_status): Likewise.
  (gpgsm_status_handler): Likewise.
  (gpgsm_set_recipients): Likewise.
* export.c (export_status_handler): Likewise.
* genkey.c (genkey_status_handler): Likewise.
* import.c (append_xml_impinfo): Likewise.
  (import_status_handler): Likewise.
* keylist.c (keylist_status_handler): Likewise.
* passphrase.c (_gpgme_passphrase_status_handler): Likewise.
  (command_handler): Likewise.
* progress.c (_gpgme_progress_status_handler): Likewise.
* sign.c (_gpgme_sign_status_handler): Likewise.
* trustlist.c (trustlist_status_handler): Likewise.
* verify.c (_gpgme_verify_status_handler): Likewise.
* gpgme.h (GpgmeEditCb): New type.
* rungpg.h (GpgStatusCode): Rename and move to ...
  * gpgme.h (GpgmeStatusCode): ... this and here.
  * Makefile.am (status-table.h): Run mkstatus on gpgme.h, not rungpg.h.
  * mkstatus: Prefix STATUS with GPGME_.
  * rungpg.h (GpgStatusHandler, GpgCommandHandler): Change type
    accordingly.
* ops.h (_gpgme_passphrase_status_handler,
  _gpgme_decrypt_status_handler, _gpgme_sign_status_handler,
  _gpgme_encrypt_status_handler, _gpgme_passphrase_status_handler,
  _gpgme_progress_status_handler): Likewise.
* rungpg.c (struct gpg_object_s): Likewise for CMD.code.

These changes add an edit operation to GPGME:

* context.h (struct gpgme_context_s): New member RESULT.edit.
  * ops.h: Add prototype for _gpgme_release_edit_result and
    _gpgme_passphrase_command_handler.
  * passphrase.c (command_handler): Make non-static and rename to ...
(_gpgme_passphrase_command_handler): ... this.
(_gpgme_passphrase_start): Use new name for command handler.
* types.h: Add EditResult type.
* gpgme.c (_gpgme_release_result): Release EDIT result.
* edit.c: New file.
* Makefile.am (libgpgme_la_SOURCES): Add edit.c.
(libgpgme_la_LDADD): Rename to libgpgme_la_LIBADD, and include
assuan_libobjs.
(assuan_libobjs): New variable, set this instead
libgpgme_la_LIBADD.
* engine.h (_gpgme_engine_op_edit): New prototype.
* engine.c (_gpgme_engine_op_edit): New function.
* rungpg.h (_gpgme_gpg_op_edit): New prototype.
* rungpg.c (_gpgme_gpg_op_edit): New function.

2002-07-27 Marcus Brinkmann <marcus@g10code.de>
* delete.c (delete_problem): New case ambiguous specification.
(delete_status_handler): Handle new case (poorly).

2002-07-25 Marcus Brinkmann <marcus@g10code.de>
* engine-gpgsm.c (_gpgme_gpgsm_op_delete): Implement this.

2002-07-25 Marcus Brinkmann <marcus@g10code.de>
* Makefile.am (libgpgme_la_LDADD): Add @LIBOBJS@ for vasprintf and
fopencookie.
* vasprintf.c: Update to more recent libiberty version.
* debug.h: Replace #elsif with #elif.

Submitted by Stphane Corthsy:
* util.h (vasprintf): Correct prototype.
* encrypt-sign.c: Include <stddef.h>.
(encrypt_sign_status_handler): Change type of ENCRYPT_INFO_LEN to
size_t.
* ath-pthread.c: Include <stdlib.h>, not <malloc.h>.
* ath-PTH.c: Likewise.

2002-07-25 Marcus Brinkmann <marcus@g10code.de>
* wait.c (fdt_global): Make static. Reported by Stphane
Corthsy.

* rungpg.c (_gpgme_gpg_op_keylist_ext): Skip empty string
patterns. Reported by Stphane Corthsy.

* key.c (gpgme_key_get_as_xml): Add OTRUST attribute. Requested
by Stephane Corthesy.
(gpgme_key_get_string_attr): Add GPGME_ATTR_SIG_SUMMARY case to silence gcc warning.

* rungpg.c (_gpgme_gpg_new): Always set utf8 as charset.

2002-07-03 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_set_io_cbs): Deal with CTX being NULL.

* gpgme.c (_gpgme_op_event_cb_user): New function.
* op-support.c (_gpgme_op_reset): Support a new mode of operation for private or user event loop. Use new user event callback wrapper.
* trustlist.c (gpgme_op_trustlist_start): Use this new mode.
* keylist.c (gpgme_op_keylist_start): Likewise.

* rungpg.c (_gpgme_gpg_io_event): New function.
* rungpg.h (_gpgme_gpg_io_event): New prototype.
* engine-gpgsm.c (_gpgme_gpg_io_event): New function.
* engine.c (_gpgme_engine_io_event): New function.
* engine.h (_gpgme_engine_io_event): New prototype.
* keylist.c (finish_key): Call _gpgme_engine_io_event, and move the real work for the default IO callback routines to ...
(_gpgme_op_keylist_event_cb): ... here. New function.
* trustlist.c (trustlist_colon_handler): Signal GPGME_EVENT_NEXT_TRUSTITEM. Move queue manipulation to ...
(_gpgme_op_trustlist_event_cb): ... here. New function.
* gpgme.c (_gpgme_op_event_cb): Call _gpgme_op_keylist_event_cb and _gpgme_op_trustlist_event_cb when appropriate.
* ops.h (_gpgme_op_keylist_event_cb): New prototype.
(_gpgme_op_trustlist_event_cb): Likewise.
* op-support.c (_gpgme_op_reset): Add comment why we don't use the user provided event handler directly.
* gpgme.h (GpgmeRegisterIOCb): Return GpgmeError value, and TAG in a pointer argument.
* wait.c (_gpgme_add_io_cb): Likewise.
* wait.h (_gpgme_add_io_cb): Likewise for prototype.
* rungpg.c (_gpgme_gpg_add_add_io_cb): Call IO_CBS->add with new argument. Fix up error handling.
* engine-gpgsm.c (_gpgme_gpgsm_add_add_io_cb): Call IO_CBS->add with new argument, fix up error handling.

2002-07-03 Werner Koch <wk@gnupg.org>

* encrypt.c (status_handler_finish): New.
(_gpgme_encrypt_status_handler): Moved some code out to the new
function and call this function also in case we get into the
status handler with an error which might happen due to a kludge in
engine-gpgsm.c

2002-06-28 Marcus Brinkmann <marcus@g10code.de>

* keylist.c (gpgme_op_keylist_ext_start): Always use our own FD
table (eg use synchronous mode).

2002-06-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h: Fix documentation of key attribute retrieval functions.

2002-06-28 Marcus Brinkmann <marcus@g10code.de>

* ops.h (_gpgme_wait_on_condition): Remove HANG argument from
prototype and change return type to GpgmeError.
(_gpgme_wait_one): New prototype.
* wait.c (gpgme_wait): Replace with the meat from
_gpgme_wait_on_condition here, and remove the support for
conditions.
(_gpgme_wait_on_condition): Remove HANG argument from prototype
and change return type to GpgmeError. Replace with meat from
_gpgme_wait_one and add support for conditions.
(_gpgme_wait_one): Just call _gpgme_wait_on_condition without
condition.
* keylist.c (gpgme_op_keylist_ext_start): Always use our own FD
table (eg use synchronous mode).
(gpgme_op_keylist_next): Remove HANG argument from
_gpgme_wait_on_condition. Check its return value.
* trustlist.c (gpgme_op_trustlist_start): Always use our own FD
table (eg use synchronous mode).
(gpgme_op_trustlist_next): Remove HANG argument from
_gpgme_wait_on_condition. Check its return value.

2002-06-26 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (map_assuan_error): Map No_Data_Available to EOF.

* import.c (append_xml_impinfo): Kludge to print fingerprint
instead of keyid for use with gpgsm.
(import_status_handler): Set a flag to know whether any import
occurred.
(gpgme_op_import): Return -1 if no certificate ewas imported.

2002-06-25 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (_gpgme_gpgsm_set_io_cbs) [ENABLE_GPGSM]: Fixed
function arguments.

2002-06-25 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_op_export): Only export the keys listed in RECP.
* export.c (gpgme_op_export): If no data was returned, return GPGME_No_Recipients.

2002-06-25 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_op_export): Implement.

2002-06-21 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_assuan_simple_command): Return ERR.
   (parse_status): New function.
   (gpgsm_status_handler): Use parse_status.
   (gpgsm_assuan_simple_command): Accept new arguments STATUS_FNC and STATUS_FNC_VALUE and process status messages.
   (gpgsm_set_recipients): Pass new arguments to gpgsm_assuan_simple_command.
   (gpgsm_set_fd): Likewise.
   (_gpgme_gpgsm_op_keylist): Likewise.
   (_gpgme_gpgsm_op_keylist_ext): Likewise.
   (_gpgme_gpgsm_op_sign): Likewise.

2002-06-21 Marcus Brinkmann <marcus@g10code.de>

* wait.c (_gpgme_remove_io_cb): Unlock FDT->lock.

2002-06-20 Werner Koch <wk@gnupg.org>

* rungpg.c (build_argv): Ignore GPG_AGENT_INFO if set but empty.

* verify.c (calc_sig_summary): Set bad policy for wrong key usage.
   (skip_token): New.
   (_gpgme_verify_status_handler): Watch out for wrong key usage.
   (gpgme_get_sig_string_attr): Hack to return info on the key usage. Does now make use of the former RESERVED argument which has been renamed to WHATIDX.
   (gpgme_get_sig_ulong_attr): Renamed RESERVED to WHATIDX.

2002-06-14 Marcus Brinkmann <marcus@g10code.de>

* wait.c (do_select): Return -1 on error, and 0 if nothing to run.
   (_gpgme_wait_one): Only set HANG to zero if do_select returned an error, or there are no more file descriptors to wait on.
   (_gpgme_wait_on_condition): Ignore return value from do_select for
now.

2002-06-13 Werner Koch <wk@gnupg.org>

* verify.c (gpgme_op_verify): Make sure that we never access an uninitialized result structure.

2002-06-12 Werner Koch <wk@gnupg.org>

* keylist.c (struct keylist_result_s): New.
  (_gpgme_release_keylist_result): Release it here
  (keylist_status_handler): Handle truncated.
  (append_xml_keylistinfo): New.
  * gpgme.c (_gpgme_release_result): and use it here.
  * types.h: Declare the new type here.
  * context.h (struct gpgme_context_s): Use it here.

2002-06-11 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_release): Close status_cb.fd.
  (_gpgme_gpgsm_new): Duplicate status file descriptor, so we can use our own close notification mechanism without interfering with assuan.

2002-06-11 Werner Koch <wk@gnupg.org>

* gpgme.h: Add GPGME_ATTR_SIG_SUMMARY and the GPGME_SIGSUM constants.
  * verify.c (calc_sig_summary): New.
  (gpgme_get_sig_ulong_attr): And use it here.

2002-06-10 Werner Koch <wk@gnupg.org>

* rungpg.h: Add new status codes TRUNCATED and ERROR.
  * verify.c (is_token, copy_token): New.
  (_gpgme_verify_status_handler): Use copy_token, handle the new ERROR status and store the errorcode used withgpgsm and trust status codes.
  * gpgme.h: New attribute ERRTOK.
  * key.c (gpgme_key_get_string_attr): Add dummy case for it.
  (gpgme_get_sig_string_attr): Use it here to return the last error.

2002-06-10 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_start): Move the code that sets the close notification for the status fd to ...
  (_gpgme_gpgsm_new): ... here.
  * wait.h: Include "sema.h". Remove prototypes of
_gpgme_remove_proc_from_wait_queue and
_gpgme_register_pipe_handler. Add prototypes of
_gpgme_fd_table_init, _gpgme_fd_table_deinit, _gpgme_fd_table_put,
_gpgme_add_ioCb, _gpgme_remove_ioCb, _gpgme_wait_event_cb and
_gpgme_wait_one.

* wait.c: Remove global variables PROC_QUEUE, PROC_QUEUE_LOCK,
FD_TABLE_SIZE, FD_TABLE, FD_TABLE_LOCK. New global variables
FDTLOBAL, CTX_DONE_LIST, CTX_DONE_LIST_SIZE,
CTX_DONE_LIST_LENGTH and CTX_DONE_LIST_LOCK. Remove struct
proc_s. Replace struct wait_item_s.
(_gpgme_fd_table_init): New function.
(_gpgme_fd_table_deinit): Likewise.
(_gpgme_fd_table_put): Likewise.
(set_process_done): Remove function.
(do_select): Take argument FDT. Use that to decide which fds to
select on.
(_gpgme_remove_proc_from_wait_queue): Remove function.
(_gpgme_wait_event_cb): New function.
(_gpgme_wait_one): Likewise.
(_gpgme_register_pipe_handler): Remove function.
(_gpgme_remove_ioCb): Likewise.
(_gpgme_freeze_fd): Remove function.
(_gpgme_thaw_fd): Remove function.
* rungpg.c (struct fd_data_map_s): Add new member TAG.
(struct gpg_object_s): Likewise for STATUS and COLON. Add member
IDX to CMD. Add new member IO_CBS.
(close_notify_handler): New variables POSSIBLY_DONE and NOT_DONE.
For each I/O callback, check if it should be unregistered. If all
callbacks have been unregistered, trigger GPGME_EVENT_DONE.
Remove member RUNNING.
(_gpgme_gpg_new): Initialize new members.
(_gpgme_gpg_release): Check PID not RUNNING. Don’t call
_gpgme_remove_proc_from_wait_queue. Close GPG->CMD.FD if set.
(build_argv): Store away the index instead the file descriptor for
CMD.
(_gpgme_gpg.spawn): Use _gpgme_gpg_add_ioCb to register IO
callbacks.
(gpg_status_handler): Change return type to void, remove PID
argument, close filedescriptor if EOF or error occurs.
(read_status): Use _gpgme_gpg_add_ioCb instead _gpgme_thaw_fd.
Use IO_CBS->remove instead _gpgme_freeze_fd.
(gpg_colon_line_handler): Change return type to void, remove PID
argument, close filedescriptor if EOF or error occurs.
(command_cb): Use IO_CBS->remove instead _gpgme_freeze_fd.
* rungpg.h (_gpgme_gpg_set_io_cbs): Prototype for
Open Source Used In BGP TE Controller Version 4.3.0  16451

_gpgme_gpg_set_io_cbs.
* gpgme.h (GpgmeIOCb): New type.
(GpgmeRegisterIOCb): Likewise.
(GpgmeRemoveIOCb): Likewise.
(GpgmeEventIO): Likewise.
(GpgmeEventIOCb): Likewise.
(struct GpgmeIOCbs): New structure to hold I/O callbacks.
(gpgme_set_op_io_cbs): New prototype.
(gpgme_get_op_io_cbs): Likewise.
* ops.h: New prototype for _gpgme_op_event_cb. Remove prototypes
for _gpgme_freeze_fd and _gpgme_thaw_fd. Remove PID argument from
_gpgme_data_inbound_handler and _gpgme_data_outbound_handler
prototype. Add prototype for _gpgme_op_reset.
Add synchronous argument to _gpgme_decrypt_start prototype.
* io.h: Beautification.
* gpgme.c: Include "wait.h".
(gpgme_new): Initialize FDT.
(gpgme_get_io_cbs): Likewise.
(_gpgme_op_event_cb): Likewise.
* data.c (_gpgme_data_inbound_handler): Change return type to
void. Drop PID argument. Close FD on error and EOF.
(write_mem_data): Don't close FD here ...
(write_cb_data): ... or here ...
(_gpgme_data_outbound_handler): ... but here. Change return type
to void. Drop PID argument.
* context.h: Include "wait.h".
(struct gpgme_context_s): New members FDT and IO_CBS.
* op-support.c: New file.
* Makefile.am (libgpgme_la_SOURCES): Add op-support.c.
* ops.h: Add prototype for _gpgme_op_reset().
* decrypt.c (_gpgme_decrypt_start): New argument SYNCHRONOUS. Use
_gpgme_op_reset.
(gpgme_op_decrypt_start): Add synchronous argument.
(gpgme_op_decrypt): Likewise. Use _gpgme_wait_one instead
gpgme_wait.
* delete.c (gpgme_op_delete_start): Rename to ...
(_gpgme_op_delete_start): ... this. New argument SYNCHRONOUS.
Use _gpgme_op_reset. Make function static.
(gpgme_op_delete_start): Just a wrapper around
_gpgme_op_delete_start now.
(gpgme_op_delete): Add synchronous argument. Use _gpgme_wait_one
instead gpgme_wait.
* encrypt.c: Include "wait.h".
(gpgme_op_encrypt_start): Rename to ...
(_gpgme_op_encrypt_start): ... this. New argument SYNCHRONOUS.
Use _gpgme_op_reset. Make function static.
(gpgme_op_encrypt_start): Just a wrapper around
_gpgme_op_encrypt_start now.
(gpgme_op_encrypt): Add synchronous argument. Use _gpgme_wait_one instead gpgme_wait.
* encrypt_sign.c (gpgme_op_encrypt_sign_start): Rename to ...
  (_gpgme_op_encrypt_sign_start): ... this. New argument SYNONCHRONOUS. Use _gpgme_op_reset. Make function static.
(gpgme_op_encrypt_sign_start): Just a wrapper around _gpgme_op_encrypt_sign_start now.
(gpgme_op_encrypt_sign): Add synchronous argument. Use _gpgme_wait_one instead gpgme_wait.
* export.c (gpgme_op_export_start): Rename to ...
  (_gpgme_op_export_start): ... this. New argument SYNONCHRONOUS. Use _gpgme_op_reset. Make function static.
(gpgme_op_export_start): Just a wrapper around _gpgme_op_export_start now.
(gpgme_op_export): Add synchronous argument. Use _gpgme_wait_one instead gpgme_wait.
* genkey.c (gpgme_op_genkey_start): Rename to ...
  (_gpgme_op_genkey_start): ... this. New argument SYNONCHRONOUS. Use _gpgme_op_reset. Make function static.
(gpgme_op_genkey_start): Just a wrapper around _gpgme_op_genkey_start now.
(gpgme_op_genkey): Add synchronous argument. Use _gpgme_wait_one instead gpgme_wait.
* import.c (gpgme_op_import_start): Rename to ...
  (_gpgme_op_import_start): ... this. New argument SYNONCHRONOUS. Use _gpgme_op_reset. Make function static.
(gpgme_op_import_start): Just a wrapper around _gpgme_op_import_start now.
(gpgme_op_import): Add synchronous argument. Use _gpgme_wait_one instead gpgme_wait.
* keylist.c (gpgme_op_keylist_start): Use _gpgme_op_reset.
  (gpgme_op_keylist_ext_start): Likewise.
* sign.c (gpgme_op_sign_start): Rename to ...
  (_gpgme_op_sign_start): ... this. New argument SYNONCHRONOUS. Use _gpgme_op_reset. Make function static.
(gpgme_op_sign_start): Just a wrapper around _gpgme_op_sign_start now.
(gpgme_op_sign): Add synchronous argument. Use _gpgme_wait_one instead gpgme_wait.
* trustlist.c (gpgme_op_trustlist_start): Use _gpgme_op_reset.
* verify.c (gpgme_op_verify_start): Rename to ...
  (_gpgme_op_verify_start): ... this. New argument SYNONCHRONOUS. Use _gpgme_op_reset. Make function static.
(gpgme_op_verify_start): Just a wrapper around _gpgme_op_verify_start now.
(gpgme_op_verify): Add synchronous argument. Use _gpgme_wait_one instead gpgme_wait.
* engine-gpgsm.c (iocb_data_t): New type.
(struct gpgsm_object_s): New member status_cb. Replace input_fd
and input_data with input_cb. Replace output_fd and output_data
with output_cb. Replace message_fd and message_data with
(_gpgme_gpgsm_new): Initialize all new members (and drop the old
ones).
(close_notify_handler): New variable POSSIBLY_DONE. For each I/O
callback, check if it should be unregistered. If all callbacks
have been unregistered, trigger GPGME_EVENT_DONE.
(_gpgme_gpgsm_release): Remove variable PID. Use new variable
names to close the file descriptors.
(_gpgme_gpgsm_op_decrypt): Use new variable names,
(_gpgme_gpgsm_op_encrypt): Likewise.
(_gpgme_gpgsm_op_genkey): Likewise.
(_gpgme_gpgsm_op_import): Likewise.
(_gpgme_gpgsm_op_keylist): Likewise.
(_gpgme_gpgsm_op_keylist_ext): Likewise.
(_gpgme_gpgsm_op_sign): Likewise.
(_gpgme_gpgsm_op_verify): Likewise.
(gpgsm_status_handler): Drop argument PID. Change return type to
void. Close status pipe before returning because of EOF or error.
(_gpgme_gpgsm_start): Use _gpgme_gpgsm_add_io_cb to register
callback function.
* engine-gpgsm.h: New prototype for _gpgme_gpgsm_set_io_cbs.
* engine.c (_gpgme_engine_set_io_cbs): New function.
* engine.h: New prototype for _gpgme_engine_set_io_cbs.

2002-06-04 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (libgpgme_la_SOURCES): Remove mutex.h.

2002-06-03 Marcus Brinkmann <marcus@g10code.de>

* key.c: Include <ctype.h>.
(_gpgme_key_append_name): Skip one more char when
processing escaped char. Submitted by Marc Mutz <mutz@kde.org>.
Handle hexadecimal encodings. Also reported by Marc. Thanks!

2002-06-02 Marcus Brinkmann <marcus@g10code.de>

* ath.h: Enable the _gpgme_prefix. Fix all those prefix macros.
* posix-sema.c: Use that prefix here.
* posix-io.c: Include "ath.h".
(_gpgme_io_read): Use _gpgme_ath_read instead read.
(_gpgme_io_write): Use _gpgme_ath_write instead write.
(_gpgme_io_waitpid): Use _gpgme_ath_waitpid instead waitpid.
(_gpgme_io_select): Use _gpgme_ath_select instead select.

2002-06-02 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (ath_components): New variable.
(ath_components_pthread): Likewise.
(ath_components_pth): Likewise.
(system_components): Add ath_components.

* ath.h: New file.
* ath.c: Likewise.
* ath-pthread.c: Likewise.
* ath-pth.c: Likewise.
* posix-sema.c (_gpgme_sema_cs_enter): Rework to use the ATH
  interface.
* mutex.h: Remove file.

2002-05-30 Werner Koch <wk@gnupg.org>

* key.c (gpgme_key_get_string_attr): Return NULL when asking for
  an issuer with IDX > 0. We don't support altIssuerNames for now.

2002-05-22 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (_gpgme_gpgsm_op_keylist_ext): Aehmm, added
  missing variable definition. Oohh - Marcus was faster.

2002-05-22 Marcus Brinkmann <marcus@gnu.org>

* engine-gpgsm.c (_gpgme_gpgsm_op_keylist_ext): Fix last change.

2002-05-21 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (_gpgme_gpgsm_op_keylist)
  (_gpgme_gpgsm_op_keylist_ext): Pass the keylist mode to gpgsm.

2002-05-10 Werner Koch <wk@gnupg.org>

* key.h (gpgme_key_s): Add OTRUST.
* keylist.c (set_ownertrust): New.
 (keylist_colon_handler): Get the ownertrust value
* key.c (gpgme_key_get_string_attr,gpgme_key_get_ulong_attr): Return that value.

2002-05-08 Marcus Brinkmann <marcus@g10code.de>

* w32-util.c: New static variable GET_PATH_LOCK.
(_gpgme_get_gpg_path): Remove superfluous NULL initializer.
Take lock while determining path.
(_gpgme_get_gpgsm_path): Likewise.
* version.c (doSubsystem_inits): Set DONE to 1 after
initialization.
(gpgme_get_engine_info): New variable ENGINE_INFO_LOCK. Take lock
while determining engine info.
* rungpg.c (_gpgme_gpg_version): New variable
GPG_VERSION_LOCK. Take the lock while determining the program
version.
* posix-io.c: Include "sema.h".
(_gpgme_io_spawn): New variable
FIXED сигналs LOCK. Take the lock
while fixing the signals.
(_gpgme_io_select): Make READFDS and WRITEFDS non-static.
* key.c: Include "sema.h". New globals KEY_CACHE_LOCK and
KEY_REF_LOCK.
(capabilities_to_string): Make STRINGS very const.
(_gpgme_key_cache_add): Lock the key cache.
(_gpgme_key_cache_get): Likewise.
(gpgme_key_ref, gpgme_key_release): Lock the key_ref_lock.
* import.c (append_xml_impinfo): Make IMPORTED_FIELDS and
IMPORT_RES_FIELDS very const. Make FIELD and FIELD_NAME a
ci two const.
* engine.c (_gpgme_engine_get_info): New variable
ENGINE_INFO_LOCK. Take lock while determining engine info.
* engine-gpgsm.c: Include "sema.h".
(_gpgme_gpgsm_get_version): New variable GPGSM_VERSION_LOCK. Take
lock while getting program version.

2002-05-08 Marcus Brinkmann <marcus@g10code.de>

* debug.h: New file.
* Makefile.am (libgpgme_la_SOURCES): Add debug.h.
* util.h: Removed all prototypes and declarations related to
debugging. Include "debug.h".

* debug.c (debug_level): Comment variable and remove superfluous
zero initializer.
(errfp): Likewise.
(_gpgme_debug_enabled): Function removed.
(struct debug_control_s): Definition removed.
(_gpgme_debug_level): Function removed.
(_gpgme_debug_begin): Rewritten to use vasprintf. Accept a
printf-style format specification and a variable number of
arguments.
(_gpgme_debug_add): Rewritten using vasprintf. Expect that format
starts out with "%s" for simplicity.
(_gpgme_debug_end): Rewritten using vasprintf. Do not accept a
TEXT argument anymore.

* posix-io.c (_gpgme_io_select): Use new level argument for DEBUG_BEGIN instead explicit if construct.

* debug.c (debug_init): Remove superfluous zero initializer, remove volatile flag of INITIALIZED. Do not use the double-checked locking algorithm, it is fundamentally flawed and will empty your fridge (on a more serious note, despite the volatile flag it doesn’t give you the guarantee you would expect, for example on a DEC Alpha or an SMP machine. The volatile only serializes accesses to the volatile variable, but not to the other variables).

2002-05-03 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (_gpgme_gpgsm_new): Redirect any gpgsm error output to /dev/null.

* verify.c (gpgme_get_sig_key): Set the protocol of the listctx.
* gpgme.c (gpgme_get_protocol): New.

* data.c (gpgme_data_write): Changed type of BUFFER to void*.
  (gpgme_data_read): Ditto.

* verify.c (_gpgme_verify_status_handler): Handle TRUST_* status lines so that a claim can be made without looking up the key.
  (gpgme_get_sig_string_attr): New.
  (gpgme_get_sig_ulong_attr): New.

* gpgme.h (GpgmeAttr): Added GPGME_ATTR_SIG_STATUS.

* rungpg.h: Add new status codes from gpg 1.0.7 and formatted the list to align with the status.h file from gnupg.

* gpgme.h (GpgmeSigStat): Add _GOOD_EXP and _GOOD_EXPKEY.
* verify.c (_gpgme_verify_status_handler, finish_sig): Handle these new status codes. Store the expiration time

2002-04-27 Werner Koch <wk@gnupg.org>

* gpgme.h (GpgmeData_Encoding): New.
* data.c (gpgme_data_get_encoding,gpgme_data_set_encoding): New.
* engine-gpgsm.c (map_input_enc): New. Use it in all local functions where the INPUT command gets send.

2002-04-27 Marcus Brinkmann <marcus@g10code.de>
* engine-gpgsm.c (_gpgme_gpgsm_op_verify): Close the output
descriptor only when we don't need it anymore. Close the message
descriptor if we don't need it.

2002-04-26 Werner Koch <wk@gnupg.org>

* Makefile.am (libgpgme_la_LIBADD): Use libtool libraries.

2002-04-25 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (_gpgme_gpg_release): Call gpgme_data_release on
GPG->cmd.cb_data, not xfree.

2002-04-25 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_new): Set the display, ttnname,
ttytype, lc_ctype and lc_messages options in the server.

2002-04-24 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (map_assuan_error): Add new error codes.

2002-04-23 Werner Koch <wk@gnupg.org>

* key.c (gpgme_key_get_ulong_attr): Swapped use of can_encrypt and
can_certify to return the requested values.

2002-04-23 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_get_progress_cb): Allow either return parameter
to be NULL.
(gpgme_get_passphrase_cb): Likewise.

2002-04-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_get_passphrase_cb): New function.
(gpgme_get_progress_cb): New function.
* gpgme.h: Add new prototypes for gpgme_get_passphrase_cb and
gpgme_get_progress_cb.

2002-03-28 Werner Koch <wk@gnupg.org>

* gpgme.h (GpgmeAttr): Add values for issuer and chaining.
* key.h (gpgme_key_s): Add issuer and chaining elements for X509.
* keylist.c (keylist_colon_handler): Store them.
* key.c (gpgme_key_release): Free them.
(gpgme_key_get_as_xml,gpgme_key_get_string_attr): Print them.
2002-03-26 Werner Koch <wk@gnupg.org>

* Makefile.am (libgpgme_la_SOURCES): Add mutex.h

2002-03-21 Werner Koch <wk@gnupg.org>

* util.h [!HAVE_FOPENCookie]: Make sure off_t and ssize_t are defined.

2002-03-18 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (system_components): New variable, set depending on HAVE_DOSISH_SYSTEM.
  (libgpgme_la_SOURCES): Use system_components. Remove `syshdr.h'.
  * syshdr.h: File removed.

* posix-io.c: Remove !HAVE_DOSISH_SYSTEM safeguard. Clean up source.
  * posix-sema.c: Likewise.
  * posix-util.c: Likewise.

* w32-io.c: Remove HAVE_DOSISH_SYSTEM safeguard.
  * w32-sema.c: Likewise.
  * w32-util.c: Likewise.

* posix-io.c: Include `unistd.h', do not include `syshdr.h'.
  * posix-sema.c: Likewise.
  * w32-io.c: Include `io.h', do not include `syshdr.h'
  * w32-sema.c: Likewise.
  * w32-util.c: Likewise.
  * data.c: Do not include `syshdr.h'.
  * wait.c: Likewise.
  * wait.h: Code cleanup.

* mutex.h: New file.
  * posix-sema.c: Implement.

2002-03-08 Werner Koch <wk@gnupg.org>

* util.h [!HAVE_FOPENCookie]: Fixed type. Thanks to Frank Heckenbach.

2002-03-07 Werner Koch <wk@gnupg.org>

* gpgme.h (gpgme_op_keylist_ext_start): Add prototype.

2002-03-06 Marcus Brinkmann <marcus@g10code.de>

* encrypt.c (_gpgme_encrypt_sym_status_handler): New function.
  (gpgme_op_encrypt_start): New variable SYMMETRIC, set if RECP
is null, and if it is set, use _gpgme_encrypt_sym_status_handler
as status handler and run _gpgme_passphrase_start.
* rungpg.c (_gpgme_gpg_op_encrypt): If RECP is zero, do symmetric
  encryption.
* engine-gpgsm.c (_gpgme_gpgsm_op_encrypt): If RECP is zero,
  return error value.

* rungpg.c (_gpgme_gpg_op_verify): Add "--" argument.

2002-03-03 Marcus Brinkmann <marcus@g10code.de>

* passphrase.c (_gpgme_passphrase_status_handler): Also set the
  error No_Passphrase if only a bad passphrase was provided.

2002-03-03 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (_gpgme_gpg_op_verify): If TEXT is of mode
  GPGME_DATA_MODE_IN, construct a command line that stores the
  plaintext in TEXT.
* verify.c (gpgme_op_verify_start): Accept TEXT being
  uninitialized, and in this case interpret SIG as a normal or
  cleartext signature and TEXT as a return data object.
* engine-gpgsm.c (_gpgme_gpgsm_op_verify): Likewise.

2002-03-03 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_op_keylist_ext) ![ENABLE_GPGSM]:
  Add stub function.

2002-02-28 Werner Koch <wk@gnupg.org>

* key.h (subkey_s): New member expires_at.
* keylist.c (keylist_colon_handler): Set it here
* key.c (gpgme_key_get_as_xml,gpgme_key_get_ulong_attr): Return it.

2002-02-27 Marcus Brinkmann <marcus@g10code.de>

* rungpg.h (_gpgme_gpg_op_keylist_ext): New prototype.
* rungpg.c (_gpgme_gpg_op_keylist_ext): New function.
* engine.h (_gpgme_engine_op_keylist_ext): New prototype.
* engine.c (_gpgme_engine_op_keylist_ext): New function.
* keylist.c (gpgme_op_keylist_ext_start): New function.

2002-02-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h: Add new error code GPGME_Invalid_Recipient.
* encrypt.c (struct encrypt_result_s): New member invalid_recipients, rename no_recipients to no_valid_recipients.
(_gpgme_encrypt_status_handler): Include error for invalid recipients.
* engine-gpgsm.c (gpgsm_set_recipients): Change type of first argument to GpgsmObject. Use that to report back the status about the recipients.

2002-02-26 Marcus Brinkmann <marcus@g10code.de>

* verify.c (_gpgme_verify_status_handler): Fix the last change.

2002-02-25 Marcus Brinkmann <marcus@g10code.de>

* verify.c (_gpgme_verify_status_handler): Parse the args line to see if the problem is due to a missing key, and report that back to the user.

2002-02-25 Marcus Brinkmann <marcus@g10code.de>

* engine.c (_gpgme_engine_op_encrypt_sign): New function.
* engine.h (_gpgme_engine_op_encrypt_sign): New prototype.
* rungpg.c (_gpgme_append_gpg_args_from_signers): New function.
(_gpgme_gpg_op_sign): Use that new function.
(_gpgme_gpg_op_encrypt_sign): New function.
* rungpg.h (_gpgme_gpg_op_encrypt_sign): New prototype.
* gpgme.h (gpgme_op_encrypt_sign_start): New prototype.
(gpgme_op_encrypt_sign): Likewise.
* Makefile.am (libgpgme_la_SOURCES): Add encrypt-sign.c.
* ops.h (_gpgme_encrypt_status_handler): Add prototype.
(_gpgme_sign_status_handler): Add prototype.
* sign.c (sign_status_handler): Rename to ...
(_gpgme_sign_status_handler): ... this and make non-static.
* encrypt.c (encrypt_status_handler): Rename to ...
(_gpgme_encrypt_status_handler): ... this and make non-static.
* encrypt.c (gpgme_op_encrypt_start): Use new status handler name.
* sign.c (gpgme_op_encrypt_start): Likewise.

2002-02-25 Marcus Brinkmann <marcus@g10code.de>

* context.h (struct gpgme_context_s): New member include_certs.
* gpgme.h (gpgme_set_include_certs): Add prototype.
(gpgme_get_include_certs): Likewise.
* gpgme.c (gpgme_set_include_certs): New function.
(gpgme_get_include_certs): Likewise.
(gpgme_new): Set include_certs to 1 (the default).
* engine.c (_gpgme_engine_op_encrypt): Accept new argument include_certs, and pass it to _gpgme_gpgsm_op_sign.
* engine.h (_gpgme_engine_op_sign): Likewise for prototype.
* engine-gpgsm.c (_gpgme_gpgsm_op_sign): Accept new argument include_certs and handle it.
* engine-gpgsm.h (_gpgme_gpgsm_start): Add new argument include_certs.
* sign.c (gpgme_op_sign_start): Add new argument to _gpgme_engine_op_sign call.

2002-02-14 Werner Koch <wk@gnupg.org>

* keylist.c (gpgme_op_keylist_start): Do not use a verbose listing.

2002-02-13 Werner Koch <wk@gnupg.org>

* vasprintf.c, fopencookie.c: Add replacement functions.
* util.h: Add prototypes for them.

2002-02-09 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_assuan_simple_command): Return 0 if we reach the end of the function.

2002-02-09 Marcus Brinkmann <marcus@g10code.de>

* genkey.c (gpgme_op_genkey_start): Fix logic in validity check.
  (gpgme_op_genkey_start): Skip newlines after opening tag.

* engine-gpgsm.c (_gpgme_gpgsm_start): Remove cruft.

2002-02-08 Marcus Brinkmann <marcus@g10code.de>

* genkey.c (gpgme_op_genkey_start): Allow PUBKEY and SECKEY to be set, and pass them down to the crypto engine.
* engine-gpgsm.h (_gpgme_gpgsm_start): New arguments PUBKEY and SECKEY.
* engine.h: Likewise.
* rungpg.h (_gpgme_gpg_spawn): Likewise.
* engine.c (_gpgme_engine_op_genkey): Likewise. Use those arguments.
* rungpg.c (_gpgme_gpg_op_genkey): Likewise. Complain if those arguments are set.

* engine-gpgsm.c (_gpgme_gpgsm_op_keylist): Beautify comment.

2002-02-06 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (_gpgme_gpg_op_keylist): Remove handling of keylist mode (for now).
2002-02-06 Marcus Brinkmann <marcus@g10code.de>

* wait.c (gpgme_wait): Add new argument STATUS, in which the status of the returned context is returned.
(_gpgme_wait_on_condition): Rework the function a bit, to make it aware of cancelled processes, and to allow to use gpgme_wait with CTX being NULL (as documented in the source).
(struct proc_s): New member REPORTED.
* gpgme.h: Fix prototype.
* verify.c (gpgme_op_verify): Fix use of gpgme_wait.
* sign.c (gpgme_op_sign): Likewise.
* import.c (gpgme_op_import): Likewise.
* genkey.c (gpgme_op_genkey): Likewise.
* export.c (gpgme_op_export): Likewise.
* encrypt.c (gpgme_op_encrypt): Likewise.
* delete.c (gpgme_op_delete): Likewise.
* decrypt-verify.c (gpgme_op_decrypt_verify): Likewise.

2002-02-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_set_keylist_mode): Possibly return an error value.
(gpgme_get_keylist_mode): New function.
(gpgme_new): Set the default for keylist_mode member of CTX.

* gpgme.h (gpgme_set_keylist_mode): Fix prototype.
(gpgme_get_keylist_mode): New prototype.
(GPGME_KEYLIST_MODE_LOCAL): New macro.
(GPGME_KEYLIST_MODE_EXTERN): Likewise..

2002-02-02 Marcus Brinkmann <marcus@g10code.de>

This patch has gotten a bit large... mmh. The main thing that happens here is that error values are now not determined in the operation function after gpgme_wait completed, but in the status handler when EOF is received. It should always be the case that either an error is flagged or EOF is received, so that after a gpgme_wait you should never have the situation that no error is flagged and EOF is not received. One problem is that the engine status handlers don't have access to the context, a horrible kludge works around this for now. All errors that happen during a pending operation should be caught and reported in ctx->error, including out-of-core and cancellation. This rounds up neatly a couple of loose ends, and makes it possible to pass up any errors in the communication with the backend as well. As a bonus, there will be a function to access gpgme->wait, so that the operations can truly be implemented with their _start function.
* engine-gpgsm.c (gpgsm_status_handler): Horrible kludge to report error back to the context.
* rungpg.c (gpg_status_handler): Same horrible kludge applied here.

* engine-gpgsm.c (gpgsm_assuan_simple_command): Add error checking.

* wait.c (_gpgme_wait_on_condition): If canceled, set CTX->error to a value indication that.

* verify.c (add_notation): Set error, not out_of_core.
  (finish_sig): Likewise.
  (gpgme_op_verify_start): Don't clear out_of_core.
  (_gpgme_verify_status_handler): At EOF, clean up the notation data.
  (gpgme_op_verify): And don't do it here.

* trustlist.c (trustlist_status_handler): Check error, not out_of_core.
  (gpgme_op_trustlist_start): Don't clear out_of_core.
  (gpgme_op_trustlist_next): Check error, not out_of_core.
  (gpgme_op_trustlist_end): Likewise.

* ops.h (test_and_allocate_result): New macro.
  (_gpgme_passphrase_result): Remove prototype.
* delete.c (gpgme_op_delete): Return error from context.
  (delete_status_handler): Use macro test_and_allocate_result.
  Perform error checking at EOF.
  (gpgme_op_delete_start): Release result.
* passphrase.c (_gpgme_passphrase_status_handler): Use macro test_and_allocate_result, and perform error checking here.
  (_gpgme_passphrase_result): Function removed.
* sign.c (gpgme_op_sign_start): Do not set out_of_core to zero.
  (gpgme_op_sign): Just return the error value from the context.
  (sign_status_handler): Only progress if no error is set yet. If we process an EOF, set the resulting error value (if any).
* decrypt.c (_gpgme_decrypt_result): Function removed.
  (create_result_struct): Function removed.
  (_gpgme_decrypt_status_handler): Use macro test_and_allocate_result, calculate error on EOF, do not progress with errors.
  (_gpgme_decrypt_start): Do not set out_of_core to zero.
  (gpgme_op_decrypt): Just return the error value from the context.
* encrypt.c (encrypt_status_handler): Perform the error checking here.
  (gpgme_op_encrypt_start): Do not clear out_of_core.
* export.c (export_status_handler): Return if error is set in context.
  (gpgme_op_export_start): Release result.
  (gpgme_op_export): Return error from context.
* decrypt-verify.c (gpgme_op_decrypt_verify): Return the error in the context.
* genkey.c (genkey_status_handler): Use macro test_and_allocate_result. Perform error checking at EOF.
   (gpgme_op_genkey): Just return the error from context.
* import.c (gpgme_op_import): Return the error from context.
   (import_status_handler): Use macro test_and_allocate_result.
* keylist.c (gpgme_op_keylist_start): Do not clear out_of_core.
   (gpgme_op_keylist_next): Return error of context.
   (keylist_colon_handler): Set error instead out_of_code.
   (finish_key): Likewise.

* context.h: Remove member out_of_core, add member error.
* gpgme.c (_gpgme_release_result): Clear error flag.

* engine.h (_gpgme_engine_get_error): New prototype.
* engine.c (_gpgme_engine_get_error): New function.
* engine-gpgsm.c (_gpgme_gpgsm_get_error): New function.

* engine-gpgsm.c (map_assuan_error): New function.
   (gpgsm_assuan_simple_command): Change return type to GpgmeError, use the new function to map error values.
   (gpgsm_set_fd): Change return type tp GpgmeError.
   (_gpgme_gpgsm_op_decrypt): Change type of ERR to GpgmeError.
   (_gpgme_gpgsm_op_import): Likewise.
   (_gpgme_gpgsm_op_sign): Likewise.
   (struct gpgsm_object_s): New member error.
   (gpgsm_status_handler): Set error if error occurs. Determine error number from ERR line received. If assuan_read_line fails, terminate the connection.

2002-02-01 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (MOSTLYCLEANFILES): New variable.

2002-02-01 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_status_handler): At error, terminate the connection to the server.

2002-01-31 Marcus Brinkmann <marcus@g10code.de>

* rungpg.h: Add STATUS_KEY_CREATED.

* progress.c: New file.
* Makefile.am (libgpgme_la_SOURCES): Add progress.c.

* genkey.c (genkey_status_handler): Use
_gpgme_progress_status_handler. Add check for status.
(struct genkey_result_s): New structure.
(_gpgme_release_genkey_result): New function.
(gpgme_op_genkey): Check for error.
* gpgme.c (_gpgme_release_result): Call
_gpgme_release_genkey_result.
* ops.h (_gpgme_release_genkey_result): Add prototype.
* types.h (GenKeyResult): New type.
* context.h (gpgme_context_s): Add GenKeyResult to member result.

2002-01-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (_gpgme_release_result): Call
_gpgme_release_delete_result.
* ops.h (_gpgme_release_delete_result): Add prototype.
* types.h (DeleteResult): New type.
* context.h (gpgme_context_s): Add DeleteResult to member result.

* delete.c (enum delete_problem): New type.
(struct delete_result_s): New structure.
(_gpgme_release_delete_result): New function.
(delete_status_handler): Implement more status codes.
(gpgme_op_delete): Return error on failure.

* import.c (MAX_IMPORTED_FIELDS): Bump up to 14.

2002-01-30 Marcus Brinkmann <marcus@g10code.de>

* import.c (struct import_result_s): New structure.
(_gpgme_release_import_result): New function.
(append_xml_impinfo): Likewise.
(import_status_handler): Implement.
* gpgme.c (_gpgme_release_result): Add call to
_gpgme_release_import_result.
* ops.h (_gpgme_release_import_result): Add prototype.
* types.h (ImportResult): New type.
* context.h (gpgme_context_s): Add ImportResult to member result.

* encrypt.c (gpgme_op_encrypt): Code clean up.

2002-01-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h: Add lots of comment and fix the formatting. Add
gpgme_trustlist_end prototype.

2002-01-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h: Add new type GpgmeIdleFunc. Change type of
gpgme_register_idle to return and accept this type.
* wait.c (gpgme_register_idle): Fix type.
Save and return old value of idle_function.

2002-01-29 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (_gpgme_gpgsm_op_keylist): Implement secret only mode.

* keylist.c (keylist_colon_handler): Add support for the new "crs"
record type.

2002-01-22 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_release): Call assuan_disconnect,
not assuan_pipe_disconnect.

* Makefile.am (libgpgme_la_LIBADD): Change to link assuan and
jnlbin (needed by assuan) statically into libgpgme. Linking a
static library into a shared library this way is not portable.

2002-01-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.h (GpgmePassphraseCb): Change type of R_HD from void* to
void**.

2002-01-22 Marcus Brinkmann <marcus@g10code.de>

* data.c (gpgme_data_new_from_filepart): Change type of LENGTH
from off_t to size_t.
* gpgme.h: Likewise.

2002-01-22 Marcus Brinkmann <marcus@g10code.de>

* wait.c (_gpgme_wait_on_condition): If the process finished,
reset the pending flag. Also if the operation was cancelled.

(struct proc_s): Rename READY to DONE.
(wait_item_s): Likewise.
(set_process_ready): Rename to ...
(set_process_done): ... this.
(_gpgme_remove_proc_from_wait_queue): Call set_process_done
instead set_process_ready.
(_gpgme_wait_on_condition): Likewise.
(do_select): Rename READY to DONE.

* verify.c (gpgme_op_verify): Do not set pending to zero here.
* sign.c (gpgme_op_sign): Likewise.
* import.c (gpgme_op_import): Likewise.
* genkey.c (gpgme_op_genkey): Likewise.
* export.c (gpgme_op_export): Likewise.
* encrypt.c (gpgme_op_encrypt): Likewise.
* delete.c (gpgme_op_delete): Likewise.
* decrypt-verify.c (gpgme_op_decrypt_verify): Likewise.
* decrypt.c (gpgme_op_decrypt): Likewise.

2002-01-22 Marcus Brinkmann <marcus@g10code.de>

* export.c: Cleanup.

2002-01-15 Marcus Brinkmann <marcus@g10code.de>

* trustlist.c: Various source clean ups.
  (my_isdigit): Removed.
  (gpgme_op_trustlist_end): New function.

2002-01-13 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c: Various source clean ups, like renaming C to CTX where appropriate.
  (gpgme_new): Clear R_CTX before starting the work.
  (my_isdigit): Removed.
  (my_isxdigit): Likewise.

* data.c: Various source clean ups.
  (gpgme_data_new_from_mem): Check BUFFER after clearing R_DH.
  (gpgme_data_new_with_read_cb): Similar for READ_CB.
  (gpgme_data_new_from_file): Loop over fread while EINTR.
  (gpgme_data_new_from_filepart): Rediddled a bit. Allow LENGTH to be zero. Loop over fread while EINTR.
  (my_isdigit): Removed.
  (my_isxdigit): Likewise.

2001-12-21 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_new): Replace General_Error with Pipe_Error where appropriate.

2001-12-19 Marcus Brinkmann <marcus@g10code.de>

* engine.c: Include 'string.h'. Reported by Stphane Corthsy.

* version.c (get_engine_info): Remove prototype.

2001-12-19 Marcus Brinkmann <marcus@g10code.de>
* engine-gpgsm.c (_gpgme_gpgsm_new): New variable CHILD_FDS. Fill it with the servers fds, and pass it to assuan_pipe_connect.

2001-12-18 Marcus Brinkmann <marcus@g10code.de>

* keylist.c (gpgme_op_keylist_end): New function.
* gpgme.h (gpgme_op_keylist_end): New prototype.

* engine.h (gpgme_engine_check_version): Move prototype to ...

* gpgme.h (gpgme_engine_check_version): ... here.

* genkey.c (gpgme_op_genkey_start): Remove unused variable.

2001-12-18 Marcus Brinkmann <marcus@g10code.de>

* version.c (gpgme_get_engine_info): Reimplemented.
(gpgme_check_engine): Reimplemented.
(_gpgme_compare_versions): Return NULL if MY_VERSION is NULL.

* engine.c: Include `io.h'.
(gpgme_engine_get_info): New function.
* engine.h (gpgme_engine_check_version, _gpgme_engine_get_info): Add prototype.

2001-12-18 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (struct reap_s, reap_list, reap_list_lock): Moved to ...
* engine.c (struct reap_s, reap_list, reap_list_lock): ... here.
Include `time.h', `sys/types.h', `assert.h', and `sema.h'.

* rungpg.c (_gpgme_engine_add_child_to_reap_list): New function.
(do_reaping, _gpgme_gpg_housecleaning): Moved to ...
* engine.c (do_reaping, _gpgme_engine_housecleaning): ... here.
* rungpg.c (_gpgme_gpg_release): Replace code that is now in its own function by call to _gpgme_engine_add_child_to_reap_list().

* wait.c: Include `engine.h'.
(run_idle): Call _gpgme_engine_housecleaning(), not _gpgme_gpg_housecleaning().

2001-12-18 Marcus Brinkmann <marcus@g10code.de>

* key.c (_gpgme_key_append_name): Append, not prepend, the uid. Initialize the next field of the uid structure.
(gpgme_key_get_as_xml): Do not list last uid first.

2001-12-17 Marcus Brinkmann <marcus@g10code.de>
* engine-gpgsm.c (_gpgme_gpgsm_set_colon_line_handler): New function [!ENABLE_GPGSM].

2001-12-14 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_op_verify): Put TEXT into message_data, not SIG.
(_gpgme_gpgsm_op_sign): Use `--detached', not `--detach'.

* sign.c (sign_status_handler): Call
_gpgme_passphrase_status_handler early.

2001-12-14 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c: Revert last change.

2001-12-14 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_status_handler): Freeze the output file handler when ending this operation, otherwise the wait function will sit on it.

2001-12-14 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (struct gpgsm_object_s): New member colon.attic.
(_gpgme_gpgsm_new): Initialize some more members.
(_gpgme_gpgsm_release): Free the colon line handler's attic line.
(gpgsm_status_handler): Rework the inline-data processing.

2001-12-13 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (_gpgme_gpg_spawn): Do not add the fds to the child list that are not dup'ed, for those the close-on-exec flag is set now.
* version.c (_gpgme_get_program_version): Remove first entry in CFD, as the close-on-exec flag is now set for this fd.

2001-12-13 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_op_encrypt): Do not add `armor' option to `ENCRYPT'.
* engine-gpgsm.c (gpgsm_set_recipients): Free LINE when returning successfully.

2001-12-13 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (close_notify_handler): New function.
(_gpgme_gpgsm_new): Manage the file descriptors a
bit differently. Do not set close-on-exit flags.
(_gpgme_gpgsm_op_decrypt): Do not set message_fd
to -1, this is done by the close handler.
(_gpgme_gpgsm_op_encrypt): Likewise.
(_gpgme_gpgsm_op_import): Likewise (also for output_fd).
(_gpgme_gpgsm_op_keylist): Likewise (also for input_fd and output_fd).
(_gpgme_gpgsm_op_sign): Likewise.
(_gpgme_gpgsm_op_verify): Likewise, but for output_fd.

* posix-io.c (_gpgme_io_pipe): Set the close-on-exit flag for the
non-inherited file descriptor index of the pipe.

2001-12-13 Werner Koch <wk@gnupg.org>

* engine-gpgsm.c (_gpgme_gpgsm_set_colon_line_handler): New.
(gpgsm_status_handler): Pass datalines to a colon handler
* engine.c (_gpgme_engine_set_colon_line_handler): Set the colon
handler for gpgsm.

* engine-gpgsm.c (_gpgme_gpgsm_op_keylist): Allow NULL for
pattern.
(gpgsm_assuan_simple_command): Removed underscore from
assuan_write_line.
(_gpgme_gpgsm_start): Ditto.
(gpgsm_assuan_simple_command): Replaced internal Assuan read
function by the new assuan_read_line. Removed the use of the
internal header.
(gpgsm_status_handler): Ditto. Use the new assuan_pending_line.
(_gpgme_gpgsm_start): Use the documented way to get an fd from
assuan.

* keylist.c (keylist_colon_handler): Handle "crt" records
* key.h (gpgme_key_s): Add an x509 flag.
* key.c (parse_x509_user_id): New.
(_gpgme_key_append_name): Handle x.509 names.

2001-12-05 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_status_handler): Make it work with current
version of assuan.

2001-12-05 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_set_fd): Accept one more argument OPT.
(_gpgme_gpgsm_op_encrypt): Pass armor argument to gpgsm_set_fd for
output descriptor.
(_gpgme_gpgsm_op_sign): Likewise.
2001-12-05 Marcus Brinkmann <marcus@g10code.de>

* keylist.c (gpgme_op_keylist_next): Set pending to 0 if EOF occurs.

2001-11-26 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_op_sign): Fix stupid typo.

2001-11-24 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (gpgsm_status_handler): Don't break if bsearch fails. Deal with assuan read line returning more than one line (for now).

2001-11-23 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_op_sign): Implement it according to the current protocol definition.

2001-11-23 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c (_gpgme_gpgsm_op_sign): Set CLOEXEC flag for parent ends of the pipe.

2001-11-22 Marcus Brinkmann <marcus@g10code.de>

* engine-gpgsm.c: Include stdlib.h and string.h. Also include, for now, rungpg.h and status-table.h. (gpgsm_status_handler): Implement more of the status handler.

2001-11-22 Marcus Brinkmann <marcus@g10code.de>


(_gpgme_gpgsm_op_sign): Likewise.
(_gpgme_gpgsm_op_keylist): Likewise.
(_gpgme_gpgsm_op_trustlist): Likewise.
(_gpgme_gpgsm_release): Release command.
(_gpgme_gpgsm_op_decrypt): Allocate command.
(_gpgme_gpgsm_op_import): Likewise.
(gpgsm_status_handler): Also treat 'ERR' strings as EOF.

2001-11-22 Marcus Brinkmann <marcus@g10code.de>
* gpgme.h (gpgme_set_protocol): New prototype.

2001-11-22 Marcus Brinkmann <marcus@g10code.de>
* engine-gpgsm.c (_gpgme_gpgsm_op_decrypt): New function.
(_gpgme_gpgsm_op_import): Likewise.

2001-11-22 Marcus Brinkmann <marcus@g10code.de>
* engine-gpgsm.c: Shuffle around header inclusion a bit, to still
keep them separate.
(_gpgme_set_status_handler) [#ENABLE_GPGSM]: New function.

2001-11-22 Werner Koch <wk@gnupg.org>
* engine-gpgsm.c: Include more headers so that NULL and mk_error
is defined even with an undefined GPGSM_PATH.

2001-11-22 Marcus Brinkmann <marcus@g10code.de>
* rungpg.c (gpg_inbound_handler, write_mem_data, write_cb_data,
gpg_outbound_handler): Moved to ... 
* data.c (_gpgme_data_inbound_handler, write_mem_data,
write_cb_data, _gpgme_data_outbound_handler): ... here. Make the
_gpgme_* ones non-static.
* data.c: Include io.h.

* ops.h (_gpgme_data_inbound_handler): New prototype.
(_gpgme_data_outbound_handler): Likewise.
(_gpgme_gpg_spawn): Use these new functions.

* engine-gpgsm.h (_gpgme_gpgsm_op_decrypt, _gpgme_gpgsm_op_delete,
_gpgme_gpgsm_op_encrypt, _gpgme_gpgsm_op_export,
_gpgme_gpgsm_op_genkey, _gpgme_gpgsm_op_import,
_gpgme_gpgsm_op_keylist, _gpgme_gpgsm_op_sign,
_gpgme_gpgsm_op_trustlist, _gpgme_gpgsm_op_verify,
_gpgme_gpgsm_start, _gpgme_gpgsm_set_status_handler): New prototype.
Include <rungpg.h> for status handler function.
* engine-gpgsm.c (struct gpgsm_object_s): New members input_fd, input_data, output_fd, output_data, message_fd, message_data, command and status.
(_gpgme_gpgsm_new): Open input, output and message pipes before connecting to the client. Close server's ends afterwards.
(_gpgme_gpgsm_release): Close open file descriptors. Remove server process from wait queue.

* engine.c (_gpgme_engine_start): Implement for GPGME_PROTOCOL_CMS.
(_gpgme_engine_set_status_handler): Likewise.
(_gpgme_engine_op_verify): Likewise.

2001-11-21 Marcus Brinkmann <marcus@g10code.de>

* context.h: Do not include rungpg.h, but engine.h.
(struct gpgme_context_s): Replace member gpg with engine.
* gpgme.c (gpgme_release): Release engine, not gpg.

* recipient.c (_gpgme_append_gpg_args_from_recipients): Function moved ...
* rungpg.c (_gpgme_append_gpg_args_from_recipients): ... here.
Make static, change order of arguments, and return an error value.
* ops.h (_gpgme_gpg_op_verify): Removed prototype.

* rungpg.h (_gpgme_gpg_op_verify): Add prototype.
(_gpgme_gpg_op_encrypt): Likewise.
(_gpgme_gpg_op_decrypt): Likewise.
(_gpgme_gpg_op_delete): Likewise.
(_gpgme_gpg_op_export): Likewise.
(_gpgme_gpg_op_genkey): Likewise.
(_gpgme_gpg_op_import): Likewise.
(_gpgme_gpg_op_keylist): Likewise.
(_gpgme_gpg_op_sign): Likewise.
(_gpgme_gpg_op_trustlist): Likewise.
* rungpg.c (_gpgme_gpg_op_verify): New function.
(_gpgme_gpg_op_encrypt): Likewise.
(_gpgme_gpg_op_decrypt): Likewise.
(_gpgme_gpg_op_delete): Likewise.
(_gpgme_gpg_op_export): Likewise.
(_gpgme_gpg_op_genkey): Likewise.
(_gpgme_gpg_op_import): Likewise.
(_gpgme_gpg_op_keylist): Likewise.
(_gpgme_gpg_op_sign): Likewise.
(_gpgme_gpg_op_trustlist): Likewise.
* engine.h (_gpgme_engine_set_status_handler): Add prototype.
  (_gpgme_engine_set_command_handler): Likewise.
  (_gpgme_engine_set_colon_line_handler): Likewise.
  (_gpgme_engine_op_decrypt): Likewise.
  (_gpgme_engine_op_delete): Likewise.
  (_gpgme_engine_op_encrypt): Likewise.
  (_gpgme_engine_op_export): Likewise.
  (_gpgme_engine_op_genkey): Likewise.
  (_gpgme_engine_op_import): Likewise.
  (_gpgme_engine_op_keylist): Likewise.
  (_gpgme_engine_op_sign): Likewise.
  (_gpgme_engine_op_trustlist): Likewise.
  (_gpgme_engine_op_verify): Likewise.
  (_gpgme_engine_start): Likewise.
* engine.c (_gpgme_engine_set_status_handler): New function.
  (_gpgme_engine_set_command_handler): Likewise.
  (_gpgme_engine_set_colon_line_handler): Likewise.
  (_gpgme_engine_op_decrypt): Likewise.
  (_gpgme_engine_op_delete): Likewise.
  (_gpgme_engine_op_encrypt): Likewise.
  (_gpgme_engine_op_export): Likewise.
  (_gpgme_engine_op_genkey): Likewise.
  (_gpgme_engine_op_import): Likewise.
  (_gpgme_engine_op_keylist): Likewise.
  (_gpgme_engine_op_sign): Likewise.
  (_gpgme_engine_op_trustlist): Likewise.
  (_gpgme_engine_op_verify): Likewise.
  (_gpgme_engine_start): Likewise.
* types.h: Add types EngineObject and GpgsmObject.
* Makefile.am (libgpgme_la_SOURCES): Add engine-gpgsm.h,
  engine-gpgsm.c, engine.h and engine.c.
* engine.h: New file.
* engine.c: Likewise.
* engine-gpgsm.h: Likewise.
* engine-gpgsm.c: Likewise.
* rungpg.c (_gpgme_gpg_get_version): New function.

2001-11-20 Marcus Brinkmann <marcus@g10code.de>
(_gpgme_gpg_check_version): Likewise.
* rungpg.h: Add prototypes for _gpgme_gpg_get_version and _gpgme_gpg_check_version.

* version.c (compare_versions): Rename to ...
(_gpgme_compare_versions): ... this. Make non-static.
(gpgme_check_version): Use _gpgme_compare_versions rather than compare_versions.
(gpgme_check_engine): Likewise.
* ops.h (_gpgme_get_program_version): Add prototype.

2001-11-20 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (libgpgme_la_INCLUDES): Remove obsolete directive.
(AM_CPPFLAGS): New directive [BUILD_ASSUAN].
(libgpgme_la_LIBADD): Likewise.

2001-11-20 Marcus Brinkmann <marcus@g10code.de>

* version.c: Remove global variables lineno and tmp_engine_version.
( version_handler): Removed.
(_gpgme_get_program_version): New function.
(get_engine_info): Don't use context and version_handler, but _gpgme_get_program_version.
* ops.h (_gpgme_get_program_version): Add prototype for _gpgme_get_program_version (we expect to use it elsewhere soon).

2001-11-18 Marcus Brinkmann <marcus@g10code.de>

* version.c (get_engine_info): If GnuPG is not available, return an error message.
* posix-util.c (_gpgme_get_gpg_path): Allow GPG_PATH to be undefined.
(_gpgme_get_gpgsm_path): New function.
* w32-util.c (find_program_in_registry): New static function.
(_gpgme_get_gpg_path): Allow GPG_PATH to be undefined. Rework to use find_program_in_registry.
(_gpgme_get_gpgsm_path): New function.
(util.h): Prototype _gpgme_get_gpgsm_path).
* rungpg.c (_gpgme_gpg_spawn): Verify that _gpgme_get_gpg_path() returns non-null.

2001-11-16 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (libgpgme_la_SOURCES): Add decrypt-verify.c.
* types.h: Add decrypt-verify types.
* ops.h: Likewise.
* context.h: Add result type for decrypt-verify.
* gpgme.h: Add decrypt-verify prototypes.

* decrypt.c (decrypt_status_handler): Renamed to ...
  (_gpgme_decrypt_status_handler): ... this. Make non-static.
  (gpgme_op_decrypt_start): New function, derived from
  gpgme_op_decrypt_start.
  (gpgme_op_decrypt_start): Reimplement in terms of
  _gpgme_decrypt_start.
  (_gpgme_decrypt_result): New function to retrieve error value.
  (gpgme_op_decrypt): Use _gpgme_decrypt_result.
* ops.h: Add prototypes for new functions.

* verify.c (verify_status_handler): Renamed to ...
  (_gpgme_verify_status_handler): ... this. Make non-static.
  (gpgme_op_verify_start): Use new function name.
  (intersect_stati): Renamed to ...
  (_gpgme_intersect_stati): ... this. Make non-static.
  (gpgme_op_verify): Use new name.
* ops.h: Add prototypes for new functions.

2001-11-16 Marcus Brinkmann <marcus@g10code.de>

* passphrase.c: New file.
* Makefile.am (libgpgme_la_SOURCES): Add passphrase.c.
* ops.h (_gpgme_passphrase_result): Add prototypes from
  passphrase.c.
* types.h: Likewise.
* context.h: Add member passphrase to result.
* gpgme.c (_gpgme_release_result): Release passphrase member.

* decrypt.c: Some formatting and variable name changes (like
  CTX instead C).
  (struct decrypt_result_s): Remove members now found in
  passphrase result.
  (_gpgme_release_decrypt_result): Don't release removed members.
  (decrypt_status_handler): Call _gpgme_passphrase_status_handler,
  and don't handle the cases caught there.
  (command_handler): Removed.
  (gpgme_op_decrypt_start): Don't set command handler, but invoke
  _gpgme_passphrase_start which does it.
  (gpgme_op_decrypt): Invoke _gpgme_passphrase_result and drop the
  cases covered by it.

* sign.c Some formatting and variable name changes (like
  CTX instead C).
  (struct sign_result_s): Remove members now found in
passphrase result.  
(_gpgme_release_sign_result): Don't release removed members.  
(sign_status_handler): Call _gpgme_passphrase_status_handler,  
and don't handle the cases caught there.  
(command_handler): Removed.  
(gpgme_op_sign_start): Don't set command handler, but invoke  
_gpgme_passphrase_start which does it.  
(gpgme_op_sign): Invoke _gpgme_passphrase_result and drop the  
cases covered by it.

2001-11-15  Marcus Brinkmann  <marcus@g10code.de>

* decrypt.c (command_handler): Fix last change.

2001-11-15  Marcus Brinkmann  <marcus@g10code.de>

* verify.c (_gpgme_release_verify_result): Rename RES to RESULT.  
Rename R2 to NEXTgetResult.  
(intersect_stati): Rename RES to RESULT.  
(gpgme_get_sig_status): Likewise. Do not check return_type, but  
the member verify of result.  
(gpgme_get_sig_key): Likewise.

* sign.c (_gpgme_release_sign_result): Rename RES to RESULT.  If  
RESULT is zero, return.  
(sign_status_handler, command_handler): Do not check return_type,  
but the member sign of result.  
(gpgme_op_sign): Likewise. Drop assertion.

* encrypt.c (_gpgme_release_encrypt_result): Rename RES to RESULT.  If  
RESULT is zero, return.  
(encrypt_status_handler): Do not check return_type, but the member  
encrypt of result.  
(gpgme_op_encrypt): Likewise. Drop assertion.

* decrypt.c (_gpgme_release_decrypt_result): Rename RES to RESULT.  
(create_result_struct): Do not set result_type.  
(command_handler, decrypt_status_handler): Do not check  
return_type, but the member decrypt of result.  
(gpgme_op_decrypt): Likewise. Drop assertion.

* context.h (enum ResultType): Removed.  
(struct gpgme_context_s): Remove member result_type.  
(struct result): Replaces union result.  
* gpgme.c: Include string.h.  
(_gpgme_release_result): Release all members of c->result, which  
is now a struct. Zero out all members of the struct afterwards.
2001-11-11 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (_gpgme_gpg_release): Release GPG->cmd.cb_data. Release all members of the list GPG->arglist. Reported by Michael Schmidt <mschmidt@cs.uni-sb.de>.

2001-11-02 Marcus Brinkmann <marcus@g10code.de>

* rungpg.c (pipemode_copy): Change type of NBYTES to size_t.

* key.c: Include string.h.
* data.c: Likewise.
* recipient.c: Likewise.

2001-10-29 Marcus Brinkmann <marcus@g10code.de>

* context.h: New member signers_len.
* signers.c (gpgme_signers_clear): Require that signers are non-NULL with assertion. Use signers_len to determine how much keys to release. Add documentation.
  (gpgme_signers_add): Use signers_len to determine if the buffer is large enough. Use xtryrealloc rather than xtrymalloc and copying. Add documentation.
  (gpgme_signers_enum): Use signers_len to determine if key is available. Add documentation.

2001-10-22 Marcus Brinkmann <marcus@g10code.de>

* data.c (_gpgme_data_append): Check if LENGTH is smaller than ALLOC_CHUNK, not DH->length.

2001-10-17 Marcus Brinkmann <marcus@g10code.de>

* gpgme.c (gpgme_set_protocol): Fix last change.

2001-10-15 Werner Koch <wk@gnupg.org>

* gpgme.h (GpgmeProtocol): New.
* gpgme.c (gpgme_set_protocol): New.

2001-09-26 Werner Koch <wk@gnupg.org>


2001-09-17 Werner Koch <wk@gnupg.org>

* keylist.c (finish_key): Shortcut for no tmp_key. Changed all
callers to use this function without a check for tmp_key.

* keylist.c (gpgme_op_keylist_next): Reset the key_cond after emptying the queue. Bug reported by Stéphane Corlisy.

2001-09-12 Werner Koch <wk@gnupg.org>

* data.c (gpgme_data_rewind): Allow rewind for callbacks.

2001-09-07 Werner Koch <wk@gnupg.org>

* runpgp.h: Add NO_RECP.
* encrypt.c (encrypt_status_handler): Take on No_RECP.
  (gpgme_op_encrypt): Better error return.

* verify.c (verify_status_handler): Take on NODATA.

2001-09-03 Werner Koch <wk@gnupg.org>

* runpgp.h: Added STATUS_INV_RECP.
* gpgme.c (_gpgme_release_result): Add support for new EncryptResult object.
* encrypt.c (append_xml_encinfo): New.
  (encrypt_status_handler): Add some status parsing.
  (_gpgme_release_encrypt_result): New.

2001-08-29 Werner Koch <wk@gnupg.org>

* recipient.c (gpgme_recipients_release): Free the list. By Timo.

* keylist.c (keylist_colon_handler): Do a finish key if we receive an EOF here. This is probably the reason for a lot of bugs related to keylisting. It is so obvious. Kudos to Enno Cramer for pointing that out.

2001-08-28 Werner Koch <wk@gnupg.org>

* gpgme.c, gpgme.h (gpgme_get_op_info): New.
  (_gpgme_set_op_info): New.
  (_gpgme_release_result): Reset the op_info here.
* sign.c (append_xml_siginfo): New.
  (sign_status_handler): Store the sig create information.

2001-07-31 Werner Koch <wk@gnupg.org>

* encrypt.c (gpgme_op_encrypt): Hack to detect no valid recipients.

2001-07-30 Werner Koch <wk@gnupg.org>
* gpgme.c (gpgme_get_armor,gpgme_get_textmode): New.

* rungpg.c (build_argv): Disable armor comments
* w32-io.c (build_commandline): Need to add quotes here

2001-07-24 Werner Koch <wk@gnupg.org>

* data.c (gpgme_data_read): Add a way to return the available bytes.

2001-07-23 Werner Koch <wk@gnupg.org>

* util.c: Removed stpcpy() because we use the version from jnlib.

2001-07-19 Werner Koch <wk@gnupg.org>

* mkstatus: Define the collating sequence for sort.

2001-06-26 Werner Koch <wk@gnupg.org>

* rungpg.h: Add STATUS_UNEXPECTED as suggested by Timo.

2001-06-15 Werner Koch <wk@gnupg.org>

* keylist.c (set_userid_flags): Fixed the assigned values. Kudos to Timo for pointing this out.

2001-06-01 Werner Koch <wk@gnupg.org>


2001-05-28 Werner Koch <wk@gnupg.org>

* version.c (gpgme_check_engine): Stop version number parsing at the opening angle and not the closing one. By Tommy Reynolds.

2001-05-01 Jos Carlos Garca Sogo <jose@jaimedelamo.eu.org>

* encrypt.c (gpgme_op_encrypt_start): Deleted the assert( !c->gpg ) line, because it gave an error if another operation had been made before using the same context.

* decrypt.c (gpgme_op_decrypt_start): The same as above. Also added one line to release the gpg object in the context (if any).

2001-04-26 Werner Koch <wk@gnupg.org>
* key.c, key.h (_gpgme_key_cache_init): New.
(_gpgme_key_cache_add): New.
(_gpgme_key_cache_get): New.
* version.c (do_subsystem_inits): Init the cache.
* keylist.c (finish_key): Put key into the cache
* verify.c (gpgme_get_sig_key): First look into the cache.

2001-04-19 Werner Koch <wk@gnupg.org>

* keylist.c (parse_timestamp): Adjusted for the changed
--fixed-list-mode of gpg 1.0.4h.

2001-04-05 Werner Koch <wk@gnupg.org>

* verify.c (gpgme_op_verify_start): Enabled pipemode for detached sigs.

2001-04-04 Werner Koch <wk@gnupg.org>

* w32-io.c (_gpgme_io_select): Don't select on the writer if there
are still bytes pending. Timo found this not easy to track down
race condition.

2001-04-02 Werner Koch <wk@gnupg.org>

* gpgme.h: Add GPGME_ATTR_KEY_{EXPIRED,DISABLED}.
* key.c (gpgme_key_get_ulong_attr): And return those attrs.

* verify.c (gpgme_get_sig_key): Set keylist storing mode depending on
the mode set in the current context. Suggested by Timo.

* key.c (gpgme_key_get_ulong_attr): Return can_certify and not
can_encrypt. By Timo.

2001-03-30 Werner Koch <wk@gnupg.org>

* debug.c (debug_init): Allow to specify a debug file.
(_gpgme_debug_level): New.

* posix-io.c (_gpgme_io_read, _gpgme_io_write): Print output.
(_gpgme_io_select): Debug only with level > 2.

2001-03-15 Werner Koch <wk@gnupg.org>

* rungpg.c: Included time.h.

* key.h: New keyflags for capabilities.
* keylist.c (set_mainkey_capability, set_subkey_capability): New.
(keylist_colon_handler): Parse them.
* gpgme.h: New attribute values for capabilities.
* key.c (gpgme_key_get_string_attr): Return them.
  (capabilities_to_string): New.
  (gpgme_key_get_ulong_attr): Return the global caps.

2001-03-14 Werner Koch <wk@gnupg.org>

* w32-io.c (destroy_reader, destroy_writer): Fixed syntax error.
  Thanks to Jan Oliver Wagner.

2001-03-13 Werner Koch <wk@gnupg.org>

* context.h: Add invalid and revoke flags to user_id structure.
* keylist.c (gpgme_op_keylist_start): Use --fixed-list-mode.
  (keylist_colon_handler): Adjust for that.
  (set_userid_flags): New.
  (set_mainkey_trust_info): Handle new key invalid flag
  (set_subkey_trust_info): Ditto.
* gpgme.h: Add new attributes for key and user ID flags.
* key.c (_gpgme_key_append_name): Init these flags
  (gpgme_key_get_as_xml): Print them.
  (one_uid_as_xml): New helper for above.
  (gpgme_key_get_string_attr, gpgme_key_get_ulong_attr):
    Return the new attributes. Enhanced, so that subkey information
    can be returned now.

2001-02-28 Werner Koch <wk@gnupg.org>

* w32-io.c (destroy_reader): Set stop_me flag.
  (writer, create_writer, destroy_writer, find_writer, kill_writer): New.
  (_gpgme_io_write): Use a writer thread to avoid blocking.
  (_gpgme_io_close): Cleanup a writer thread
  (_gpgme_io_select): Replace the faked wait on writing by a real
    waiting which is now possible due to the use of a writer thread.

2001-02-20 Werner Koch <wk@gnupg.org>

  (create_reader, reader): Add a new event to stop the thread.
  (_gpgme_io_close): Kill the reader thread.

* posix-io.c (_gpgme_io_select): Handle frozen fds here.

* wait.c: Reworked the whole thing.
* rungpg.c (_gpgme_gpg_new): Init pid to -1.
  (_gpgme_gpg_release): Remove the process from the wait queue.
2001-02-19 Werner Koch <wk@gnupg.org>

* w32-io.c (_gpgme_io_set_close_notify): New.
  (_gpgme_io_close): Do the notification.

* posix-io.c (_gpgme_io_select): Use a 1 sec timeout and not 200 microseconds.

* wait.c (remove_process): Don't close the fd here.
  (do_select): Set the fd to -1 and remove the is_closed flag everywhere.
  (_gpgme_wait_on_condition): Remove the assert on the queue and break out if we could not find the queue. The whole thing should be reworked.

* posix-io.c (_gpgme_io_set_close_notify): New.
  (_gpgme_io_close): Do the notification.

* rungpg.c (close_notify_handler): New.
  (_gpgme_gpg_new): Register a callback for the fd.
  (_gpgme_gpg_set_colon_line_handler): Ditto.
  (build_argv): Ditto

2001-02-13 Werner Koch <wk@gnupg.org>

* rungpg.c (struct reap_s): Replaced pid_t by int.

* types.h: Add ulong typedef.

* rungpg.c (do_reaping, _gpgme_gpg_housecleaning): New.
* w32-io.c (_gpgme_io_kill): New (dummy).

* keylist.c (gpgme_op_keylist_start): Cancel a pending request.

* posix-io.c (_gpgme_io_read): Add some debug output.
  (_gpgme_io_write): Ditto.
  (_gpgme_io_select): Increased the timeout.

2001-02-12 Werner Koch <wk@gnupg.org>

Enhanced the signature verification, so that it can handle more than one signature and is able to return more information on the signatures.
* verify.c (gpgme_get_sig_key): New.
  (gpgme_get_sig_status): New.

* gpgme.h: Add stdio.h.
(GpgmeSigStat): New status DIFF.

2001-02-01 Werner Koch <wk@gnupg.org>

* w32-io.c (set_synchronize): Add EVENT_MODIFY_STATE. Add Debug code to all Set/ResetEvent().

* rungpg.c (read_status): Check for end of stream only if we have an r. By Timo.

2001-01-31 Werner Koch <wk@gnupg.org>

* wait.c (_gpgme_wait_on_condition): Removed all exit code processing. 
(propagate_term_results, clear_active_fds): Removed. 
(count_active_fds): Renamed to .. 
(count_active_and_thawed_fds): .. this and count only thawed fds.

* rungpg.c (gpg_colon_line_handler): Return colon.eof and not status.eof ;-)

2001-01-30 Werner Koch <wk@gnupg.org>

* w32-io.c (_gpgme_io_spawn): Use the supplied path arg.

* version.c (get_engine_info): Return better error information.

* posix-util.c, w32-util.c: New. 
(_gpgme_get_gpg_path): New, suggested by Jan-Oliver. 
* rungpg.c (_gpgme_gpg_spawn): Use new function to get GPG's path.

* signers.c (gpgme_signers_add): Ooops, one should test code and not just write it; the newarr was not assigned. Thanks to Jos for pointing this out. Hmmm, still not tested, why should a coder test his fix :-)

* w32-io.c: Does now use reader threads, so that we can use WaitForMultipleObjects.  
* sema.h, posix-sema.c, w32-sema.c: Support for Critical sections. Does currently only work for W32.

* debug.c, util.h : New. Changed all fprintfs to use this new set of debugging functions.

2001-01-23 Werner Koch <wk@gnupg.org>

* data.c (_gpgme_data_release_and_return_string): Fixed string termination.
2001-01-22 Werner Koch <wk@gnupg.org>

* delete.c: New.

* signers.c: New.
* key.c (gpgme_key_ref, gpgme_key_unref): New.
* sign.c (gpgme_op_sign_start): Allow the use of other keys.

* version.c (gpgme_get_engine_info, gpgme_check_engine): New.
* rungpg.c (_gpgme_gpg_set_simple_line_handler): New.

2001-01-05 Werner Koch <wk@gnupg.org>

* data.c (gpgme_data_rewind): Allow to rewind data_type_none.


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<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
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commit 2145348ec54c6027f2ea20f60277e2871405
Merge: 348ba88 2036f1a
Author: Ben McGinnes <ben@adversary.org>
Date:   Wed May 6 03:04:19 2015 +1000

Merge pull request #4 from Hasimir/master

history

commit 2036f1a0a670a0561993e195c458059220b36114
Merge: dbabf0c 348ba88
Author: Ben McGinnes <ben@adversary.org>
Date:   Wed May 6 02:57:44 2015 +1000

Merge branch 'master' of github:adversary-org/pyme3
Added a short history

* A (very) brief summary of the project's history since 2002.
* Deals with why the commit log in the GPGME repo does not include the
  history of PyME.
* Mentions that intact git repos will be maintained, but not where they
  are (one will be on github, another will be in a user directory on
  playfair.gnupg.org).

Version release preparation

Todos update

* Removed reference to GitHub, replaced with impending new home at gnupg.org.

Version bump

* Bumped version number to 0.9.1 to keep it somewhat in line with the existing PyME project, even though there will be some divergence at some point (or even re-merging, depending on how many of the Python 3 modifications can be back-ported to the Python 2 version).
* Updated the author and copyright information to reflect the two current authors (Martin and I).
* Replaced Igor's contact details with mine.
* Replaced project home page with the GnuPG one.

pyme/version.py | 16 +++++++++-------
1 file changed, 9 insertions(+), 7 deletions(-)

commit ec167512f4ca88d8f6e89e2ae831798c8283b4df
Author: Ben McGinnes <ben@adversary.org>
Date:   Wed May 6 01:48:01 2015 +1000

README preparation.

* Changes in preparation for impending move of code to the GnuPG git server as a part of GPGME.

README.rst | 14 +++++++-------
1 file changed, 7 insertions(+), 7 deletions(-)

commit 8a48515e884c36b5b2b24a13cb4d2e49f4ee6f17
Author: Ben McGinnes <ben@adversary.org>
Date:   Wed May 6 01:43:53 2015 +1000

TODO moved to docs

* As it says.

TODO.rst      | 25 +++++++++++++++++++++
docs/TODO.rst | 25 ++++++++++++++++++++++++
2 files changed, 25 insertions(+), 25 deletions(-)

commit f968c777472f01f308f6e57eac1740bf5c76c205
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 16:52:13 2015 +1000

Started another TODO file.

TODO.rst | 25 ++++++++++++++++++++++
1 file changed, 25 insertions(+)

commit 127d0a56fa9f7ad1d4fb39d0b529b890a8d67365
Merge: db72dea 44837f6
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 14:59:44 2015 +1000

Merge pull request #2 from Hasimir/master

Minor editing.

commit 44837f6e50fc539e86aef1f75a6a3538b02029ea
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 14:56:55 2015 +1000

Minor editing.

* Fixed another URL.
* Changed Py3 version's version number to v0.9.1-beta0.

README.rst | 4 ++--
1 file changed, 2 insertions(+), 2 deletions(-)

commit db72deaae19c3513391df040bca66a88d9213af
Merge: db34286 48eb185
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 14:26:11 2015 +1000

Merge pull request #1 from Hasimir/master

Links

commit 48eb1856cb0739ce9f0b9084da9d965e1f7fddd
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 14:22:30 2015 +1000

Links

* Fixed URLs for authors.
* Updated my entry to point to github location.
** I strongly suspect the result of this work will be concurrent projects, so preparing for that eventuality with this repo.

README.rst | 8 +++++--
1 file changed, 4 insertions(+), 4 deletions(-)

commit db342865978f30b9a76204403daedf9fc4cf7cf
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 11:29:00 2015 +1000

Explicit over Implicit ...
... isn't just for code.

* Removed the 2to3 working directory and its contents.
* Made the README.rst file a little more clear that this branch is for Python 3 (set Python 3.2 as a fairly arbitrary requirement for the moment, but will probably raise this to 3.3).

2to3/2to3-output-remaining.log | 60 ---
2to3/2to3-output-setup.log  | 35 --
2to3/2to3-output.log       | 950 -----------------------------------------
README.rst                 | 10 +-  
4 files changed, 7 insertions(+), 1048 deletions(-)

commit 3edf07a4ba8a86af3a33246234d6e13307486af
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 11:19:41 2015 +1000

Added authors.

* In alphabetical order.
* Mine will need updating once Martin and I have decided what to do regarding the two main branches.

README.rst | 12 ++++++++++++  
1 file changed, 12 insertions(+)

commit 811eb14b53e8856312d99f46b77215f7f9bd672c
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 10:23:00 2015 +1000

Docs and other things.

* Now able to import pyme.core without error, indicates port process is successful.
* Code is *not* compatible with the Python 2 version.
* Will need to consider making this a parallel project with the master branch.
* Got rid of the .org TODO file.
* Changed the README to use the reST file extension since it's full of reST anyway.

2to3/TODO.org | 5 -----  
README.rst     | 32 ++++++++++++++++++++++++++++  
README.txt     | 32 -------------------------  
3 files changed, 32 insertions(+), 37 deletions(-)

commit 79e784bdccce1de6f7856921b5431044c62c6f015
Fixed another implicit import by making it explicit. Hopefully this is the last one.

pyme/util.py | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)

commit 2b52b46ccda3e7abcc50e0ed0745062259d698661
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 10:16:01 2015 +1000

Fixed another implicit import by making it explicit.

pyme/errors.py | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)

commit 409c8fd565e21f23cd41daaefcc867e6d23a0863
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 10:08:22 2015 +1000

Bytes vs. Unicode

* Trying PyBytes instead of PyUnicode.

commit d8164aa2ae98bf8e807c16e2d9be12c5fbea7cfd
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 09:22:58 2015 +1000

String to Unicode

* Replaced all instances of PyString with PyUnicode (and hoping there's no byte data in there).

commit bd99b7865656e559b17c419c6b64b412a22c6c44
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 09:17:06 2015 +1000

PyInt_AsLong
* Replaced all instances of PyInt with PyLong, as per C API docs.

gpgme.i | 4 ++--
helpers.c | 8 ++++----
2 files changed, 6 insertions(+), 6 deletions(-)

commit 3c91e2cc8ca788b51e3308e292c6b64888f4db15
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 05:59:36 2015 +1000

Import correction

* Once pygpgme.py is generated and moved, it will be in the right
directory for the explicit "from . import pygpgme" to be correct.

pyme/core.py | 2 +-  
1 file changed, 1 insertion(+), 1 deletion(-)

commit 23a49e7070812ff1ce138d8d4cc46d0b80328897
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 05:38:29 2015 +1000

The -py3 flag.

Makefile | 2 +-  
1 file changed, 1 insertion(+), 1 deletion(-)

commit b1549587d6db5e33081b9c20f75d1348a1d25938
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 05:01:42 2015 +1000

Fixed indentation - 4.

pyme/core.py | 2 +-  
1 file changed, 1 insertion(+), 1 deletion(-)

commit a685142ce46761ee6f5176e90717176e38e0d24f
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 05:00:16 2015 +1000

Fixed indentation - 3.

pyme/core.py | 5 +++--  
1 file changed, 2 insertions(+), 3 deletions(-)

commit 488a70b490cc64eb1c47d2483cb2f4079c6767f7
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 04:53:21 2015 +1000
Pet Peeve

def pet_peeve(self):
    peeve = print("people who don't press return after a colon!")
    FFS!

pyme/core.py | 5 +++--
1 file changed, 3 insertions(+), 2 deletions(-)

commit a5d38eb47d64bb17bb609fe594dae2aca480bac9
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 04:47:54 2015 +1000

    Fixed indentation - 2.

pyme/core.py | 2 +-     
1 file changed, 1 insertion(+), 1 deletion(-)

commit 476a207f732b8559abb1ea3c23147c0e34804730
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 04:46:01 2015 +1000

    Fixed indentation.

pyme/core.py | 4 +++--
1 file changed, 2 insertions(+), 2 deletions(-)

commit 0572900eba9bcd9b0283c7d8e022e8972f06f9f8
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 04:43:49 2015 +1000

    Replaced all tabs with 4 spaces.

pyme/core.py | 18 +++++++++---------
1 file changed, 9 insertions(+), 9 deletions(-)

commit 78e0b7677e94ce11b8c8db833a9064527187330
Author: Ben McGinnes <ben@adversary.org>
Date:   Sun May 3 04:39:07 2015 +1000

    SWIG flags in the wrong place.

Makefile | 4 ++--
1 file changed, 2 insertions(+), 2 deletions(-)

commit dfa7f2589963494a8f892777560d8c1116604a3c8
Fixed subprocess call for swig (again).

setup.py | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)

commit 249b8d8c714dcdca53127b99b6cc8a6c7c4a99f20
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 04:32:40 2015 +1000

Fixed subprocess call for swig.

setup.py | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)

commit 6fd7e719cf4c975f466ceb39835db7007df36fb2
Author: Ben McGinnes <ben@adversary.org>
Date: Sun May 3 03:51:48 2015 +1000

Linking swig to py3

* Changed the swig invocations to run with the -python -py3 flags explicitly.

Makefile | 4 ++--
setup.py | 2 +-
2 files changed, 3 insertions(+), 3 deletions(-)

commit 7a6b584f50ed6dce8617a642185eea1124ff791a
Author: Ben McGinnes <ben@adversary.org>
Date: Sat May 2 11:12:00 2015 +1000

String fun

* streamlined confdata details, including decoding strom binary to string.

setup.py | 4 +----
1 file changed, 1 insertion(+), 3 deletions(-)

commit f7df3f270592021a95a8f779bf6e85ac18f4e390b
Author: Ben McGinnes <ben@adversary.org>
Date: Sat May 2 10:46:59 2015 +1000

Open File

* Removed deprecated file() and replaced with open().
print() fix

* Makefile includes a python print, changed from statement to function.

Updated Makefile

* set make to use python3 instead.
* This will mean a successful port may need to be maintained separately from the original python2 code instead of merged, but ought to be able to share most things. So maybe merge with separated make files or a pre-make script to set python2 or python3 prior to building ... decide later, after it works.

Env and a little license issue

* Updated all the /usr/bin/env paths to point to python3.
* Also fixed the hard coded /usr/bin/python paths.
* Updated part of setup.py which gave the impression this package was only licensed under the GPL (it's actually licensed under the LGPL as well, essentially the same dual licensing as the GPGME library).

Open Source Used In BGP TE Controller Version 4.3.0 16501
examples/genkey.py | 2 +-
examples/inter-edit.py | 2 +-
examples/pygpa.py | 2 +-
examples/sign.py | 2 +-
examples/simple.py | 2 +-
examples/t-edit.py | 2 +-
examples/testCMSgetkey.py | 2 +-
examples/verifydetails.py | 2 +-
gpgme-h-clean.py | 2 +-
setup.py | 4 ++--
15 files changed, 16 insertions(+), 16 deletions(-)

commit 1a4b55dbcc2d774344352e579130bf494bc5fa4b
Author: Ben McGinnes <ben@adversary.org>
Date:   Sat May 2 08:50:54 2015 +1000

    Removed extraneous files.

    * The two .bak files.

pyme/errors.py.bak | 46 ---------------------
setup.py.bak       | 116 -----------------------------------------------------
2 files changed, 162 deletions(-)

commit 208879d4f2a6d0514c3f8ee2fc0da8bba42350de
Author: Ben McGinnes <ben@adversary.org>
Date:   Sat May 2 08:19:37 2015 +1000

    Added TODO.org

    * TODO list in Emacs org-mode.
    * Will eventually be removed along with this entire directory when the
      porting process is complete.

2to3/TODO.org | 5 ++++++
1 file changed, 5 insertions(+)

commit 1548bf201059638675c5387c6f124d4b703363a9
Author: Ben McGinnes <ben@adversary.org>
Date:   Sat May 2 07:58:40 2015 +1000

    2to3 conversion of remaining files

    * Ran the extended version against all the unmodified python files.
    * Only pyme/errors.py required additional work.

2to3/2to3-output-remaining.log | 60 ++++++++++++++++++++++++++++++++
2to3 conversion of setup.py

* Ran extended 2to3 command to produce python 3 code for setup.py.
* Effectively testing for what to run against the other originally
  unmodified py2 files.

Removing 2to3 generated .bak files.

* Not really needed with a real VCS, but couldn't hurt to have them for
  a couple of revisions. ;)

examples/PyGtkGpgKeys.py.bak |  663 --------------
examples/decrypt-to-all.py.bak |  65 --
examples/exportimport.py.bak |  75 --
examples/genkey.py.bak |  45 -
examples/integrate-edit.py.bak |  57 --
examples/pypa.py.bak | 1457 ------------------------
examples/sign.py.bak |  31 -
examples/signverify.py.bak |  78 --
examples/simple.py.bak |  52 --
examples/t-edit.py.bak |  59 --
examples/testCMSgetkey.py.bak |  45 -
examples/verifydetails.py.bak | 100 ---
gpgme-h-clean.py.bak |  42 -
pyme/callbacks.py.bak |  47 --
pyme/constants/data/__init__.py.bak |  4 -
pyme/constants/keylist/__init__.py.bak |  4 -
pyme/constants/sig/__init__.py.bak |  4 -
pyme/core.py.bak | 463 --------
pyme/util.py.bak |  72 --
pyme/version.py.bak |  41 -
20 files changed, 3404 deletions(-)

commit 1fc3c969f885ed191610bffbdbd60ac23fdd349e
Author: Ben McGinnes <ben@adversary.org>
Date: Fri May 1 21:45:50 2015 +1000

2to3 conversion log

* The output of the command to convert the code from Python 2 to 3.
* Note: this contains the list of files which were not modified and
  which will or may need to be modified.

2to3/2to3-output.log | 950 +++++++++++++++++++++++++++++++++++++++++++++++++++
1 file changed, 950 insertions(+)

commit 078f6cf878a62d12704fa424198a613a24cc8c
Author: Ben McGinnes <ben@adversary.org>
Date: Fri May 1 21:36:58 2015 +1000

2to3 conversion of pyme master

* Branch from commit 459f3eca659b4949e394c4a032d9ce2053e6c721
* Ran this: or x in `find . | egrep .py$` ; do 2to3 -w $x; done ;
* Multiple files not modified, will record elsewhere (see next commit).

examples/PyGtkGpgKeys.py               |   10 +-  
examples/PyGtkGpgKeys.py.bak           |  663 +++++++++++++++
examples/encrypt-to-all.py             |   12 +-  
examples/encrypt-to-all.py.bak         |   65 ++
examples/exportimport.py               |   20 +-  
examples/exportimport.py.bak           |   75 ++
examples/genkey.py                     |    2 +-  
examples/genkey.py.bak                 |   45 +
examples/inter-edit.py                 |    8 +-  
examples/inter-edit.py.bak             |   57 ++
examples/pygpa.py                      |   40 +-
examples/pygpa.py.bak                  | 1457 +++++++++++++++++++++++++++++++
examples/sign.py                       |    2 +-  
examples/sign.py.bak                   |   31 +
examples/signverify.py                 |   18 +-  
examples/signverify.py.bak             |   78 ++
examples/simple.py                     |    8 +-  
examples/simple.py.bak                 |   52 ++
examples/t-edit.py                     |   12 +-  
examples/t-edit.py.bak                 |   59 ++
examples/testCMSgetkey.py              |    8 +-  
examples/testCMSgetkey.py.bak          |   45 +
examples/verifydetails.py              |   34 +-  

Open Source Used In BGP TE Controller Version 4.3.0  16504
commit 459f3ec659b4949e394c4a032d9cc2053e6c721
Merge: c5966ab dae7f14
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Wed Jul 9 10:48:33 2014 +0100

Merged in jerrykan/pyme/fix_setup_26 (pull request #1)

Provide support for using setup.py with Python v2.6

commit dae7f14a54e6c2bde0ad4da7308cc7f0d0c0469
Author: John Kristensen <john.kristensen@dpipwe.tas.gov.au>
Date:   Wed Jul 9 15:54:39 2014 +1000

Provide support for using setup.py with Python v2.6

The setup.py script uses subprocess.check_output() which was introduced in Python v2.7. The equivalent functionality can be achieved without adding much extra code and provide support for Python v2.6.

setup.py | 4 +++-
1 file changed, 3 insertions(+), 1 deletion(-)

commit e5966abec9d772b3922d32650da288fd50a217be
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Thu May 15 19:43:00 2014 +0100

README.txt in ReST, including headlines

README.txt | 8 +++++++
Commit 43ee8c6f34fa9b6d3975aa6ea60b3d4a741fa721
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Thu May 15 19:37:15 2014 +0100

README.txt in ReST

Commit f71a369484cba8801df23ccc5842335fa496c0df
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Thu May 15 19:28:12 2014 +0100

added MANIFEST.in and README.txt (instead of .md)

Commit d0d6755229f920b0bed043e9c2731de2d57c096c
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Tue May 13 09:52:44 2014 +0100

added mailing list to README

Commit 30ca60ddf92df684de261cb24e83c68089be0adc
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Sun May 11 13:34:28 2014 +0100

we don't need a separate out of date ChangeLog file

Commit 8263f1a6d38fd87f5f3dd5c7e28f83caa7528af08
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Sun May 11 13:32:31 2014 +0100

adding README.md

Commit 13e54f8a9c7c4f15791006061bbd93edf79ac6e0
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Thu May 15 20:53:17 2014 +0100

adding COMMITLOG.md
commit 3fc71b47e9e14b0b984801c28d722723baa4b406
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Sat May 10 15:43:06 2014 +0100

    ValueError -> RuntimeError

    setup.py | 4 +++--
    1 file changed, 2 insertions(+), 2 deletions(-)

commit eec432abea56296b9fa36a80d10926a2335b739
Merge: eea6537 d2738b3
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Sat May 10 15:41:02 2014 +0100

    Merge branch 'master' of bitbucket.org:malb/pyme

Conflicts:
    setup.py

commit eea6537921061b4d5c54e00a99d3fa110e71433
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Sat May 10 15:39:51 2014 +0100

    check for swig

    setup.py | 8 ++++++++
    1 file changed, 8 insertions(+)

commit 53867bf9715ee1b4e97d3bc56e00a99d3fa110e71433
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Sat May 10 15:35:04 2014 +0100

    more friendly error message if gpgme is missing

    setup.py | 8 ++++++++-
    1 file changed, 7 insertions(+), 1 deletion(-)

commit d2738b35d63b1492d69641c5466103685f2d3a30
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date:   Sat May 10 15:35:04 2014 +0100

    more friendly error message if gpgme is missing

    setup.py | 8 ++++++++-
    1 file changed, 7 insertions(+), 1 deletion(-)

commit c0b01240becf8ba6cf1d4e1f64b62cb4c056f5163
version number should have three digits

pyme/version.py | 2 +-  
1 file changed, 1 insertion(+), 1 deletion(-)

commit 6672bb60b9bec60d38e854016c48658b57774578  
Author: Martin Albrecht <martinralbrecht@googlemail.com>  
Date:   Fri May 9 15:20:24 2014 +0100

bump version number for upcoming release

pyme/version.py | 2 +-  
1 file changed, 1 insertion(+), 1 deletion(-)

commit 7bd6de700f33ca5d1f27bc16ebbd401f21d2e788  
Author: Martin Albrecht <martinralbrecht@googlemail.com>  
Date:   Wed May 7 15:11:08 2014 +0100

bump version number to indicate changes

pyme/version.py | 2 +-  
1 file changed, 1 insertion(+), 1 deletion(-)

commit 4fb6bd9b3f47c1a343242ac83b326cacad12a136e  
Author: Martin Albrecht <martinralbrecht@googlemail.com>  
Date:   Sat May 3 19:34:07 2014 +0100

pyme instead of pygpgme

setup.py | 2 +-  
1 file changed, 1 insertion(+), 1 deletion(-)

commit 9548973138d78241a45cc82333b25f2cf36ce7d  
Author: Martin Albrecht <martinralbrecht@googlemail.com>  
Date:   Sat May 3 19:31:10 2014 +0100

dirty hack to make 'python setup.py install' work

setup.py | 7 +++++++  
1 file changed, 4 insertions(+), 3 deletions(-)

commit a961d7eab9db478b7e603324bc5d243bd3c84bad  
Author: Martin Albrecht <martinralbrecht@googlemail.com>  
Date:   Sat May 3 19:05:44 2014 +0100
moved everything down to the toplevel directory

<table>
<thead>
<tr>
<th>File</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPYING</td>
<td>340 ++</td>
</tr>
<tr>
<td>COPYING.LESSER</td>
<td>510 +++</td>
</tr>
<tr>
<td>ChangeLog</td>
<td>802 +++++</td>
</tr>
<tr>
<td>INSTALL</td>
<td>15 +</td>
</tr>
<tr>
<td>Makefile</td>
<td>104 +</td>
</tr>
<tr>
<td>debian/README.Debian</td>
<td>6 +</td>
</tr>
<tr>
<td>debian/changelog</td>
<td>93 +</td>
</tr>
<tr>
<td>debian/control</td>
<td>34 +</td>
</tr>
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<td>debian/copyright</td>
<td>25 +</td>
</tr>
<tr>
<td>debian/docs</td>
<td>2 +</td>
</tr>
<tr>
<td>debian/examples</td>
<td>2 +</td>
</tr>
<tr>
<td>debian/rules</td>
<td>99 +</td>
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<tr>
<td>examples/PyGtkGpgKeys.glade</td>
<td>1394 +++++++</td>
</tr>
<tr>
<td>examples/PyGtkGpgKeys.glade</td>
<td>8 +</td>
</tr>
<tr>
<td>examples/PyGtkGpgKeys.py</td>
<td>663 +++</td>
</tr>
<tr>
<td>examples/delkey.py</td>
<td>34 +</td>
</tr>
<tr>
<td>examples/encrypt-to-all.py</td>
<td>65 +</td>
</tr>
<tr>
<td>examples/exportimport.py</td>
<td>75 +</td>
</tr>
<tr>
<td>examples/genkey.py</td>
<td>45 +</td>
</tr>
<tr>
<td>examples/inter-edit.py</td>
<td>57 +</td>
</tr>
<tr>
<td>examples/pygpa.glade</td>
<td>5546 ++++++++</td>
</tr>
<tr>
<td>examples/pygpa.py</td>
<td>1457 +++++</td>
</tr>
<tr>
<td>examples/sign.py</td>
<td>31 +</td>
</tr>
<tr>
<td>examples/signverify.py</td>
<td>78 +</td>
</tr>
<tr>
<td>examples/simple.py</td>
<td>52 +</td>
</tr>
<tr>
<td>examples/t-edit.py</td>
<td>59 +</td>
</tr>
<tr>
<td>examples/testCMSgetkey.py</td>
<td>45 +</td>
</tr>
<tr>
<td>examples/verifydetails.py</td>
<td>100 +</td>
</tr>
<tr>
<td>gpgme-h-clean.py</td>
<td>42 +</td>
</tr>
<tr>
<td>gpgme.i</td>
<td>267 ++</td>
</tr>
<tr>
<td>helpers.c</td>
<td>154 +</td>
</tr>
<tr>
<td>helpers.h</td>
<td>36 +</td>
</tr>
<tr>
<td>pyme/COPYING</td>
<td>340 --</td>
</tr>
<tr>
<td>pyme/COPYING.LESSER</td>
<td>510 --</td>
</tr>
<tr>
<td>pyme/ChangeLog</td>
<td>802 -----</td>
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<tr>
<td>pyme/INSTALL</td>
<td>15 -</td>
</tr>
<tr>
<td>pyme/Makefile</td>
<td>104 -</td>
</tr>
<tr>
<td>pyme/<strong>init</strong>.py</td>
<td>137 +</td>
</tr>
<tr>
<td>pyme/callbacks.py</td>
<td>47 +</td>
</tr>
<tr>
<td>pyme/consts/<strong>init</strong>.py</td>
<td>7 +</td>
</tr>
<tr>
<td>pyme/consts/data/<strong>init</strong>.py</td>
<td>4 +</td>
</tr>
<tr>
<td>pyme/consts/data/encoding.py</td>
<td>20 +</td>
</tr>
<tr>
<td>pyme/consts/event.py</td>
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</tr>
<tr>
<td>pyme/consts/import.py</td>
<td>20 +</td>
</tr>
<tr>
<td>pyme/consts/keylist/<strong>init</strong>.py</td>
<td>4 +</td>
</tr>
<tr>
<td>pyme/consts/keylist/mode.py</td>
<td>20 +</td>
</tr>
</tbody>
</table>
pyme/pyme/constants/protocol.py | 20 -
pyme/pyme/constants/sig/__init__.py | 4 -
pyme/pyme/constants/sig/mode.py | 20 -
pyme/pyme/constants/sigsum.py | 20 -
pyme/pyme/constants/status.py | 20 -
pyme/pyme/constants/validity.py | 20 -
pyme/pyme/core.py | 463 ---
pyme/pyme/errors.py | 46 -
pyme/pyme/util.py | 72 -
pyme/pyme/version.py | 41 -
pyme/setup.py | 99 -
pyme/util.py | 72 +
pyme/version.py | 41 +
setup.py | 99 +
108 files changed, 13384 insertions(+), 13384 deletions(-)

commit 8148cdd424c434e833ce427612ea8c89abc6e41c
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date: Sat May 3 18:58:52 2014 +0100

removing pyme-web

pyme-web/Makefile | 15 -
pyme-web/default.css | 37 --
pyme-web/doc/gpgme/ASCII-Armor.html | 57 ---
pyme-web/doc/gpgme/Advanced-Key-Editing.html | 98 ----
pyme-web/doc/gpgme/Algorithms.html | 47 --
pyme-web/doc/gpgme/Building-the-Source.html | 82 ----
.../doc/gpgme/Callback-Based-Data-Buffers.html | 148 ------
pyme-web/doc/gpgme/Cancellation.html | 67 ---
pyme-web/doc/gpgme/Concept-Index.html | 186 --------
pyme-web/doc/gpgme/Context-Attributes.html | 52 --
pyme-web/doc/gpgme/Contexts.html | 61 ---
pyme-web/doc/gpgme/Creating-Contexts.html | 49 --
pyme-web/doc/gpgme/Creating-Data-Buffers.html | 47 --
pyme-web/doc/gpgme/Creating-a-Signature.html | 143 ------
pyme-web/doc/gpgme/Crypto-Engine.html | 79 ---
pyme-web/doc/gpgme/Crypto-Operations.html | 67 ---
.../doc/gpgme/Cryptographic-Message-Syntax.html | 42 --
.../doc/gpgme/Data-Buffer-I_002fO-Operations.html | 104 ----
pyme-web/doc/gpgme/Data-Buffer-Meta_002dData.html | 100 ----
pyme-web/doc/gpgme/Decrypt-and-Verify.html | 79 ---
pyme-web/doc/gpgme/Decrypt.html | 123 ------
pyme-web/doc/gpgme/Deleting-Keys.html | 67 ---
pyme-web/doc/gpgme/Destroying-Contexts.html | 46 --
pyme-web/doc/gpgme/Destroying-Data-Buffers.html | 70 ---
pyme-web/doc/gpgme/Encrypt.html | 45 --
pyme-web/doc/gpgme/Encrypting-a-Plaintext.html | 147 ------
fixing op_export_keys()

the conversion of gpgme_key_t[] was restricted to gpgme_key_t[] with the name recv, i.e. only the use-cases of encryption were covered.

pyme/gpgme.i | 6 +++---
1 file changed, 3 insertions(+), 3 deletions(-)

commit 658d23b95110d21eeb50abf4e74701a667521a88
Author: Martin Albrecht <martinralbrecht@googlemail.com>
Date: Mon Jan 6 17:41:33 2014 +0100

deleting CVSROOT

CVSROOT/checkoutlist | 13 -------------
CVSROOT/commitinfo   | 15 -------------
CVSROOT/config       | 21 -------------
CVSROOT/cvswrappers  | 19 -------------
CVSROOT/editinfo     | 21 -------------
CVSROOT/loginfo      | 26 ---------------
CVSROOT/modules      | 26 ---------------
CVSROOT/notify       | 12 -----------
CVSROOT/rcsinfo      | 13 -----------
CVSROOT/taginfo      | 20 ---------------
CVSROOT/verifymsg    | 21 ---------------
11 files changed, 207 deletions(-)

commit 576b555499c094e4786d42de9e59aa9826009b89
Author: convert-repo <devnull@localhost>
Date: Mon Jan 6 15:22:44 2014 +0000

update tags

commit 2dcf0c5b702eb5a18c66ff1e42a72eaa7427af1d
Author: belyi <devnull@localhost>
Date: Wed Nov 26 02:38:33 2008 +0000

Move Windows specific fix from helpers.c to helpers.h so that it works
for edit callback as well as for the passphrase one.

pyme/helpers.c | 5 -----  
pyme/helpers.h | 5 +++++  
2 files changed, 5 insertions(+), 5 deletions(-)

commit 42a035f2ef62470fefa7a7f8ee33a1297fa90a603
Author: belyi <devnull@localhost>
Date: Mon Nov 24 21:44:30 2008 +0000

Update the way build directives are constructed on MinGW to have a bit
more robust. Update PyMe build version to 0.8.1 in version.py

pyme/pyme/version.py | 2 +- 
pyme/setup.py | 10 ++++++++--
2 files changed, 9 insertions(+), 3 deletions(-)

commit 3aaa20fbcba17066c9fffd580f5209946022793a2
Author: belyi <devnull@localhost>
Date: Mon Nov 24 06:57:11 2008 +0000

Update changelog

pyme/debian/changelog | 5 ++++- 
1 file changed, 4 insertions(+), 1 deletion(-)

commit 689ff46b2550547e3883f809a6dc40c22c3e137e
Author: belyi <devnull@localhost>
Date: Mon Nov 24 06:50:41 2008 +0000

Fix hang problem on Windows when password is written to a filehandle.
Fix the way path is constructed on MinGW platform.

pyme/helpers.c | 5 ++++
pyme/setup.py | 4 ++--
2 files changed, 7 insertions(+), 2 deletions(-)

commit 852a60d541d66cb56f40378182b976fd87a02c46
Author: belyi <devnull@localhost>
Date: Sun Nov 23 04:31:31 2008 +0000

Add Bernard's example testCMSgetkey.py and his updates for
verifydetails.py

pyme/examples/testCMSgetkey.py | 45 ++++++++++++++++++++++++++++++++++++++++++++++++++++ 
pyme/examples/verifydetails.py | 43 ++++++++++++++++++++++++++++++++++++++++++++++++++++ 
2 files changed, 77 insertions(+), 11 deletions(-)

commit f080527d9184f3360f0a8ef6136b9a188d8e7d2a
Author: belyi <devnull@localhost>
Date: Thu May 29 18:29:37 2008 +0000

Remove debian packaging for python2.3 since it is removed from both
testing and unstable dists.
Update docs build target to have correct PYTHONPATH set.

pyme/Makefile | 2 +- 
pyme/debian/changelog | 4 +++-
pyme/debian/control | 4 ++--
Forgot to adjust mainText margin. Doing it now.

Fix an error in default.css and make index.html "Standards Compliant".

Adjust spacing between links.

Make style a bit more IE friendly.

Make GPGME documentation a bit more web friendly on the index.html page.
Add missing core.set_locale() to set default locale for contexts.

Avoid leaks caused by keys.
Add set/get methods for engine info.

Update index.html to reflect new versions on the web.

Update PyMe documentation to match 0.8.0 version of the package.
pyme-web/doc/gpgme/Passphrase-Callback.html | 101 +++
pyme-web/doc/gpgme/Preparation.html | 54 ++
pyme-web/doc/gpgme/Progress-Meter-Callback.html | 80 +++
pyme-web/doc/gpgme/Protocol-Selection.html | 60 ++
pyme-web/doc/gpgme/Protocols-and-Engines.html | 82 +++
pyme-web/doc/gpgme/Public-Key-Algorithms.html | 74 +++
.../doc/gpgme/Registering-I_O-Callbacks.html | 81 +++
pyme-web/doc/gpgme/Run-Control.html | 53 ++
pyme-web/doc/gpgme/Selecting-Signers.html | 64 ++
pyme-web/doc/gpgme/Sign.html | 50 ++
pyme-web/doc/gpgme/Signal-Handling.html | 61 ++
pyme-web/doc/gpgme/Signature-Notation-Data.html | 85 +++
pyme-web/doc/gpgme/Text-Mode.html | 63 ++
pyme-web/doc/gpgme/Trust-Item-Management.html | 68 ++
pyme-web/doc/gpgme/Using-Automake.html | 74 +++
pyme-web/doc/gpgme/Using-External-Event-Loops.html | 74 +++
pyme-web/doc/gpgme/Using-Libtool.html | 44 ++
pyme-web/doc/gpgme/Verify.html | 492 ++++++++}
pyme-web/doc/gpgme/Waiting-For-Completion.html | 77 +++
pyme-web/doc/gpgme/gpgme.html | 251 --------
pyme-web/doc/gpgme/gpgme_1.html | 76 ---
pyme-web/doc/gpgme/gpgme_10.html | 61 --
pyme-web/doc/gpgme/gpgme_11.html | 130 ----
pyme-web/doc/gpgme/gpgme_12.html | 82 ---
pyme-web/doc/gpgme/gpgme_13.html | 130 -----}
pyme-web/doc/gpgme/gpgme_14.html | 108 ----
pyme-web/doc/gpgme/gpgme_15.html | 69 ---
pyme-web/doc/gpgme/gpgme_16.html | 169 ------
pyme-web/doc/gpgme/gpgme_17.html | 63 --
pyme-web/doc/gpgme/gpgme_18.html | 63 --
pyme-web/doc/gpgme/gpgme_19.html | 66 --
pyme-web/doc/gpgme/gpgme_2.html | 79 ---
pyme-web/doc/gpgme/gpgme_20.html | 120 ----
pyme-web/doc/gpgme/gpgme_21.html | 102 ---
pyme-web/doc/gpgme/gpgme_22.html | 108 ----
pyme-web/doc/gpgme/gpgme_23.html | 237 -------
pyme-web/doc/gpgme/gpgme_24.html | 154 ------
pyme-web/doc/gpgme/gpgme_25.html | 248 -------
pyme-web/doc/gpgme/gpgme_26.html | 107 ----
pyme-web/doc/gpgme/gpgme_27.html | 80 ---
pyme-web/doc/gpgme/gpgme_28.html | 67 --
pyme-web/doc/gpgme/gpgme_29.html | 164 -----}
pyme-web/doc/gpgme/gpgme_3.html | 86 ---
pyme-web/doc/gpgme/gpgme_30.html | 106 ----
pyme-web/doc/gpgme/gpgme_31.html | 232 -------
pyme-web/doc/gpgme/gpgme_32.html | 85 ---
pyme-web/doc/gpgme/gpgme_33.html | 223 -------
pyme-web/doc/gpgme/gpgme_34.html | 83 ---
commit 163c1053dc761682f5a4231da163bdd0ff7162d7
Author: belyi <devnull@localhost>
Date:   Tue Apr 1 21:14:29 2008 +0000

Update Home page to be a bit more visitor friendly.

commit 05db2d17d8fd8da0ab8c948bbdc0643dfc1466830d
Author: belyi <devnull@localhost>
Date:   Sun Mar 30 21:27:38 2008 +0000

Add a rule to build binary distribution for Windows.

commit 57acb1089f5f8c24323ee62fc0a7f492a496b9c0
Author: belyi <devnull@localhost>
Date:   Sat Mar 29 22:50:11 2008 +0000

Switch to using central location for python files (pycentral)
Update docs rule to fix location of the python source files.
Turn SWIG's autodoc feature on. Ignore 'next' in the types which are lists now.
Use new style for class declarations. Specify None as a default value for core.check_version() method. Update version.py for 0.8.0 version.

Improve matching for DEPRECATED typedefs

Update API to use list when types containing 'next' field are return.
Update examples accordingly
Add verifydetails.py example
Start adding bullets for 0.8.0 version.
Open Source Used In BGP TE Controller Version 4.3.0  16524

commit 342d85b07475e7360bcd62804bf5facda039494f
Author: belyi <devnull@localhost>
Date:   Mon Mar 10 01:14:16 2008 +0000

Change references to source files so that they point to the WebCVS browse location.

commit 4139dd1d066c1a6c892d84fe45dc3e6c4aa1b803
Author: belyi <devnull@localhost>
Date:   Sat Mar 8 18:21:08 2008 +0000

Add core.check_version(None) to all examples since this function is used by Gpgme to do internal initialization. Update debian/rules to use dh_pysupport instead of deprecated dh_python.
Change name of internal package name from 'gpgme' to 'pygpgme' to avoid conflict with gpgme.dll on Windows.
Fix build with SWIG 1.3.28.
Change version to 0.7.1 in a preparation for new release.

Put all constants into pyme.constants package to avoid stepping on python reserved words.
Add build rules for Mingw32 and Cygwin on Windows. Rules for Mingw under Debian are still to come.
Fixed a small bug in pygpa.py example.
Imported changes provided by Joost van Baal:
Use dh_python in debian/rules and change the Section pyme belongs to from 'libs' to 'python'.

Added 'callbacks' into the list of visible pyme modules (__all__ var.)

Slightly updated INSTALL file.
Added pyme and gpgme documentation.

commit 6aa34ccee4ea0099e50b4936dfee59778157b8ca8
Author: belyi <devnull@localhost>
Date:   Wed Jun 8 15:18:20 2005 +0000

8 files changed, 19 insertions(+), 41 deletions(-)
commit 2d6fe54479f042644f7b0f3d2fe35877d2056144
Author: belyi <devnull@localhost>
Date:   Thu May 19 02:06:09 2005 +0000

Added INSTALL file.

pyme/INSTALL | 10 ++++++++++
1 file changed, 10 insertions(+)

commit d6892fff0c3cedf41dba4c25ab8608e7f2bc039c
Author: belyi <devnull@localhost>
Date:   Tue May 17 16:49:28 2005 +0000

Update copyright note on simple.py

pyme/examples/simple.py | 4 ++--
1 file changed, 2 insertions(+), 2 deletions(-)
Update simple.py to catch errors.

```
pyme/examples/simple.py | 17 +++++++++++------
1 file changed, 11 insertions(+), 6 deletions(-)
```

commit ead6ae7e7696ba0b67e781a59b6769c44
Author: belyi <devnull@localhost>
Date:   Tue May 17 01:18:23 2005 +0000

Added 'PYTHON = python' into Makefile for bug #1199122

```
pyme/Makefile               | 1 +
pyme/examples/signverify.py | 1 +
2 files changed, 2 insertions(+)
```

commit 56fd244bb2636a4d58629899ea3cde1d96428198
Author: belyi <devnull@localhost>
Date:   Wed Apr 27 21:37:06 2005 +0000

Added pygpa example.

```
pyme/debian/changelog     |    3 +-
pyme/examples/pygpa.glade | 5546 +++++++++++++++++++++++++++++++++++++++++++++
pyme/examples/pygpa.py    | 1459 ++++++++++++
3 files changed, 7007 insertions(+), 1 deletion(-)
```

commit 2d9a2a91a59ac3fee5410c953b7e0859e9e7cd35
Author: belyi <devnull@localhost>
Date:   Thu Apr 21 15:17:51 2005 +0000

Change version to 0.7.0 due to the change in license.

```
pyme/debian/changelog     | 2 +-
pyme/pyme/version.py     | 2 +-
2 files changed, 2 insertions(+), 2 deletions(-)
```

commit 94e34e38d742f145385bd235825b66ba1e30d8339
Author: belyi <devnull@localhost>
Date:   Thu Apr 21 03:53:12 2005 +0000

Changed license on PyMe from GPL to LGPL.  
PyMe examples keep GPL license.

```
pyme/COPYING.LESSER                  | 510 ++++++++++++++++++++++++++++++++++++
```
commit 0d8aa0f6335cb1506a37085095ed45173b099a02
Author: belyi <devnull@localhost>
Date:   Tue Apr 19 01:46:06 2005 +0000

Added __hash__ and __eq__ methods to GpgmeWrapper to allow both Context()
and Data() to be used as a dictionary key.
Changed core.wait() function to always return a tuple. On timeout now it
returns (0, None) instead of just None. Plus, return context is now a
Context() object instead of a wrapper return by underlying gpgme.

commit 63ff6d10637be1debcd78e939ac1ef1ac30b1024
Author: belyi <devnull@localhost>
Date:   Wed Apr 6 04:58:40 2005 +0000

Made hook parameter optional in passphrase_cb and progress_cb.
Allowed None for callbacks to unset ones set previously.
Removed cleanup of exception in callbacks - now just retrieve the error code.
Added prev_bad parameter in passphrase_cb since it can be used in
change password protocols.
Updated examples to follow new sets of arguments in callbacks
Updated op_edit to check if passed key is None (otherwise gpgme dumps core)
God rid of annoying warning "function declaration isn't a prototype" in
helpers.c and helpers.h by changing from () to (void) list of arguments.

9 files changed, 96 insertions(+), 55 deletions(-)
commit 8f0ab8138c7aa190936376c6b933bb09c64d6f1
Author: belyi <devnull@localhost>
Date: Thu Mar 31 23:50:59 2005 +0000

Added exception handling in passphrase_cb and edit_cb. If GPGMEError
exception is thrown in those callbacks it will be converted into its
core representation and return as an error code to the caller.
On all other exceptions error code will be GPG_ERR_GENERAL.

5 files changed, 71 insertions(+), 12 deletions(-)
commit 9903d1f11231e7a3d92e58d1ecb67c65988b07
Author: belyi <devnull@localhost>
Date: Thu Mar 31 05:12:15 2005 +0000

Remove workaround from Context.wait() method since the bug report and
patch fixing gpgme_wait's behavior is sent to GPMGE developers already.
Added errorcheck into op_edit() so that it can report an error.

1 file changed, 5 insertions(+), 5 deletions(-)
commit 45e8a5f4e13d3ca797e3b0037242874a6be5562
Author: belyi <devnull@localhost>
Updated version number to 0.6.2 in version.py
Added examples/*.glade files into documentation package.

pyme/debian/examples | 1 +
pyme/pyme/version.py | 2 +-  
2 files changed, 2 insertions(+), 1 deletion(-)

commit 270b87bb40e180cb6e8f1de9a0e8161525ffa4ab
Author: belyi <devnull@localhost>
Date: Sat Mar 26 19:31:14 2005 +0000

Updated debian/changelog regarding PyGtkGpgKeys example and a fix in errors.

pyme/debian/changelog | 5 +++++-
1 file changed, 4 insertions(+), 1 deletion(-)

commit ea4682009a506db91e5174ff0d38fe7e4406b591
Author: belyi <devnull@localhost>
Date: Sat Mar 26 19:25:36 2005 +0000

Added handling of right mouse button click.
Changed reporting a string instead of a number on key generation failure.

pyme/examples/PyGtkGpgKeys.glade | 2 ++
pyme/examples/PyGtkGpgKeys.py | 30 +++++++++++++++++++++++++++---
2 files changed, 29 insertions(+), 3 deletions(-)

commit f65ad1a703d0098a3204f8527a54d253e5847e7
Author: belyi <devnull@localhost>
Date: Sat Mar 26 18:11:11 2005 +0000

Added another column indicating if a key has a secret part.
Automated generation of the View menu from the view field of the KeyColumn class.

pyme/examples/PyGtkGpgKeys.glade | 93 +--------------------------------------
pyme/examples/PyGtkGpgKeys.py | 74 +++++++++++++++++---------------
2 files changed, 44 insertions(+), 123 deletions(-)

commit b54e83a7a7a5785502f3c7e8b95f15e23b40e65a
Author: belyi <devnull@localhost>
Date: Sat Mar 26 16:45:13 2005 +0000

Small change to the way gtk.TreeModel object is used.

pyme/examples/PyGtkGpgKeys.py | 21 +++++++++++++++++--
1 file changed, 10 insertions(+), 11 deletions(-)

commit 7078db75cef4c1fd70cf03e37172bdb4f933fd1b
Author: belyi <devnull@localhost>
Date:   Fri Mar 25 23:33:06 2005 +0000

Use more comprehensible error reporting since gpgme_strerror_r returns None
all the time.

pyme/pyme/errors.py | 6 +++---
1 file changed, 3 insertions(+), 3 deletions(-)

commit 151213f4344d9984975721440af07de09e3df61c
Author: belyi <devnull@localhost>
Date:   Fri Mar 25 04:30:17 2005 +0000

Improved PyGtkGpgKeys example to manage owner_trust on keys.
Added another example inter-edit.py which is just a helper to write
scripts for Context.op_edit() command.

pyme/examples/PyGtkGpgKeys.glade | 78 ++++++++++++++++++++++++++++++++++++++++----
pyme/examples/PyGtkGpgKeys.py    | 68 +++++++++++++++++++++++++++++++++++---
pyme/examples/inter-edit.py      | 54 ++++++++++++++++++++++++++++++++++++-
pyme/examples/t-edit.py          | 18 ++++++++++
4 files changed, 212 insertions(+), 6 deletions(-)

commit fc7235af217bcee5231ce7fb7f234712d5ad3b0
Author: belyi <devnull@localhost>
Date:   Fri Mar 25 00:30:39 2005 +0000

Updated PyGtkGpgKeys example to include import, export and reload
functionality. Also added ability to remove number of keys simultaneously.
Rearranged how KeyColumn is used to avoid unnecessary sorts and duplication
of information in different parts of the code.

pyme/examples/PyGtkGpgKeys.glade | 86 +++++++++---
pyme/examples/PyGtkGpgKeys.py    | 332 ++++++++++++++++++++++++++++++++++++---
2 files changed, 325 insertions(+), 93 deletions(-)

commit 9f657494cccb17cab562e19c03f4371d5f7d94912
Author: belyi <devnull@localhost>
Date:   Thu Mar 24 05:51:03 2005 +0000

Added example of PyGTK+ and PyMe integration.
For now it does only simple things - listing, deleting, and generating keys.

pyme/examples/PyGtkGpgKeys.glade | 1321 ++++++++++++++++++++++++++++++++++++++++---
pyme/examples/PyGtkGpgKeys.gladep |  8 +
Added wait method Context class which handles asynchronous calls a little bit better than the one generated by SWIG.

Added correct handling of Context.op_edit() method.
Added example/t-edit.py showing usage for this method.
Output of this example should match output of the tests/gpg/t-edit from the GPGME test suite.
Remove unused static function from helpers.c

Update changelog to include note about deprecated function in 0.6.1 release

Remove deprecated functions from helpers.[ch]
Use gpgme-h-clean.py to remove deprecated functions and typedefs from the GPGME header file. This will reduce the number of unused methods.
Update copyright and author values in pyme/version.py
Create rules to build distribution files - one full and one without
debian bits.

Added package building for python2.4

Updated copyright notes to include myself and avoid confusion who's the
maintainer. In John's own words: "I'd prefer to just step out of the picture".
Jonh's copyright notice left intact.
Removed the note about gpgme.i to be generated - it's been the primary source for some time.

Added my copyright in genkey.py since there's enough changes made.
Updated signverify to use only keys generated by genkey.py, to check that keys added to singers are able to sign and to check that the list of signers is not empty. The last check is necessary to prevent signing with the key of the user running signverify.py script.
Added delkey.py script to delete keys generated by genkey.py
Added exportimport.py example for key export/import.

Added examples/signverify.py for unattended sing/verify.
Updated examples/genkey.py to work correctly.
Updated gpgme.i to allow None as a value for gpgme_data_t
pyme/examples/signverify.py | 72 ++++++++++++++++++++++++++++++++++++++++++++++
pyme/gpgme.i | 21 ++++++++-----

3 files changed, 87 insertions(+), 20 deletions(-)

commit ba45931abf530ab89ead46d7233ff1b62b629a18
Author: belyi <devnull@localhost>
Date: Thu Apr 8 16:15:09 2004 +0000

  Ensure that we support only python2.2 and up. :-)
  Use generators in core.Context class which makes pyme.aux obsolete
  Remove importing future nested_scopes since they are standard starting
  with python2.2

pyme/pyme/__init__.py |  5 ++---
pyme/pyme/aux.py | 56 ++++++++++++++++++++++++++++++++++++
pyme/pyme/core.py | 15 ++++++++++++----
pyme/pyme/errors.py |  1 -
pyme/pyme/util.py |  2 +-

5 files changed, 15 insertions(+), 64 deletions(-)

commit 4e9be5a555ecff4da7ad5c192cc892eddaaa9586
Author: belyi <devnull@localhost>
Date: Sun Mar 21 03:53:30 2004 +0000

  Small change to index.html
  Added clean: rule to the Makefile

pyme-web/Makefile |  3 +++
pyme-web/index.html | 6 +++++---

2 files changed, 6 insertions(+), 3 deletions(-)

commit 2efb95176f4edf56ed61c9ac0c3aa09e56534df0
Author: belyi <devnull@localhost>
Date: Sun Mar 21 03:00:32 2004 +0000

  Added Makefile rules for pyme module installation.

pyme/Makefile |  5 ++++-

1 file changed, 4 insertions(+), 1 deletion(-)

commit 2b83d5d8b513029cc3e54f2fa502ccc85618104b
Author: belyi <devnull@localhost>
Date: Sun Mar 21 02:29:54 2004 +0000

  Decorative change.

pyme/pyme/aux.py |  2 +-

1 file changed, 1 insertion(+), 1 deletion(-)
commit e3478015d763a036c1d806ae01433f65e9712204
Author: belyi <devnull@localhost>
Date: Sun Mar 21 02:25:55 2004 +0000

Added RCS Id: tags

pyme/Makefile | 1 +
pyme/examples/encrypt-to-all.py | 3 ++-
pyme/examples/gencod.py | 3 ++-
pyme/examples/key.py | 3 ++-
pyme/examples/simp.py | 3 ++-
pyme/gpgme.i | 1 +
pyme/helpers.c | 1 +
pyme/helpers.h | 1 +
pyme/pyme/__init__.py | 1 +
pyme/pyme/aux.py | 1 +
pyme/pyme/callbacks.py | 1 +
pyme/pyme/constants/__init__.py | 2 ++
pyme/pyme/constants/data/__init__.py | 2 ++
pyme/pyme/constants/dataencoding.py | 1 +
pyme/pyme/constants/event.py | 1 +
pyme/pyme/constants/import.py | 1 +
pyme/pyme/constants/keylist/__init__.py | 2 ++
pyme/pyme/constants/keylist/mode.py | 1 +
pyme/pyme/constants/md.py | 1 +
pyme/pyme/constants/pk.py | 1 +
pyme/pyme/constants/protocol.py | 1 +
pyme/pyme/constants/sig/__init__.py | 2 ++
pyme/pyme/constants/sig/mode.py | 1 +
pyme/pyme/constants/sigsum.py | 1 +
pyme/pyme/constants/status.py | 1 +
pyme/pyme/constants/status.py | 1 +
pyme/pyme/core.py | 1 +
pyme/pyme/errors.py | 1 +
pyme/pyme/util.py | 1 +
pyme/pyme/version.py | 2 ++
30 files changed, 39 insertions(+), 4 deletions(-)

commit b3b3712645332c5bc3e8d9d557aab21d48ff0f86
Author: belyi <devnull@localhost>
Date: Sun Mar 21 02:07:36 2004 +0000

Added Id: RCS tags to all files.

pyme-web/Makefile | 2 ++
pyme-web/index.html | 3 ++-
2 files changed, 4 insertions(+), 1 deletion(-)
commit 6aea2426beaa8c43e6f2310a37a2737c0c3a1b5
Author: belyi <devnull@localhost>
Date:   Sun Mar 21 01:50:55 2004 +0000

Update example on the init pyme.html page to match simple.py example.
Fix core.py to use getcode() instead of getvalue() method of the exception.

pyme/pyme/__init__.py | 22 +++++++++++++++++++---
pyme/pyme/core.py     |  4 ++--
2 files changed, 16 insertions(+), 10 deletions(-)

commit dee337455ff62d4f83e1c159e4bb2cefe692c9
Author: belyi <devnull@localhost>
Date:   Sat Mar 20 20:32:29 2004 +0000

Added Makefile to simplify publishing web files.

pyme-web/Makefile | 7 +++++++
1 file changed, 7 insertions(+)

commit af7129b9a8260697d85c2d6b434562e8a80b62d8
Author: belyi <devnull@localhost>
Date:   Sat Mar 20 20:15:53 2004 +0000

Added minimum of formatting and SF icon.

pyme-web/index.html | 18 +++++++++++-------
1 file changed, 11 insertions(+), 7 deletions(-)

commit 2e64dcbf99cee796b5166704d8961e390edde87
Author: belyi <devnull@localhost>
Date:   Sat Mar 20 18:30:09 2004 +0000

Initial revision

pyme-web/index.html | 33 +++++++++++++++++++++++++++++++++
1 file changed, 33 insertions(+)

commit 1c51644b3d0b6611422d971758e35f303d2ad5df
Author: belyi <devnull@localhost>
Date:   Sat Mar 20 05:10:46 2004 +0000

Update examples and package information on the initial pyme doc page.

pyme/pyme/__init__.py | 27 ++++++++++++++++++++---
1 file changed, 12 insertions(+), 15 deletions(-)
Deleted unnecessary files.
Updated debian/control to remove dependency on python-xml package since there's none now.
Move example files from 'doc' into separate control file.
Update debian/rules to build documentation from *.py files and to exclude CVS directories from the installation.

commit b2d31b0bf6bdf5247d6db4e3e95140cc1b1f19
Author: belyi <devnull@localhost>
Date:   Sat Mar 20 04:47:42 2004 +0000

Deleted unnecessary files.
Updated debian/control to remove dependency on python-xml package since there's none now.
Move example files from 'doc' into separate control file.
Update debian/rules to build documentation from *.py files and to exclude CVS directories from the installation.

commit 1b517dd9b82a433499b4696b06d94d756cd36e53
Author: belyi <devnull@localhost>
Date:   Sat Mar 20 02:59:15 2004 +0000

Remove doc/gpgme directory containing GPGME documentation since this belongs to a different project. Need to add reference in our documentation.

commit 95d7d171da115a0fedefe2a4a7e5acc8a408f673
Author: belyi <devnull@localhost>
Date:   Sat Mar 20 02:45:03 2004 +0000

Change debian/rules to generate files by swig during build and to cleanup those files on 'clean' rule.
Plus, leave generated gpgme_wrap.c in the root directory instead of moving it into subdirectory 'generated'.

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Plus, leave generated gpgme_wrap.c in the root directory instead of moving it into subdirectory 'generated'.
commit 545b3d90d445c5c78e8d72b2c1780863e02c789a
Author: belyi <devnull@localhost>
Date:   Sat Mar 20 02:18:01 2004 +0000

Initial revision

pyme/COPYING | 340 +++++
pyme/ChangeLog | 802 +++++++
pyme/Makfile | 79 +
pyme/debian/README.Debian | 6 +
pyme/debian/changelog | 19 +
pyme/debian/control | 68 +
pyme/debian/copyright | 27 +
pyme/debian/dirs | 2 +
pyme/debian/docs | 2 +
pyme/debian/ex.package.doc-base | 22 +
pyme/debian/manpage.1.ex | 60 +
pyme/debian/manpage.sgml.ex | 152 ++
pyme/debian/postinst.ex | 48 +
pyme/debian/postrm.ex | 38 +
pyme/debian/preinst.ex | 44 +
pyme/debian/prerm.ex | 39 +
pyme/debian/rules | 130 ++
pyme/debian/setup.cfg-2.2 | 8 +
pyme/debian/setup.cfg-2.3 | 8 +
pyme/doc/gpgme/fdl.texi | 402 +++++
pyme/doc/gpgme/gpgme.texi | 3372 ++++++++++++++++++++++++++++++
pyme/doc/gpgme/gpl.texi | 397 ++++
pyme/doc/gpgme/version.texi | 4 +
pyme/examples/encrypt-to-all.py | 63 +
pyme/examples/genkey.py | 55 +
pyme/examples/sign.py | 28 +
pyme/examples/simple.py | 44 +
pyme/gpgme.i | 191 ++
pyme/helpers.c | 139 ++
pyme/helpers.h | 29 +
pyme/pyme/__init__.py | 134 ++
pyme/pyme/aux.py | 55 +
pyme/pyme/callbacks.py | 45 +
pyme/pyme/constants/__init__.py | 2 +
pyme/pyme/constants/data/__init__.py | 2 +
pyme/pyme/constants/data/encoding.py | 19 +
pyme/pyme/constants/event.py | 19 +
pyme/pyme/constants/import.py | 19 +
pyme/pyme/constants/keylist/__init__.py | 2 +
pyme/pyme/constants/keylist/mode.py | 19 +
pyme/pyme/constants/md.py | 19 +
pyme/pyme/constants/pk.py | 19 +
Overview

* In the beginning::
* Keeping the flame alive::
* Passing the torch::
* Coming full circle::

Relics of the past

* The Annoyances of Git::
* The Perils of PyPI::

The Perils of PyPI

* GPG 180 - Python bindings for GPGME GnuPG cryptography library::
* PyME 090 - Python support for GPGME GnuPG cryptography library::

@node Overview
@section Overview

@multitable{aaaaaaaaaaaaaaa} {aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa}
@item Version: @tab 0.0.1
@item GPGME Version: @tab 1.13.0
@item Author: @tab Ben McGinnes <ben@@gnupg.org>
@item Author GPG Key: @tab DB4724E6FA4286C92B4E55C4321E4E2373590E5D
@item Language: @tab Australian English, British English
@item xml:lang: @tab en-AU, en-GB, en
@end multitable
The GPGME Python bindings passed through many hands and numerous phases before, after a fifteen year journey, coming full circle to return to the source. This is a short explanation of that journey.

@menu
* In the beginning::
* Keeping the flame alive::
* Passing the torch::
* Coming full circle::
@end menu

@node In the beginning
@section In the beginning
In 2002 John Goerzen released PyME; Python bindings for the GPGME module which utilised the current release of Python of the time and SWIG. @footnote{In all likelihood this would have been Python 2.2 or possibly Python 2.3.} Shortly after creating it and ensuring it worked he stopped supporting it, though he left his work available on his Gopher site.

@node Keeping the flame alive
@section Keeping the flame alive
A couple of years later the project was picked up by Igor Belyi and actively developed and maintained by him from 2004 to 2008. Igor's whereabouts at the time of this document's creation are unknown, but the current authors do hope he is well. We're assuming (or hoping) that life did what life does and made continuing untenable.

@node Passing the torch
@section Passing the torch
In 2014 Martin Albrecht wanted to patch a bug in the PyME code and discovered the absence of Igor. Following a discussion on the PyME mailing list he became the new maintainer for PyME, releasing version 0.9.0 in May of that year. He remains the maintainer of the original PyME release in Python 2.6 and 2.7 (available via PyPI).

@node Coming full circle
@section Coming full circle
In 2015 Ben McGinnes approached Martin about a Python 3 version, while investigating how complex a task this would be the task ended up being completed. A subsequent discussion with Werner Koch led to the decision to fold the Python 3 port back into the original
GPGME release in the languages subdirectory for non-C bindings under the module name of `pyme3`.

In 2016 this PyME module was integrated back into the GPGME project by Justus Winter. During the course of this work Justus adjusted the port to restore limited support for Python 2, but not as many minor point releases as the original PyME package supports. During the course of this integration the package was renamed to more accurately reflect its status as a component of GPGME. The `pyme3` module was renamed to `gpg` and adopted by the upstream GnuPG team.

In 2017 Justus departed G10code and the GnuPG team. Following this Ben returned to maintain of gpgme Python bindings and continue building them from that point.

@node Relics of the past
@chapter Relics of the past

There are a few things, in addition to code specific factors, such as SWIG itself, which are worth noting here.

@menu
* The Annoyances of Git::
* The Perils of PyPI::
@end menu

@node The Annoyances of Git
@section The Annoyances of Git

As anyone who has ever worked with git knows, submodules are horrible way to deal with pretty much anything. In the interests of avoiding migraines, that was skipped with addition of the PyME code to GPGME.

Instead the files were added to a subdirectory of the `lang/` directory, along with a copy of the entire git log up to that point as a separate file within the `lang/python/docs/` directory. The entire PyME git log and other preceding VCS logs are located in the `gpgme/lang/python/docs/old-commits.log` file. As the log for PyME is nearly 100KB and the log for GPGME is approximately 1MB, this would cause considerable bloat, as well as some confusion, should the two be merged.

Hence the unfortunate, but necessary, step to simply move the files. A regular repository version has been maintained should it be possible to implement this better in the future.

@node The Perils of PyPI
@section The Perils of PyPI

The early port of the Python 2 `@samp{pyme}` module as `@samp{pyme3}` was never added to PyPI while the focus remained on development and testing during 2015 and early 2016. Later in 2016, however, when Justus completed his major integration work and subsequently renamed the module from `@samp{pyme3}` to `@samp{gpg}`, some prior releases were also provided through PyPI.

Since these bindings require a matching release of the GPGME libraries in order to function, it was determined that there was little benefit in also providing a copy through PyPI since anyone obtaining the GPGME source code would obtain the Python bindings source code at the same time. Whereas there was the potential to sew confusion amongst Python users installing the module from PyPI, only to discover that without the relevant C files, header files or SWIG compiled binaries, the Python module did them little good.

There are only two files on PyPI which might turn up in a search for this module or a sample of its content:

@enumerate
@item
`gpg (1.8.0)` - Python bindings for GPGME GnuPG cryptography library
@item
`pyme (0.9.0)` - Python support for GPGME GnuPG cryptography library
@end enumerate

@menu
* GPG 180 - Python bindings for GPGME GnuPG cryptography library::
* PyME 090 - Python support for GPGME GnuPG cryptography library::
@end menu

@node GPG 180 - Python bindings for GPGME GnuPG cryptography library
@subsection GPG 180 - Python bindings for GPGME GnuPG cryptography library

This is the most recent version to reach PyPI and is the version of the official Python bindings which shipped with GPGME 1.8.0. If you have GPGME 1.8.0 installed and `@emph{only] 1.8.0` installed, then it is probably safe to use this copy from PyPI.

As there have been a lot of changes since the release of GPGME 1.8.0, the GnuPG Project recommends not using this version of the module and instead installing the current version of GPGME along with the Python bindings included with that package.

@node PyME 090 - Python support for GPGME GnuPG cryptography library
@subsection PyME 090 - Python support for GPGME GnuPG cryptography library
This is the last release of the PyME bindings maintained by Martin Albrecht and is only compatible with Python 2, it will not work with Python 3. This is the version of the software from which the port from Python 2 to Python 3 code was made in 2015.

Users of the more recent Python bindings will recognise numerous points of similarity, but also significant differences. It is likely that the more recent official bindings will feel "more pythonic."

For those using Python 2, there is essentially no harm in using this module, but it may lack a number of more recent features added to GPGME.

@bye

# -*- mode: org -*-
#+TITLE: GNU Privacy Guard (GnuPG) Made Easy Python Bindings
#+AUTHOR: Ben McGinnes
#+LATEX_COMPILER: xelatex
#+LATEX_CLASS: article
#+LATEX_CLASS_OPTIONS: [12pt]
#+LATEX_HEADER: \usepackage{xltxtra}
#+LATEX_HEADER: \usepackage[margin=1in]{geometry}
#+LATEX_HEADER: \setmainfont[Ligatures={Common}]{Times New Roman}
#+LATEX_HEADER: \author{Ben McGinnes <ben@gnupg.org>}

* GPGME Python Bindings
  :PROPERTIES:
  :CUSTOM_ID: top
  :END:

** Contents
  :PROPERTIES:
  :CUSTOM_ID: contents
  :END:

- [[file:short-history][A short history of the project]]
- [[file:what-is-new][What's New]]
- [[file:maintenance-mode][Maintenance Mode]] (from January, 2019)
- [[file:what-was-new][What Was New]]
- [[file:gpgme-python-howto][GPGME Python Bindings HOWTO]]

-----BEGIN PGP PUBLIC KEY BLOCK-----
mQENBFrsKEkBCADKw4Wt8J6M/88qD8PO6lSMCxH1cpwH8iK0uPaFFYsJkkXo7kWf
What's New

* New in GPGME 1130::

@end detailmenu
@end menu

@node What's New
@chapter What's New

@multitable {aaaaaaaaaaaaaaa} {aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa}
@item Version:
@tab 0.0.1
@item GPGME Version:
@tab 1.13.0
@item Author:
@tab Ben McGinnes <ben@gnupg.org>
@item Author GPG Key:
@tab DB4724E6FA4286C92B4E55C4321E4E2373590E5D
@item Language:
@tab Australian English, British English
@item xml:lang:
@tab en-AU, en-GB, en
@end multitable

Last time the most obviously new thing was adding the @emph{What's New} section to the HOWTO. Now it's moving it out of the HOWTO.

@menu
* New in GPGME 1130::
@end menu

@node New in GPGME 1130
@section New in GPGME 1130

Additions since GPGME 1.12.0 include:

@itemize
@item
Moving the @emph{What's New} section out of the basic @uref{gpgme-python-howto.org, HOWTO} document and into its own file so as to more readily include other documents
beyond that HOWTO.

@item
Moving the preceding, archival, segments into @uref{what-was-new.org, another file}.

@item
Added @samp{gpg.version.versionintlist} to make it easier for Python developers to check for a specific version number, even with beta versions (it will drop the “-betaN” part).

@item
Added expanded detail on issues pertaining to installing for Windows users.

@item
Bindings enter @uref{maintenance-mode, maintenance mode} from January, 2019.

@item
Added documentation on maintenance mode and what changes can be made to the code when in that status. Essentially that boils down to bug fixes only and no feature requests.

@item
The import-keys-hkp.py example script, which uses the @samp{hkp4py} module to search the SKS servers for a key, has been tightened up to search for both hexadecimal key IDs and user ID strings with reduced chance of unnecessary repetition. There may still be some repetition if a key includes a user ID matching the hexadecimal value of a key ID.

@end itemize

@bye

Using gpgme.js
---------------

At first, make sure that the environment you want to use gpgme.js in has access and permissions for nativeMessaging, and gpgme-json installed. For details, see the README.

The library itself is started via the {@link init} method. This will test the nativeMessaging connection, and then resolve into an Object offering the top level API:

* [encrypt] {@link GpgME#encrypt}
* [decrypt] {@link GpgME#decrypt}
* [sign] {@link GpgME#sign}
* [verify] {@link GpgME#verify}
* [Keyring] {@link GPGME_Keyring}

```js
  gpgmejs.init()
  .then(function(GPGME) {
    // using GPGME
  }, function(error){
    // error handling;
```
All methods that require communication with nativeMessaging are asynchronous, using Promises. Rejections will be instances of `@link GPGME_Error`.

An exception are Keys, which can be initialized in a 'sync' mode, allowing them to be cached and used synchronously until manually refreshed.

Keyring and Keys
----------------
The gnupg keys can be accessed via the `@link GPGME_Keyring`. The Keyring offers the methods for accessing information on all Keys known to gnupg.

**Due to security constraints, the javascript-binding currently only offers limited support for secret-Key interaction.**

The existence of secret Keys is not secret, and those secret Keys can be used for signing, but Operations that may expose, modify or delete secret Keys are not supported.

* `@link GPGME_Keyring#getKeysArmored`
* `@link GPGME_Keyring#getKeys`
* `@link GPGME_Keyring#getDefaultKey`
* `@link GPGME_Keyring#generateKey`
* `@link GPGME_Keyring#deleteKey`

For a list of the authors of the source code of GPGME, please see the file AUTHORS. The following people supported GPGME development in various ways (for example by finding bugs or giving advice), and we want to thank them for their help. If we forgot you, please let us know.

Adriaan de Groot adridg@cs.kun.nl
Albrecht Dre albrecht.dress@arcor.de
Alfons Hoogervorst alfons@proteus.demon.nl
Daniel Mueller daniel@damn.de
Enno Cramer uebergeek@web.de
Frank Heckenbach frank@g-n-u.de
Igor Belyigpgme@katehok.ac93.org
Jan-Oliver Wagner jan@intevation.de
Johannes Poehlmann jhp@caldera.de
Jose C. Garca Sogo jose@jaimedelamo.eu.org
Leo Gaspard ekleog@gmail.com
Mark Mutz mutz@kde.org
Miguel Cocamcoca@gnu.org
Noel Torresenvite@rolamasao.org

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This file is distributed in the hope that it will be useful, but
WITHOUT ANY WARRANTY, to the extent permitted by law; without even the
implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

(in-package :gpgme)

(in-package :gpgme)

(in-package :gpgme)

(include "errno.h" "sys/types.h")

(constant (+ebadf+ "EBADF"))
(ctype off-t "off_t")
(ctype size-t "size_t")
(ctype ssize-t "ssize_t")

(cvar ("errno" *errno*) :int)
# This is a template. The dist target uses it to create the real file.
Summary: GPGME - GnuPG Made Easy
Name: gpgme
Version: 1.13.1
Release: 1
URL: https://gnupg.org/gpgme.html
Source: https://www.gnupg.org/ftp/gcrypt/gpgme/%{name}-%{version}.tar.gz
Group: Development/Libraries
Copyright: GPL
BuildRoot: %{_tmppath}/%{name}-%{version}
BuildRequires: make
Prereq: /sbin/ldconfig /sbin/install-info
Requires: gnupg

%description
GnuPG Made Easy (GPGME) is a library designed to make access to GnuPG easier for applications. It provides a High-Level Crypto API for encryption, decryption, signing, signature verification and key management.

%prep
%setup -q

%build
CFLAGS="SRPM_OPT_FLAGS"; export CFLAGS
./configure --prefix=/usr
make

%install
rm -fr $RPM_BUILD_ROOT
mkdir -p $RPM_BUILD_ROOT
make install prefix=$RPM_BUILD_ROOT/usr infodir=$RPM_BUILD_ROOT%{_infodir}
rm -f $RPM_BUILD_ROOT%{_infodir}/dir

%clean
rm -fr $RPM_BUILD_ROOT
make distclean

%post
/sbin/ldconfig
/sbin/install-info %(_infodir)/gpgme.info.gz %(_infodir)/dir
/sbin/install-info %(_infodir)/gpgme-python-howto.info.gz %(_infodir)/dir

%preun
if [ "$1" = 0 ]; then
/sbin/install-info --delete %{_infodir}/gpgme.info.gz %{_infodir}/dir
/sbin/install-info --delete %{_infodir}/gpgme-python-howto.info.gz %{_infodir}/dir
fi

%postun
/sbin/ldconfig

%files
%defattr(-,root,root)
%doc COPYING COPYING.LESSER AUTHORS README INSTALL NEWS ChangeLog TODO THANKS
%attr(0755,root,root) %{_bindir}/gpgme-config
%attr(0755,root,root) %{_libdir}/*gpgme.so*
%attr(0755,root,root) %{_libdir}/gpgme.la
%attr(0644,root,root) %{_libdir}/*gpgme.a
%{_includedir}/gpgme.h
%{_datadir}/aclocal/gpgme.m4
%{_infodir}/gpgme.info*
%{_infodir}/gpgme-python-howto.info*

%changelog
* Sat Aug 30 2003 Robert Schiele <rschiele@uni-mannheim.de>
- %{_infodir}/dir is not packaged, remove to prevent checking failure
* Mon Jul 01 2002 Wojciech Polak <polak@lodz.pdi.net>
- initial specfile release for GPGME.

# EOF
# -*- mode: org -*-
#+TITLE: GNU Privacy Guard (GnuPG) Made Easy Python Bindings HOWTO (English)
#+AUTHOR: Ben McGinnes
#+LATEX_COMPILER: xelatex
#+LATEX_CLASS: article
#+LATEX_CLASS_OPTIONS: [12pt]
#+LATEX_HEADER: \usepackage{xltttrax}
#+LATEX_HEADER: \usepackage[margin=1in]{geometry}
#+LATEX_HEADER: \setmainfont[Ligatures={Common}]{Times New Roman}
#+LATEX_HEADER: \author{Ben McGinnes <ben@gnupg.org>}

* Introduction

| Version: | 0.1.5 |
| GPME Version: | 1.13.0 |
| Author: | Ben McGinnes <ben@gnupg.org> |
| Author GPG Key: | DB4724E6FA4286C92B4E55C4321E4E2373590E5D |
This document provides basic instruction in how to use the GPGME Python bindings to programmatically leverage the GPGME library.

** Python 2 versus Python 3

Though the GPGME Python bindings themselves provide support for both Python 2 and 3, the focus is unequivocally on Python 3 and specifically from Python 3.4 and above. As a consequence all the examples and instructions in this guide use Python 3 code.

Much of it will work with Python 2, but much of it also deals with Python 3 byte literals, particularly when reading and writing data. Developers concentrating on Python 2.7, and possibly even 2.6, will need to make the appropriate modifications to support the older string and unicode types as opposed to bytes.

There are multiple reasons for concentrating on Python 3; some of which relate to the immediate integration of these bindings, some of which relate to longer term plans for both GPGME and the python bindings and some of which relate to the impending EOL period for Python 2.7. Essentially, though, there is little value in tying the bindings to a version of the language which is a dead end and the advantages offered by Python 3 over Python 2 make handling the data types with which GPGME deals considerably easier.

** Examples

All of the examples found in this document can be found as Python 3 scripts in the =lang/python/examples/howto= directory.

** Unofficial Drafts

In addition to shipping with each release of GPGME, there is a section
on locations to read or download [[#draft-editions][draft editions]] of this document from the end of it. These are unofficial versions produced in between major releases.

** What's New
:PROPERTIES:  
:CUSTOM_ID: new-stuff  
:END:

Full details of what is new are now available in the [[file:what-is-new.org][What's New]] file and archives of the preceding /What's New/ sections are available in the [[file:what-was-new][What Was New]] file.

*** New in GPGME 1130
:PROPERTIES:  
:CUSTOM_ID: new-stuff-1-13-0  
:END:

See the [[file:what-is-new#new-stuff-1-13-0][What's New]] document for what is new in version 1.13.0.

*** New in GPGME 1120
:PROPERTIES:  
:CUSTOM_ID: new-stuff-1-12-0  
:END:

See the [[file:what-was-new#new-stuff-1-12-0][What Was New]] document for what was new in version 1.12.0.

* GPGME Concepts
:PROPERTIES:  
:CUSTOM_ID: gpgme-concepts  
:END:

** A C API
:PROPERTIES:  
:CUSTOM_ID: gpgme-c-api  
:END:

Unlike many modern APIs with which programmers will be more familiar with these days, the GPGME API is a C API. The API is intended for use by C coders who would be able to access its features by including the =gpgme.h= header file with their own C source code and then access its functions just as they would any other C headers.
This is a very effective method of gaining complete access to the API and in the most efficient manner possible. It does, however, have the drawback that it cannot be directly used by other languages without some means of providing an interface to those languages. This is where the need for bindings in various languages stems.

** Python bindings

The Python bindings for GPGME provide a higher level means of accessing the complete feature set of GPGME itself. It also provides a more pythonic means of calling these API functions.

The bindings are generated dynamically with SWIG and the copy of \=gpgme.h= generated when GPGME is compiled.

This means that a version of the Python bindings is fundamentally tied to the exact same version of GPGME used to generate that copy of \=gpgme.h=.

** Difference between the Python bindings and other GnuPG Python packages

There have been numerous attempts to add GnuPG support to Python over the years. Some of the most well known are listed here, along with what differentiates them.

*** The python-gnupg package maintained by Vinay Sajip

This is arguably the most popular means of integrating GPG with Python. The package utilises the \=subprocess= module to implement wrappers for the \=gpg= and \=gpg2= executables normally invoked on the command line (\=gpg.exe= and \=gpg2.exe= on Windows).

The popularity of this package stemmed from its ease of use and capability in providing the most commonly required features.

Unfortunately it has been beset by a number of security issues in the
past; most of which stemmed from using unsafe methods of accessing the command line via the =subprocess= calls. While some effort has been made over the last two to three years (as of 2018) to mitigate this, particularly by no longer providing shell access through those subprocess calls, the wrapper is still somewhat limited in the scope of its GnuPG features coverage.

The python-gnupg package is available under the MIT license.

*** The gnupg package created and maintained by Isis Lovecruft

In 2015 Isis Lovecruft from the Tor Project forked and then re-implemented the python-gnupg package as just gnupg. This new package also relied on subprocess to call the =gpg= or =gpg2= binaries, but did so somewhat more securely.

The naming and version numbering selected for this package, however, resulted in conflicts with the original python-gnupg and since its functions were called in a different manner to python-gnupg, the release of this package also resulted in a great deal of consternation when people installed what they thought was an upgrade that subsequently broke the code relying on it.

The gnupg package is available under the GNU General Public License version 3.0 (or any later version).

*** The PyME package maintained by Martin Albrecht

This package is the origin of these bindings, though they are somewhat different now. For details of when and how the PyME package was folded back into GPGME itself see the [[file:short-history.org][Short History]] document.[fn:1]

The PyME package was first released in 2002 and was also the first attempt to implement a low level binding to GPGME. In doing so it provided access to considerably more functionality than either the =python-gnupg= or =gnupg= packages.

The PyME package is only available for Python 2.6 and 2.7.

Porting the PyME package to Python 3.4 in 2015 is what resulted in it
being folded into the GPGME project and the current bindings are the end result of that effort.

The PyME package is available under the same dual licensing as GPGME itself: the GNU General Public License version 2.0 (or any later version) and the GNU Lesser General Public License version 2.1 (or any later version).

* GPGME Python bindings installation

** No PyPI

Most third-party Python packages and modules are available and distributed through the Python Package Installer, known as PyPI.

Due to the nature of what these bindings are and how they work, it is infeasible to install the GPGME Python bindings in the same way.

This is because the bindings use SWIG to dynamically generate C bindings against =gpgme.h= and =gpgme.h= is generated from =gpgme.h.in= at compile time when GPGME is built from source. Thus to include a package in PyPI which actually built correctly would require either statically built libraries for every architecture bundled with it or a full implementation of C for each architecture.

See the additional notes regarding [[#snafu-cffi][CFFI and SWIG]] at the end of this section for further details.

** Requirements

The GPGME Python bindings only have three requirements:

1. A suitable version of Python 2 or Python 3. With Python 2 that means CPython 2.7 and with Python 3 that means CPython 3.4 or higher.
2. [https://www.swig.org][SWIG].

[SWIG]: https://www.swig.org
3. GPGME itself. Which also means that all of GPGME’s dependencies must be installed too.

*** Recommended Additions

Though none of the following are absolute requirements, they are all recommended for use with the Python bindings. In some cases these recommendations refer to which version(s) of CPython to use the bindings with, while others refer to third party modules which provide a significant advantage in some way.

1. If possible, use Python 3 instead of 2.
2. Favour a more recent version of Python since even 3.4 is due to reach EOL soon. In production systems and services, Python 3.6 should be robust enough to be relied on.
3. If possible add the following Python modules which are not part of the standard library: [Requests], [Cython], [Pendulum] and [hkp4py].

Chances are quite high that at least the first one and maybe two of those will already be installed.

Note that, as with Cython, some of advanced use case scenarios will bring with them additional requirements. Most of these will be fairly well known and commonly installed ones, however, which are in many cases likely to have already been installed on many systems or be familiar to Python programmers.

** Installation

Installing the Python bindings is effectively achieved by compiling and installing GPGME itself.

Once SWIG is installed with Python and all the dependencies for GPGME are installed you only need to confirm that the version(s) of Python you want the bindings installed for are in your $PATH$.

By default GPGME will attempt to install the bindings for the most recent or highest version number of Python 2 and Python 3 it detects.
in \$PATH=. It specifically checks for the =python= and =python3= executables first and then checks for specific version numbers.

For Python 2 it checks for these executables in this order: =python=, =python2= and =python2.7=.

For Python 3 it checks for these executables in this order: =python3=, =python3.7=, =python3.6=, =python3.5= and =python3.4=. [fn:2]

On systems where =python= is actually =python3= and not =python2= it may be possible that =python2= may be overlooked, but there have been no reports of that actually occurring as yet.

In the three months or so since the release of Python 3.7.0 there has been extensive testing and work with these bindings with no issues specifically relating to the new version of Python or any of the new features of either the language or the bindings. This has also been the case with Python 3.7.1rc1. With that in mind and given the release of Python 3.7.1 is scheduled for around the same time as GPGME 1.12.0, the order of preferred Python versions has been changed to move Python 3.7 ahead of Python 3.6.

*** Installing GPGME

:PROPERTIES:
:CUSTOM_ID: install-gpgme
:END:

See the GPGME =README= file for details of how to install GPGME from source.

** Known Issues

:PROPERTIES:
:CUSTOM_ID: snafu
:END:

There are a few known issues with the current build process and the Python bindings. For the most part these are easily addressed should they be encountered.

*** Breaking Builds

:PROPERTIES:
:CUSTOM_ID: snafu-a-swig-of-this-builds-character
:END:

Occasionally when installing GPGME with the Python bindings included
it may be observed that the `make` portion of that process induces a large very number of warnings and, eventually errors which end that part of the build process. Yet following that with `make check` and `make install` appears to work seamlessly.

The cause of this is related to the way SWIG needs to be called to dynamically generate the C bindings for GPGME in the first place. So the entire process will always produce `lang/python/python2-gpg/` and `lang/python/python3-gpg/` directories. These should contain the build output generated during compilation, including the complete bindings and module installed into `site-packages/`.

Occasionally the errors in the early part or some other conflict (e.g. not installing as `*/root/*` or `*/su/*`) may result in nothing being installed to the relevant `site-packages/` directory and the build directory missing a lot of expected files. Even when this occurs, the solution is actually quite simple and will always work.

That solution is simply to run the following commands as either the *root* user or prepended with `sudo -H` in the `lang/python/` directory:

```shell
/path/to/pythonX.Y setup.py build
/path/to/pythonX.Y setup.py build
/path/to/pythonX.Y setup.py install
```

Yes, the build command does need to be run twice. Yes, you still need to run the potentially failing or incomplete steps during the `configure`, `make` and `make install` steps with installing GPGME. This is because those steps generate a lot of essential files needed, both by and in order to create, the bindings (including both the `setup.py` and `gpgme.h` files).

**** IMPORTANT Note

If specifying a selected number of languages to create bindings for, try to leave Python last. Currently the majority of the other language bindings are also preceding Python of either version when listed alphabetically (not counting the Qt bindings).

If Python is set to precede one of the other languages then it is possible that the errors described here may interrupt the build
process before generating bindings for those other languages. In these cases it may be preferable to configure all preferred language bindings separately with alternative =configure= steps for GPGME using the =--enable-languages=$LANGUAGE= option.

Alternatively =make= (or =gmake=, depending on your platform) may be run with the the =--k= option, which tells =make= to keep going even if errors are encountered. In that case the failure of one language's set of bindings to build should not hamper another language's bindings to build.

*** Reinstalling Responsibly

Regardless of whether you're installing for one version of Python or several, there will come a point where reinstallation is required. With most Python module installations, the installed files go into the relevant site-packages directory and are then forgotten about. Then the module is upgraded, the new files are copied over the old and that's the end of the matter.

While the same is true of these bindings, there have been intermittent issues observed on some platforms which have benefited significantly from removing all the previous installations of the bindings before installing the updated versions.

Removing the previous version(s) is simply a matter of changing to the relevant =site-packages= directory for the version of Python in question and removing the =gpg/= directory and any accompanying egg-info files for that module.

In most cases this will require root or administration privileges on the system, but the same is true of installing the module in the first place.

*** Multiple installations

For a variety of reasons it may be either necessary or just preferable to install the bindings to alternative installed Python versions which meet the requirements of these bindings.
On POSIX systems this will generally be most simply achieved by running the manual installation commands (build, build, install) as described in the previous section for each Python installation the bindings need to be installed to.

As per the SWIG documentation: the compilers, libraries and runtime used to build GPGME and the Python Bindings *must* match those used to compile Python itself, including the version number(s) (at least going by major version numbers and probably minor numbers too).

On most POSIX systems, including OS X, this will very likely be the case in most, if not all, cases.

Note that from GPGME ([https://dev.gnupg.org/r/Mff6f616aea6f59b7fI2ce1176492850edcfd3851e][1.12.1]) the default installation installs to each version of Python it can find first. That is that it will currently install for the first copies of Python versions 2.7, 3.4, 3.5, 3.6, 3.7 and 3.8 (dev branch) that it finds. Usually this will be in the same prefix as GPGME itself, but is dictated by the =$PATH= when the installation is performed. The above instructions can still be performed on other python installations which the installer does not find, including alternative prefixes.

*** Won't Work With Windows

There are semi-regular reports of Windows users having considerable difficulty in installing and using the Python bindings at all. Very often, possibly even always, these reports come from Cygwin users and/or MinGW users and/or Msys2 users. Though not all of them have been confirmed, it appears that these reports have also come from people who installed Python using the Windows installer files from the [[https://python.org][Python website]] (i.e. mostly MSI installers, sometimes self-extracting .exe files).

The Windows versions of Python are not built using Cygwin, MinGW or Msys2; they're built using Microsoft Visual Studio. Furthermore the version used is /considerably/ more advanced than the version which MinGW obtained a small number of files from many years ago in order to be able to compile anything at all. Not only that, but there are changes to the version of Visual Studio between some micro releases, though that is is particularly the case with Python 2.7, since it has been kept around far longer than it should have been.
There are two theoretical solutions to this issue:

1. Compile and install the GnuPG stack, including GPGME and the Python bindings using the same version of Microsoft Visual Studio used by the Python Foundation to compile the version of Python installed.

   If there are multiple versions of Python then this will need to be done with each different version of Visual Studio used for those versions of Python.

2. Compile and install Python using the same tools used by choice, such as MinGW or Msys2.

   Do *not* use the official Windows installer for Python unless following the first method.

   In this type of situation it may even be for the best to accept that there are less limitations on permissive software than free software and simply opt to use a recent version of the Community Edition of Microsoft Visual Studio to compile and build all of it, no matter what.

   Investigations into the extent or the limitations of this issue are ongoing.

   The following table lists the version of Microsoft Visual Studio which needs to be used when compiling GPGME and the Python bindings with each version of the CPython binary released [[https://www.python.org/downloads/windows/][for Windows]]:

<table>
<thead>
<tr>
<th>CPython</th>
<th>Microsoft product name</th>
<th>runtime filename</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7.6</td>
<td>Visual Studio 2008</td>
<td>MSVCR90.DLL</td>
</tr>
<tr>
<td>3.4.0</td>
<td>Visual Studio 2010</td>
<td>MSVCR100.DLL</td>
</tr>
<tr>
<td>3.5.0</td>
<td>Visual Studio 2015</td>
<td><em>see below</em></td>
</tr>
<tr>
<td>3.6.0</td>
<td>Visual Studio 2015</td>
<td><em>see below</em></td>
</tr>
<tr>
<td>3.7.0</td>
<td>Visual Studio 2017*</td>
<td><em>see below</em></td>
</tr>
</tbody>
</table>

   It is important to note that MingW and Msys2 ship with the Visual C runtime from Microsoft Visual Studio 2005 and are thus *incompatible* with all the versions of CPython which can be used with the GPGME Python bindings.

   It is also important to note that from CPython 3.5 onwards, the Python Foundation has adopted the reworking of the Visual C runtime which was performed for Visual Studio 2015 and aimed at resolving many of these kinds of issues. Much greater detail on these issues and the correct file(s) to link to are available from Matthew Brett's invaluable page, [[https://matthew-brett.github.io/pydagogue/python_msvc.html][Using Microsoft Visual C with Python]]. It is also
worth reading the Microsoft Developer Network blog post on [http://blogs.msdn.com/b/vcblog/archive/2015/03/03/introducing-the-universal-crt.aspx][the universal CRT] and Steve Dower's blog posts on Python extensions ([http://stevedower.id.au/blog/building-for-python-3-5][part 1] and [http://stevedower.id.au/blog/building-for-python-3-5-part-two][part 2]).

The second of those two posts by Steve Dower contains the details of specific configuration options required for compiling anything to be used with official CPython releases. In addition to those configuration and compiler settings to use, the versions of Visual Studio prior to Visual Studio 2015 did not support 64-bit systems by default. So compiling a 64-bit version of these bindings for a 64-bit version of CPython 2.7 or 3.4 requires additional work.

In addition to the blog posts, the [https://wiki.python.org/moin/WindowsCompilers][Windows compilers] wiki page on the CPython wiki is another essential reference on the relevant versions of Visual Studio to use and the degree of compatibility with CPython releases.

Eventually someone will ask why there isn't an installable binary for Windows, which the GPGME of the licenses do not preclude as long as the source code is available in conjunction with such a release.

The sheer number of versions of Visual Studio in conjunction with differing configuration options depending on the target Windows version and whether the architecture is 64-bit or 32-bit makes it difficult to provide a correct binary installer for Windows users. At the bare minimum doing so would require the GnuPG project compile ten different versions of the bindings with each release; both 32-bit and 64-bit versions for CPython 2.7 and 3.4, with 64-bit versions for both x86-64 (i.e. Intel and AMD) and ARM architectures for CPython 3.5, 3.6, 3.7 and later releases. That's the bare *minimum*, it'd probably be higher.

Additionally, with only a binary installation used in conjunction with the CPython installer from =python.org= the advanced options available which utilise [#cython][Cython] will not be able to be used at all. Cython depends on being able to compile the C code it generates and that too would need to utilise a matching runtime to both the installed version of CPython and these bindings in order to work with the bindings.

Considering all of that, what do we recommend?

1. Use a recent version of CPython; at least 3.5, but ideally 3.6 or later.

2. Use Visual Studio 2015 or the standalone build tools for Visual
3. Compile both CPython and GPGME with these bindings using the tools selected in step 2.

4. Ignore MingW, Msys2 and the official CPython binary installers.

5. Be thankful the answer to this question wasn't simply to say something like, install Linux or install FreeBSD (or even Apple's OS X).

*** CFFI is the Best and GPGME should use it instead of SWIG

There are many reasons for favouring [[https://cffi.readthedocs.io/en/latest/overview.html][CFFI]] and proponents of it are quite happy to repeat these things as if all it would take to switch from SWIG to CFFI is repeating that list as if it were a new concept.

The fact is that there are things which Python's CFFI implementation cannot handle in the GPGME C code. Beyond that there are features of SWIG which are simply not available with CFFI at all. SWIG generates the bindings to Python using the=gpgme.h= file, but that file is not a single version shipped with each release, it too is generated when GPGME is compiled.

CFFI is currently unable to adapt to such a potentially mutable codebase. If there were some means of applying SWIG's dynamic code generation to produce the Python/CFFI API modes of accessing the GPGME libraries (or the source source code directly), but such a thing does not exist yet either and it currently appears that work is needed in at least one of CFFI's dependencies before any of this can be addressed.

So if you're a massive fan of CFFI; that's great, but if you want this project to switch to CFFI then rather than just insisting that it should, I'd suggest you volunteer to bring CFFI up to the level this project needs.

If you're actually seriously considering doing so, then I'd suggest taking the=gpgme-tool.c= file in the GPGME =src/= directory and getting that to work with any of the CFFI API methods (not the ABI methods, they'll work with pretty much anything). When you start running into trouble with "ifdefs" then you'll know what sort of things are lacking. That doesn't even take into account the amount of
work saved via SWIG’s code generation techniques either.

*** Virtualised Environments

It is fairly common practice amongst Python developers to, as much as possible, use packages like virtualenv to keep various things that are to be installed from interfering with each other. Given how much of the GPGME bindings is often at odds with the usual pythonic way of doing things, it stands to reason that this would be called into question too.

As it happens the answer as to whether or not the bindings can be used with virtualenv, the answer is both yes and no.

In general we recommend installing to the relevant path and matching prefix of GPGME itself. Which means that when GPGME, and ideally the rest of the GnuPG stack, is installed to a prefix like=/usr/local= or=/opt/local= then the bindings would need to be installed to the main Python installation and not a virtualised abstraction. Attempts to separate the two in the past have been known to cause weird and intermittent errors ranging from minor annoyances to complete failures in the build process.

As a consequence we only recommend building with and installing to the main Python installations within the same prefix as GPGME is installed to or which are found by GPGME’s configuration stage immediately prior to running the make commands. Which is exactly what the compiling and installing process of GPGME does by default.

Once that is done, however, it appears that a copy of the compiled module may be installed into a virtualenv of the same major and minor version matching the build. Alternatively it is possible to utilise a=sites.pth= file in the =site-packages/= directory of a virtualenv installation, which links back to the system installations corresponding directory in order to import anything installed system wide. This may or may not be appropriate on a case by case basis.

Though extensive testing of either of these options is not yet complete, preliminary testing of them indicates that both are viable as long as the main installation is complete. Which means that certain other options normally restricted to virtual environments are also available, including integration with pythonic test suites (e.g. [[https://docs.pytest.org/en/latest/index.html][pytest]]) and other large projects.
That said, it is worth reiterating the warning regarding non-standard installations. If one were to attempt to install the bindings only to a virtual environment without somehow also including the full GnuPG stack (or enough of it as to include GPGME) then it is highly likely that errors would be encountered at some point and more than a little likely that the build process itself would break.

If a degree of separation from the main operating system is still required in spite of these warnings, then consider other forms of virtualisation. Either a virtual machine (e.g. [https://www.virtualbox.org/][VirtualBox]), a hardware emulation layer (e.g. [https://www.qemu.org/][QEMU]) or an application container (e.g. [https://www.docker.com/why-docker][Docker]).

Finally it should be noted that the limited tests conducted thus far have been using the =virtualenv= command in a new directory to create the virtual python environment. As opposed to the standard =python3 -m venv= and it is possible that this will make a difference depending on the system and version of Python in use. Another option is to run the command =python3 -m virtualenv /path/to/install/virtual/thingy= instead.

*** Post installation

Following installation it is recommended to move the =postInstaller.py= script from the =lang/python/examples/howto/= directory to the =lang/python/= directory and run it. This will fix or restore files needed by Sphinx which may be removed during a distribution build for release. It will also generate reST files from Org mode files with Pandoc and generate Texinfo files from Org mode files with GNU Emacs and Org mode (in batch mode). Additionally it will fix the UTF-8 declaration line in the Texinfo files (Emacs expects "UTF-8" to be "utf-8").

* Fundamentals

Before we can get to the fun stuff, there are a few matters regarding GPGME's design which hold true whether you're dealing with the C code directly or these Python bindings.
The first part of which is or will be fairly blatantly obvious upon viewing the first example, but it's worth reiterating anyway. That being that this API is /*not*/ a REST API. Nor indeed could it ever be one.

Most, if not all, Python programmers (and not just Python programmers) know how easy it is to work with a RESTful API. In fact they've become so popular that many other APIs attempt to emulate REST-like behaviour as much as they are able. Right down to the use of JSON formatted output to facilitate the use of their API without having to retrain developers.

This API does not do that. It would not be able to do that and also provide access to the entire C API on which it's built. It does, however, provide a very pythonic interface on top of the direct bindings and it's this pythonic layer that this HOWTO deals with.

One of the reasons which prevents this API from being RESTful is that most operations require more than one instruction to the API to perform the task. Sure, there are certain functions which can be performed simultaneously, particularly if the result known or strongly anticipated (e.g. selecting and encrypting to a key known to be in the public keybox).

There are many more, however, which cannot be manipulated so readily: they must be performed in a specific sequence and the result of one operation has a direct bearing on the outcome of subsequent operations. Not merely by generating an error either.

When dealing with this type of persistent state on the web, full of both the RESTful and REST-like, it's most commonly referred to as a session. In GPGME, however, it is called a context and every operation type has one.
** Key selection

Selecting keys to encrypt to or to sign with will be a common occurrence when working with GPGMe and the means available for doing so are quite simple.

They do depend on utilising a Context; however once the data is recorded in another variable, that Context does not need to be the same one which subsequent operations are performed.

The easiest way to select a specific key is by searching for that key's key ID or fingerprint, preferably the full fingerprint without any spaces in it. A long key ID will probably be okay, but is not advised and short key IDs are already a problem with some being generated to match specific patterns. It does not matter whether the pattern is upper or lower case.

So this is the best method:

```
#+BEGIN_SRC python -i
import gpg

k = gpg.Context().keylist(pattern="258E88DCBD3CD44D8E7AB43F6ECB6AF0DEADBEEF")
keys = list(k)
#+END_SRC
```

This is passable and very likely to be common:

```
#+BEGIN_SRC python -i
import gpg

k = gpg.Context().keylist(pattern="0x6ECB6AF0DEADBEEF")
keys = list(k)
#+END_SRC
```

And this is a really bad idea:

```
#+BEGIN_SRC python -i
import gpg

k = gpg.Context().keylist(pattern="0xDEADBEEF")
```

keys = list(k)
#+END_SRC

Alternatively it may be that the intention is to create a list of keys which all match a particular search string. For instance all the addresses at a particular domain, like this:

#+BEGIN_SRC python -i
import gpg
csc = gpg.Context().keylist(pattern="ncsc.mil")
snsa = list(ncsc)
#+END_SRC

*** Counting keys
:PROPERTIES:
:CUSTOM_ID: howto-keys-counting
:END:

Counting the number of keys in your public keybox (=pubring.kbx=), the format which has superseded the old keyring format (=pubring.gpg= and =secring.gpg=), or the number of secret keys is a very simple task.

#+BEGIN_SRC python -i
import gpg
c = gpg.Context()
seckeys = c.keylist(pattern=None, secret=True)
pubkeys = c.keylist(pattern=None, secret=False)

seclist = list(seckeys)
secnum = len(seclist)
publist = list(pubkeys)
pubnum = len(publist)

print("Number of secret keys: {0}
Number of public keys: {1}
".format(secnum, pubnum))
#+END_SRC

NOTE: The [[#cython][Cython]] introduction in the [[#advanced-use][Advanced and Experimental]] section uses this same key counting code with Cython to demonstrate some areas where Cython can improve performance even with the bindings. Users with large public keyrings or keyboxes, for instance, should consider these options if they are comfortable with using
An alternative method of getting a single key via its fingerprint is available directly within a Context with `Context().get_key()`. This is the preferred method of selecting a key in order to modify it, sign or certify it and for obtaining relevant data about a single key as a part of other functions; when verifying a signature made by that key, for instance.

By default this method will select public keys, but it can select secret keys as well.

This first example demonstrates selecting the current key of Werner Koch, which is due to expire at the end of 2018:

```python
import gpg

fingerprint = "80615870F5BAD690333686D0F2AD85AC1E42B367"
key = gpg.Context().get_key(fingerprint)
```

Whereas this example demonstrates selecting the author's current key with the `secret` key word argument set to `True`:

```python
import gpg

fingerprint = "DB4724E6FA4286C92B4E55C4321E4E2373590E5D"
key = gpg.Context().get_key(fingerprint, secret=True)
```

It is, of course, quite possible to select expired, disabled and revoked keys with this function, but only to effectively display information about those keys.

It is also possible to use both unicode or string literals and byte literals with the fingerprint when getting a key in this way.

** Importing keys
:PROPERTIES:
Importing keys is possible with the =key_import()= method and takes one argument which is a bytes literal object containing either the binary or ASCII armoured key data for one or more keys.

The following example retrieves one or more keys from the SKS keyservers via the web using the requests module. Since requests returns the content as a bytes literal object, we can then use that directly to import the resulting data into our keybox.

```python
#BEGIN_SRC python -i
import gpg
import os.path
import requests
c = gpg.Context()
url = "https://sks-keyservers.net/pks/lookup"
pattern = input("Enter the pattern to search for key or user IDs: ")
payload = {"op": "get", "search": pattern}

r = requests.get(url, verify=True, params=payload)
result = c.key_import(r.content)

if result is not None and hasattr(result, "considered") is False:
    print(result)
elif result is not None and hasattr(result, "considered") is True:
    num_keys = len(result.imports)
    new_revs = result.new_revocations
    new_sigs = result.new_signatures
    new_subs = result.new_sub_keys
    new_uids = result.new_user_ids
    new_scrt = result.secret_imported
    nochange = result.unchanged
    print(""
    The total number of keys considered for import was:  {0}
    Number of keys revoked:  {1}
    Number of new signatures:  {2}
    Number of new subkeys:  {3}
    Number of new user IDs:  {4}
    Number of new secret keys:  {5}
    Number of unchanged keys:  {6}
    The key IDs for all considered keys were:
    """.format(num_keys, new_revs, new_sigs, new_subs, new_uids, new_scrt,
    nochange))
```

---

:CUSTOM_ID: howto-import-key
:END:
for i in range(num_keys):
    print("{0}\n",format(result.imports[i].fpr))
else:
    pass
#END_SRC

NOTE: When searching for a key ID of any length or a fingerprint (without spaces), the SKS servers require the leading =0x= indicative of hexadecimal be included. Also note that the old short key IDs (e.g. =0xDEADBEEF=) should no longer be used due to the relative ease by which such key IDs can be reproduced, as demonstrated by the Evil32 Project in 2014 (which was subsequently exploited in 2016).

Testing for whether a string in any given search is or may be a hexadecimal value which may be missing the leading =0x= is a simple matter of using a try/except statement which attempts to convert the string as hex to an integer and then back to hex; then using that to search with. Raising a ValueError simply results in treating the string as a string. This is the method and logic utilised in the =import-keys-hkp.py= script (see below).

*** Working with ProtonMail

This script searches the ProtonMail key server for the specified key and imports it.

```python

print("***")

This script searches the ProtonMail key server for the specified key and imports it.
```

```python

C = gpg.Context(armor=True)
url = "https://api.protonmail.ch/pks/lookup"
ksearch = []

if len(sys.argv) >= 2:
    keyterm = sys.argv[1]
else:

```
keyterm = input("Enter the key ID, UID or search string: ")

if keyterm.count("@") == 2 and keyterm.startswith("@") is True:
    ksearch.append(keyterm[1:])
    ksearch.append(keyterm[1:])
    ksearch.append(keyterm[1:])
elif keyterm.count("@") == 1 and keyterm.startswith("@") is True:
    ksearch.append("{0}@protonmail.com".format(keyterm[1:]))
    ksearch.append("{0}@protonmail.ch".format(keyterm[1:]))
    ksearch.append("{0}@pm.me".format(keyterm[1:]))
elif keyterm.count("@") == 0:
    ksearch.append("{0}@protonmail.com".format(keyterm))
    ksearch.append("{0}@protonmail.ch".format(keyterm))
    ksearch.append("{0}@pm.me".format(keyterm))
elif keyterm.count("@") == 2 and keyterm.startswith("@") is False:
    uidlist = keyterm.split("@")
    for uid in uidlist:
        ksearch.append("{0}@protonmail.com".format(uid))
        ksearch.append("{0}@protonmail.ch".format(uid))
        ksearch.append("{0}@pm.me".format(uid))
elif keyterm.count("@") > 2:
    uidlist = keyterm.split("@")
    for uid in uidlist:
        ksearch.append("{0}@protonmail.com".format(uid))
        ksearch.append("{0}@protonmail.ch".format(uid))
        ksearch.append("{0}@pm.me".format(uid))
else:
    ksearch.append(keyterm)

for k in ksearch:
    payload = {"op": "get", "search": k}
    try:
        r = requests.get(url, verify=True, params=payload)
        if r.ok is True:
            result = c.key_import(r.content)
        else:
            result = None
    except Exception as e:
        result = None

    if result is not None and not hasattr(result, "considered") is False:
        print("{0}" for {1}".format(result.decode(), k))
    elif result is not None and hasattr(result, "considered") is True:
        num_keys = len(result.imports)
        new_revs = result.new_revocations
        new_sigs = result.new_signatures
        new_subs = result.new_sub_keys
        new_uids = result.new_user_ids
new_scrt = result.secret_imported
nochange = resultUNCHANGED
print"

The total number of keys considered for import was: 0

With UIDs wholly or partially matching the following string:

{1}

Number of keys revoked: {2}
Number of new signatures: {3}
Number of new subkeys: {4}
Number of new user IDs: {5}
Number of new secret keys: {6}
Number of unchanged keys: {7}

The key IDs for all considered keys were:

###.format(num_keys, k, new_revs, new_signs, new_subs, new_uids, new_scrt,
    nochange))
    for i in range(num_keys):
        print(result.imports[i].fpr)
    print"
    elif result is None:
        print(e)
    #+END_SRC

Both the above example, [[../examples/howto/pmkey-import.py][pmkey-import.py]], and a version which prompts for an alternative GnuPG home directory, [[../examples/howto/pmkey-import-alt.py][pmkey-import-alt.py]], are available with the other examples and are executable scripts.

Note that while the ProtonMail servers are based on the SKS servers, their server is related more to their API and is not feature complete by comparison to the servers in the SKS pool. One notable difference being that the ProtonMail server does not permit non ProtonMail users to update their own keys, which could be a vector for attacking ProtonMail users who may not receive a key’s revocation if it had been compromised.

### Importing with HKP for Python

:PROPERTIES:
:CUSTOM_ID: import-hkp4py
:END:

Performing the same tasks with the [[https://github.com/Selfnet/hkp4py][hkp4py module]] (available via PyPI) is not too much different, but does provide a number of options of benefit to end users. Not least of which being the ability to perform some checks on a key before importing it or not. For instance it may
be the policy of a site or project to only import keys which have not been revoked. The hkp4py module permits such checks prior to the importing of the keys found.

```python
import gpg
import hkp4py
import sys

c = gpg.Context()
server = hkp4py.KeyServer("hkps://hkps.pool.sks-keyservers.net")
results = []
keys = []

if len(sys.argv) > 2:
    pattern = " ".join(sys.argv[1:])
elif len(sys.argv) == 2:
    pattern = sys.argv[1]
else:
    pattern = input("Enter the pattern to search for keys or user IDs: ")

if pattern is not None:
    try:
        key = server.search(hex(int(pattern, 16)))
        keyed = True
    except ValueError as ve:
        key = server.search(pattern)
        keyed = False

if key is not None:
    keys.append(key[0])
    if keyed is True:
        try:
            fob = server.search(pattern)
            keyed = False
        except:
            fob = None
        if fob is not None:
            keys.append(fob[0])
        else:
            pass
    else:
        pass
else:
    pass

for logrus in pattern.split():
    try:
        key = server.search(hex(int(logrus, 16)))
        hexed = True
    except:
        pass
```

```
except ValueError as ve:
    key = server.search(logrus)
    hexed = False

if key is not None:
    keys.append(key[0])
if hexed is True:
    try:
        fob = server.search(logrus)
    except:
        fob = None
    if fob is not None:
        keys.append(fob[0])
    else:
        pass
else:
    pass

if len(keys) > 0:
    for key in keys:
        import_result = c.key_import(key.key_blob)
        results.append(import_result)

for result in results:
    if result is not None and hasattr(result, "considered") is False:
        print(result)
    elif result is not None and hasattr(result, "considered") is True:
        num_keys = len(result.imports)
        new_revs = result.new_revocations
        new_sigs = result.new_signatures
        new_subs = result.new_sub_keys
        new_uids = result.new_user_ids
        new_scrt = result.secret_imported
        nochange = result.unchanged
        print(""
        The total number of keys considered for import was: {0}

        Number of keys revoked: {1}
        Number of new signatures: {2}
        Number of new subkeys: {3}
        Number of new user IDs: {4}
        Number of new secret keys: {5}
        Number of unchanged keys: {6}

        The key IDs for all considered keys were:
        """.format(num_keys, new_revs, new_sigs, new_subs, new_uids, new_scrt,
        nochange))
for i in range(num_keys):
    print(result.imports[i].fpr)
    print('')
else:
    pass

Since the hkp4py module handles multiple keys just as effectively as one (=keys= is a list of responses per matching key), the example above is able to do a little bit more with the returned data before anything is actually imported.

*** Importing from ProtonMail with HKP for Python

Though this can provide certain benefits even when working with ProtonMail, the scope is somewhat constrained there due to the limitations of the ProtonMail keyserver.

For instance, searching the SKS keyserver pool for the term "gnupg" produces hundreds of results from any time the word appears in any part of a user ID. Performing the same search on the ProtonMail keyserver returns zero results, even though there are at least two test accounts which include it as part of the username.

The cause of this discrepancy is the deliberate configuration of that server by ProtonMail to require an exact match of the full email address of the ProtonMail user whose key is being requested. Presumably this is intended to reduce breaches of privacy of their users as an email address must already be known before a key for that address can be obtained.

**** Import from ProtonMail via HKP for Python Example no. 1

The following script is available with the rest of the examples under the somewhat less than original name, =pmkey-import-hkp.py=.

```python
import gpg
import hkp4py
import os.path
```
import sys

print("This script searches the ProtonMail key server for the specified key and imports it.

Usage: pmkey-import-hkp.py [search strings]

")

c = gpg.Context(armor=True)
server = hkp4py.KeyServer("hkps://api.protonmail.ch")
keyterms = []
ksearch = []
allkeys = []
results = []
paradox = []
homeless = None

if len(sys.argv) > 2:
    keyterms = sys.argv[1:]
e1f len(sys.argv) == 2:
    keyterm = sys.argv[1]
    keyterms.append(keyterm)
else:
    key_term = input("Enter the key ID, UID or search string: ")
    keyterms = key_term.split()

for keyterm in keyterms:
    if keyterm.count("@") == 2 and keyterm.startswith("@") is True:
        ksearch.append(keyterm[1:])
        ksearch.append(keyterm[1:])
        ksearch.append(keyterm[1:])
    elif keyterm.count("@") == 1 and keyterm.startswith("@") is True:
        ksearch.append("{0}@protonmail.com".format(keyterm[1:]))
        ksearch.append("{0}@protonmail.ch".format(keyterm[1:]))
        ksearch.append("{0}@pm.me".format(keyterm[1:]))
    elif keyterm.count("@") == 0:
        ksearch.append("{0}@protonmail.com".format(keyterm))
        ksearch.append("{0}@protonmail.ch".format(keyterm))
        ksearch.append("{0}@pm.me".format(keyterm))
    elif keyterm.count("@") == 2 and keyterm.startswith("@") is False:
        uidlist = keyterm.split("@")
        for uid in uidlist:
            ksearch.append("{0}@protonmail.com".format(uid))
            ksearch.append("{0}@protonmail.ch".format(uid))
            ksearch.append("{0}@pm.me".format(uid))
    else:
        uidlist = keyterm.split("@")
        for uid in uidlist:
            ksearch.append("{0}@protonmail.com".format(uid))
            ksearch.append("{0}@protonmail.ch".format(uid))
            ksearch.append("{0}@pm.me".format(uid))

    if len(ksearch) > 0:
        allkeys.append(ksearch)

    if len(allkeys) > 0:
        results = server.search(allkeys)

    if results:
        paradox.append(results)

if paradox:
    print("The following keys were found:")
    for i, result in enumerate(paradox):
        print("Result {0}: " . format(i), result)
    print("")

    print("Enter the key ID or UID of the key to import:")
    key_id = input("")
    key = results[key_id]
    print("Importing key: " . format(key))
    c.import_key(key)
    print("Key imported.")

    print("")
    print("Searching for the key in the ProtonMail key server.")
    print("")
    print("The following keys were found:")
    for i, result in enumerate(paradox):
        print("Result {0}: " . format(i), result)
    print("")
    print("")
    print("Enter the key ID or UID of the key to import:")
    key_id = input("")
    key = results[key_id]
    print("Importing key: " . format(key))
    c.import_key(key)
    print("Key imported.")
    print("")
for uid in uidlist:
    ksearch.append("{0}@protonmail.com".format(uid))
    ksearch.append("{0}@protonmail.ch".format(uid))
    ksearch.append("{0}@pm.me".format(uid))
else:
    ksearch.append(keyterm)

for k in ksearch:
    print("Checking for key for: {0}".format(k))
    try:
        keys = server.search(k)
        if isinstance(keys, list) is True:
            for key in keys:
                allkeys.append(key)
                try:
                    import_result = c.key_import(key.key_blob)
                except Exception as e:
                    import_result = c.key_import(key.key)
                else:
                    paradox.append(keys)
                    import_result = None
                except Exception as e:
                    import_result = None
            results.append(import_result)

for result in results:
    if result is not None and hasattr(result, "considered") is False:
        print("{0} for {1}".format(result.decode(), k))
    elif result is not None and hasattr(result, "considered") is True:
        num_keys = len(result.imports)
        new_revs = result.new_revocations
        new_sigs = result.new_signatures
        new_subs = result.new_sub_keys
        new_uids = result.new_user_ids
        new_scrt = result.secret_imported
        nochange = result.unchanged
        print(""
        The total number of keys considered for import was:  {0}
        With UIDs wholly or partially matching the following string:

        {1}

        Number of keys revoked:  {2}
        Number of new signatures:  {3}
        Number of new subkeys:  {4}
        Number of new user IDs:  {5}
        Number of new secret keys:  {6}"
    )
Number of unchanged keys: [7]

The key IDs for all considered keys were:
```python
for i in range(num_keys):
    print(result.imports[i].fpr)
    print('')
elif result is None:
    pass
```

**** Import from ProtonMail via HKP for Python Example no. 2

Like its counterpart above, this script can also be found with the rest of the examples, by the name pmkey-import-hkp-alt.py.

With this script a modicum of effort has been made to treat anything passed as a `=homedir=` which either does not exist or which is not a directory, as also being a possible user ID to check for. It's not guaranteed to pick up on all such cases, but it should cover most of them.

```python
import gpg
import hkp4py
import os.path
import sys

print('This script searches the ProtonMail key server for the specified key and imports it. Optionally enables specifying a different GnuPG home directory.

Usage:  pmkey-import-hkp.py [homedir] [search string]
    or:  pmkey-import-hkp.py [search string]

```
homeless = None

if len(sys.argv) > 3:
    homedir = sys.argv[1]
    keyterms = sys.argv[2:]
eelif len(sys.argv) == 3:
    homedir = sys.argv[1]
    keyterm = sys.argv[2]
    keyterms.append(keyterm)
eelif len(sys.argv) == 2:
    homedir = ""
    keyterm = sys.argv[1]
    keyterms.append(keyterm)
eelse:
    keyterm = input("Enter the key ID, UID or search string: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")
    keyterms.append(keyterm)

if len(homedir) == 0:
    homedir = None
    homeless = False

if homedir is not None:
    if homedir.startswith("~"):
        if os.path.exists(os.path.expanduser(homedir)) is True:
            if os.path.isdir(os.path.expanduser(homedir)) is True:
                c.home_dir = os.path.realpath(os.path.expanduser(homedir))
                homeless = False
            else:
                homeless = True
        else:
            homeless = True
    else:
        homeless = True
eelif os.path.exists(os.path.realpath(homedir)) is True:
            if os.path.isdir(os.path.realpath(homedir)) is True:
                c.home_dir = os.path.realpath(homedir)
            else:
                homeless = True
        else:
            homeless = True

# First check to see if the homedir really is a homedir and if not, treat it as
# a search string.
if homeless is True:
    keyterms.append(homedir)
    c.home_dir = None
eelse:
    pass

for keyterm in keyterms:
if keyterm.count("@") == 2 and keyterm.startswith("@") is True:
    ksearch.append(keyterm[1:])
    ksearch.append(keyterm[1:])
    ksearch.append(keyterm[1:])
elif keyterm.count("@") == 1 and keyterm.startswith("@") is True:
    ksearch.append("{0}@protonmail.com".format(keyterm[1:]))
    ksearch.append("{0}@protonmail.ch".format(keyterm[1:]))
    ksearch.append("{0}@pm.me".format(keyterm[1:]))
elif keyterm.count("@") == 0:
    ksearch.append("{0}@protonmail.com".format(keyterm))
    ksearch.append("{0}@protonmail.ch".format(keyterm))
    ksearch.append("{0}@pm.me".format(keyterm))
elif keyterm.count("@") == 2 and keyterm.startswith("@") is False:
    uidlist = keyterm.split("@")
    for uid in uidlist:
        ksearch.append("{0}@protonmail.com".format(uid))
        ksearch.append("{0}@protonmail.ch".format(uid))
        ksearch.append("{0}@pm.me".format(uid))
elif keyterm.count("@") > 2:
    uidlist = keyterm.split("@")
    for uid in uidlist:
        ksearch.append("{0}@protonmail.com".format(uid))
        ksearch.append("{0}@protonmail.ch".format(uid))
        ksearch.append("{0}@pm.me".format(uid))
else:
    ksearch.append(keyterm)

for k in ksearch:
    print("Checking for key for: {0}".format(k))
    try:
        keys = server.search(k)
        if isinstance(keys, list) is True:
            for key in keys:
                allkeys.append(key)
    except Exception as e:
        print("Error occurred while searching: {0}".format(e))
try:
    import_result = c.key_import(key.key_blob)
except Exception as e:
    import_result = None
except Exception as e:
    import_result = None
results.append(import_result)
for result in results:
    if result is not None and hasattr(result, "considered") is False:
        print("{0} for {1}".format(result.decode(), k))

Open Source Used In BGP TE Controller Version 4.3.0  16586
elif result is not None and hasattr(result, "considered") is True:
    num_keys = len(result.imports)
    new_revs = result.new_revocations
    new_sigs = result.new_signatures
    new_subs = result.new_sub_keys
    new_uids = result.new_user_ids
    new_scrt = result.secret_imported
    nochange = result.unchanged
    print(""
    The total number of keys considered for import was:  {0}
    With UIDs wholly or partially matching the following string:

    {1}
    Number of keys revoked:  {2}
    Number of new signatures:  {3}
    Number of new subkeys:  {4}
    Number of new user IDs:  {5}
    Number of new secret keys:  {6}
    Number of unchanged keys:  {7}
    The key IDs for all considered keys were:
    ***.format(num_keys, k, new_revs, new_sigs, new_subs, new_uids, new_scrt,
        nochange))
        for i in range(num_keys):
            print(result.imports[i].fpr)
            print("")
        elif result is None:
            pass
        #+END_SRC

** Exporting keys
:PROPERTIES:
:CUSTOM_ID: howto-export-key
:END:

Exporting keys remains a reasonably simple task, but has been
separated into three different functions for the OpenPGP cryptographic
engine. Two of those functions are for exporting public keys and the
third is for exporting secret keys.

*** Exporting public keys
:PROPERTIES:
:CUSTOM_ID: howto-export-public-key
:END:
There are two methods of exporting public keys, both of which are very similar to the other. The default method, `key_export()`, will export a public key or keys matching a specified pattern as normal. The alternative, the `key_export_minimal()` method, will do the same thing except producing a minimised output with extra signatures and third party signatures or certifications removed.

```
BEGIN_SRC python -i
import gpg
import os.path
import sys

print("This script exports one or more public keys.
")

c = gpg.Context(armor=True)

if len(sys.argv) >= 4:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = sys.argv[3]
else:
    if len(sys.argv) == 3:
        keyfile = sys.argv[1]
        logrus = sys.argv[2]
    else:
        homedir = input("Enter the GPG configuration directory path (optional): ")

if homedir.startswith("~"):
    if os.path.exists(os.path.expanduser(homedir)) is True:
        c.home_dir = os.path.expanduser(homedir)
    else:
        pass
elif os.path.exists(homedir) is True:
    c.home_dir = homedir
else:
    pass

try:
    result = c.key_export(pattern=logrus)
```
except:
    result = c.key_export(pattern=None)

if result is not None:
    with open(keyfile, "wb") as f:
        f.write(result)
else:
    pass

# END_SRC

It should be noted that the result will only return =None= when a search pattern has been entered, but has not matched any keys. When the search pattern itself is set to =None= this triggers the exporting of the entire public keybox.

# BEGIN_SRC python -i
import gpg
import os.path
import sys

print("\nThis script exports one or more public keys in minimised form.\n\n")

c = gpg.Context(armor=True)

if len(sys.argv) >= 4:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = sys.argv[3]
elif len(sys.argv) == 3:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = input("Enter the GPG configuration directory path (optional): ")
elif len(sys.argv) == 2:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = input("Enter the GPG configuration directory path (optional): ")
else:
    keyfile = input("Enter the path and filename to save the secret key to: ")
    logrus = input("Enter the UID matching the key(s) to export: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")

if homedir.startswith("~"):
    if os.path.exists(os.path.expanduser(homedir)) is True:
        c.home_dir = os.path.expanduser(homedir)
    else:
        pass

# END_SRC
elif os.path.exists(homedir) is True:
    c.home_dir = homedir
else:
    pass

try:
    result = c.key_export_minimal(pattern=logrus)
except:
    result = c.key_export_minimal(pattern=None)

if result is not None:
    with open(keyfile, "wb") as f:
        f.write(result)
else:
    pass

/*END_SRC

*** Exporting secret keys
 :PROPERTIES:
 :CUSTOM_ID: howto-export-secret-key
 :END:

Exporting secret keys is, functionally, very similar to exporting public keys; save for the invocation of =pinentry= via =gpg-agent= in order to securely enter the key's passphrase and authorise the export.

The following example exports the secret key to a file which is then set with the same permissions as the output files created by the command line secret key export options.

/*BEGIN_SRC python -i
import gpg
import os
import os.path
import sys

print("This script exports one or more secret keys."

The gpg-agent and pinentry are invoked to authorise the export.

/*

c = gpg.Context(armor=True)

if len(sys.argv) >= 4:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
homedir = sys.argv[3]
elif len(sys.argv) == 3:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = input("Enter the GPG configuration directory path (optional): ")
elif len(sys.argv) == 2:
    keyfile = sys.argv[1]
    logrus = input("Enter the UID matching the secret key(s) to export: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")
else:
    keyfile = input("Enter the path and filename to save the secret key to: ")
    logrus = input("Enter the UID matching the secret key(s) to export: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")

if len(homedir) == 0:
    homedir = None
elif homedir.startswith("~"):
    userdir = os.path.expanduser(homedir)
    if os.path.exists(userdir) is True:
        homedir = os.path.realpath(userdir)
    else:
        homedir = None
else:
    homedir = os.path.realpath(homedir)

if os.path.exists(homedir) is False:
    homedir = None
else:
    if os.path.isdir(homedir) is False:
        homedir = None
    else:
        pass

if homedir is not None:
    c.home_dir = homedir
else:
    pass

try:
    result = c.key_export_secret(pattern=logrus)
except:
    result = c.key_export_secret(pattern=None)

if result is not None:
    with open(keyfile, "wb") as f:
        f.write(result)
    os.chmod(keyfile, 0o600)
else:
Alternatively the approach of the following script can be used. This longer example saves the exported secret key(s) in files in the GnuPG home directory, in addition to setting the file permissions as only readable and writable by the user. It also exports the secret key(s) twice in order to output both GPG binary (=.gpg=) and ASCII armoured (=.asc=) files.

```python
import gpg
import os
import os.path
import subprocess
import sys

print("This script exports one or more secret keys as both ASCII armored and binary file formats, saved in files within the user's GPG home directory.

The gpg-agent and pinentry are invoked to authorise the export.

---")

if sys.platform == "win32":
gpgconfcmd = "gpgconf.exe --list-dirs homedir"
else:
gpgconfcmd = "gpgconf --list-dirs homedir"

a = gpg.Context(armor=True)
b = gpg.Context()
c = gpg.Context()

if len(sys.argv) >= 4:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = sys.argv[3]
elif len(sys.argv) == 3:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = input("Enter the GPG configuration directory path (optional): ")
elif len(sys.argv) == 2:
    keyfile = sys.argv[1]
    logrus = input("Enter the UID matching the secret key(s) to export: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")
else:
    keyfile = input("Enter the filename to save the secret key to: ")
    logrus = input("Enter the UID matching the secret key(s) to export: ")
```

homedir = input("Enter the GPG configuration directory path (optional): ")

if len(homedir) == 0:
    homedir = None
elif homedir.startswith("~"):
    userdir = os.path.expanduser(homedir)
    if os.path.exists(userdir) is True:
        homedir = os.path.realpath(userdir)
    else:
        homedir = None
else:
    homedir = os.path.realpath(homedir)

if os.path.exists(homedir) is False:
    homedir = None
else:
    if os.path.isdir(homedir) is False:
        homedir = None
    else:
        pass

if homedir is not None:
    c.home_dir = homedir
else:
    pass

if c.home_dir is not None:
    if c.home_dir.endswith("/"):
        gpgfile = "{0}{1}.gpg".format(c.home_dir, keyfile)
        ascfile = "{0}{1}.asc".format(c.home_dir, keyfile)
    else:
        gpgfile = "{0}/{1}.gpg".format(c.home_dir, keyfile)
        ascfile = "{0}/{1}.asc".format(c.home_dir, keyfile)
else:
    if os.path.exists(os.environ["GNUPGHOME"]) is True:
        hd = os.environ["GNUPGHOME"]
    else:
        try:
            hd = subprocess.getoutput(gpgconfcmd)
        except:
            process = subprocess.Popen(gpgconfcmd.split(),
                                       stdout=subprocess.PIPE)
            procom = process.communicate()
            if sys.version_info[0] == 2:
                hd = procom[0].strip()
            else:
                hd = procom[0].decode().strip()
        gpgfile = "{0}/{1}.gpg".format(hd, keyfile)
ascfile = "\{0\}/\{1\}.asc".format(hd, keyfile)

try:
    a_result = a.key_export_secret(pattern=logrus)
    b_result = b.key_export_secret(pattern=logrus)
except:
    a_result = a.key_export_secret(pattern=None)
    b_result = b.key_export_secret(pattern=None)

if a_result is not None:
    with open(ascfile, "wb") as f:
        f.write(a_result)
    os.chmod(ascfile, 0o600)
else:
    pass

if b_result is not None:
    with open(gpgfile, "wb") as f:
        f.write(b_result)
    os.chmod(gpgfile, 0o600)
else:
    pass

*** Sending public keys to the SKS Keyservers

As with the previous section on importing keys, the =hkp4py= module adds another option with exporting keys in order to send them to the public keyservers.

The following example demonstrates how this may be done.

```python
import gpg
import hkp4py
import os.path
import sys

print("This script sends one or more public keys to the SKS keyservers and is essentially a slight variation on the export-key.py script.
")

c = gpg.Context(armor=True)
```
server = hkp4py.KeyServer("hkps://hkps.pool.sks-keyservers.net")

if len(sys.argv) > 2:
    logrus = " ".join(sys.argv[1:])
elif len(sys.argv) == 2:
    logrus = sys.argv[1]
else:
    logrus = input("Enter the UID matching the key(s) to send: ")

if len(logrus) > 0:
    try:
        export_result = c.key_export(pattern=logrus)
    except Exception as e:
        print(e)
        export_result = None
    else:
        export_result = c.key_export(pattern=None)

if export_result is not None:
    try:
        try:
            send_result = server.add(export_result)
        except:
            send_result = server.add(export_result.decode())
        if send_result is not None:
            print(send_result)
        else:
            pass
    except Exception as e:
        print(e)
    else:
        pass

An expanded version of this script with additional functions for specifying an alternative homedir location is in the examples directory as =send-key-to-keyserver.py=.

The =hkp4py= module appears to handle both string and byte literal text data equally well, but the GPGME bindings deal primarily with byte literal data only and so this script sends in that format first, then tries the string literal form.

* Basic Functions

---

Open Source Used In BGP TE Controller Version 4.3.0  16595
The most frequently called features of any cryptographic library will be the most fundamental tasks for encryption software. In this section we will look at how to programmatically encrypt data, decrypt it, sign it and verify signatures.

** Encryption

Encrypting is very straightforward. In the first example below the message, `text`, is encrypted to a single recipient's key. In the second example the message will be encrypted to multiple recipients.

*** Encrypting to one key

Once the context is set the main issues with encrypting data is essentially reduced to key selection and the keyword arguments specified in the `gpg.Context().encrypt()` method.

Those keyword arguments are: =recipients=, a list of keys encrypted to (covered in greater detail in the following section); =sign=, whether or not to sign the plaintext data, see subsequent sections on signing and verifying signatures below (defaults to =True=); =sink=, to write results or partial results to a secure sink instead of returning it (defaults to =None=); =passphrase=, only used when utilising symmetric encryption (defaults to =None=); =always_trust=, used to override the trust model settings for recipient keys (defaults to =False=); =add_encrypt_to=, utilises any preconfigured =encrypt-to= or =default-key= settings in the user's =gpg.conf= file (defaults to =False=); =prepare=, prepare for encryption (defaults to =False=); =expect_sign=, prepare for signing (defaults to =False=); =compress=, compresses the plaintext prior to encryption (defaults to =True=).

```python
import gpg

a_key = "0x12345678DEADBEEF"

#Since the text in this case must be bytes, it is most likely that
text = b"Some text to test with.
```
as this is the simplest method of obtaining the correct data format.

```python
#+BEGIN_SRC python
import gpg

a_key = "0x12345678DEADBEEF"

c = gpg.Context(armor=True)
rkey = list(c.keylist(pattern=a_key, secret=False))
ciphertext, result, sign_result = c.encrypt(text, recipients=rkey, sign=True,
always_trust=True,
add_encrypt_to=True)

with open("secret_plans.txt.asc", "wb") as afile:
    afile.write(ciphertext)
#+END_SRC
```

Though this is even more likely to be used like this; with the plaintext input read from a file, the recipient keys used for encryption regardless of key trust status and the encrypted output also encrypted to any preconfigured keys set in the =gpg.conf= file:

```python
#+BEGIN_SRC python -i
import gpg

c = gpg.Context(armor=True)
rkey = list(c.keylist(pattern=a_key, secret=False))
ciphertext, result, sign_result = c.encrypt(text, recipients=rkey, sign=False)

with open("secret_plans.txt.asc", "wb") as afile:
    afile.write(ciphertext)
#+END_SRC
```

If the =recipients= parameter is empty then the plaintext is encrypted symmetrically. If no =passphrase= is supplied as a parameter or via a callback registered with the =Context()= then an out-of-band prompt for the passphrase via pinentry will be invoked.

*** Encrypting to multiple keys

Encrypting to multiple keys essentially just expands upon the key selection process and the recipients from the previous examples.
The following example encrypts a message (=text=) to everyone with an email address on the =gnupg.org= domain,[fn:4] but does /not/ encrypt to a default key or other key which is configured to normally encrypt to.

#+BEGIN_SRC python -i
import gpg

text = b"""Oh look, another test message.

The same rules apply as with the previous example and more likely than not, the message will actually be drawn from reading the contents of a file or, maybe, from entering data at an input() prompt.

Since the text in this case must be bytes, it is most likely that the input form will be a separate file which is opened with "rb" as this is the simplest method of obtaining the correct data format.

```python

c = gpg.Context(armor=True)
rpattern = list(c.keylist(pattern="@gnupg.org", secret=False))
logrus = []

for i in range(len(rpattern)):
    if rpattern[i].can_encrypt == 1:
        logrus.append(rpattern[i])

ciphertext, result, sign_result = c.encrypt(text, recipients=logrus, sign=False, always_trust=True)

with open("secret_plans.txt.asc", "wb") as afile:
    afile.write(ciphertext)

# END_SRC
```

All it would take to change the above example to sign the message and also encrypt the message to any configured default keys would be to change the =c.encrypt= line to this:

```python

ciphertext, result, sign_result = c.encrypt(text, recipients=logrus, 
    always_trust=True,
    add_encrypt_to=True)

# END_SRC
```

The only keyword arguments requiring modification are those for which the default values are changing. The default value of =sign= is
If =always_trust= is not set to =True= and any of the recipient keys are not trusted (e.g. not signed or locally signed) then the encryption will raise an error. It is possible to mitigate this somewhat with something more like this:

```python
import gpg

with open("secret_plans.txt.asc", "rb") as afile:
    text = afile.read()

c = gpg.Context(armor=True)
rpattern = list(c.keylist(pattern="@gnupg.org", secret=False))
logrus = []

for i in range(len(rpattern)):
    if rpattern[i].can_encrypt == 1:
        logrus.append(rpattern[i])

try:
    ciphertext, result, sign_result = c.encrypt(text, recipients=logrus,
                                              add_encrypt_to=True)
except gpg.errors.InvalidRecipients as e:
    for i in range(len(e.recipients)):
        for n in range(len(logrus)):
            if logrus[n].fpr == e.recipients[i].fpr:
                logrus.remove(logrus[n])
        else:
            pass

try:
    ciphertext, result, sign_result = c.encrypt(text,
                                              recipients=logrus,
                                              add_encrypt_to=True)

with open("secret_plans.txt.asc", "wb") as afile:
    afile.write(ciphertext)
except:
    pass
```

This will attempt to encrypt to all the keys searched for, then remove invalid recipients if it fails and try again.

** Decryption

:PROPERTIES:
Decrypting something encrypted to a key in one's secret keyring is fairly straightforward.

In this example code, however, preconfiguring either `gpg.Context()` or `gpg.core.Context()` as `c` is unnecessary because there is no need to modify the Context prior to conducting the decryption and since the Context is only used once, setting it to `c` simply adds lines for no gain.

```python
import gpg
ciphertext = input("Enter path and filename of encrypted file: ")
newfile = input("Enter path and filename of file to save decrypted data to: ")

with open(ciphertext, "rb") as cfile:
    try:
        plaintext, result, verify_result = gpg.Context().decrypt(cfile)
    except gpg.errors.GPGMEError as e:
        plaintext = None
        print(e)

if plaintext is not None:
    with open(newfile, "wb") as nfile:
        nfile.write(plaintext)
else:
    pass
```

The data available in `plaintext` in this example is the decrypted content as a byte object, the recipient key IDs and algorithms in `result` and the results of verifying any signatures of the data in `verify_result`.

If `gpg.Context().decrypt(cfile, verify=False)` is called instead, then `verify_result` will be returned as `None` and the rest remains as described here.

** Signing text and files

The following sections demonstrate how to specify keys to sign with.
*** Signing key selection
:PROPERTIES:
:CUSTOM_ID: howto-basic-signing-signers
:END:

By default GPGME and the Python bindings will use the default key configured for the user invoking the GPGME API. If there is no default key specified and there is more than one secret key available it may be necessary to specify the key or keys with which to sign messages and files.

```python
import gpg

logrus = input("Enter the email address or string to match signing keys to: ")
hancock = gpg.Context().keylist(pattern=logrus, secret=True)
sig_src = list(hancock)
```

The signing examples in the following sections include the explicitly designated $signers$ parameter in two of the five examples; once where the resulting signature would be ASCII armoured and once where it would not be armoured.

While it would be possible to enter a key ID or fingerprint here to match a specific key, it is not possible to enter two fingerprints and match two keys since the pattern expects a string, bytes or None and not a list. A string with two fingerprints won't match any single key.

*** Normal or default signing messages or files
:PROPERTIES:
:CUSTOM_ID: howto-basic-signing-normal
:END:

The normal or default signing process is essentially the same as is most often invoked when also encrypting a message or file. So when the encryption component is not utilised, the result is to produce an encoded and signed output which may or may not be ASCII armoured and which may or may not also be compressed.

By default compression will be used unless GnuPG detects that the plaintext is already compressed. ASCII armouring will be determined according to the value of $gpg.Context().armor$.
The compression algorithm is selected in much the same way as the symmetric encryption algorithm or the hash digest algorithm is when multiple keys are involved; from the preferences saved into the key itself or by comparison with the preferences with all other keys involved.

```python
import gpg

# Declaration of ... something.

text = text0.encode()

c = gpg.Context(armor=True, signers=sig_src)
signed_data, result = c.sign(text, mode=gpg.constants.sig.mode.NORMAL)

with open("/path/to/statement.txt.asc", "w") as afile:
    afile.write(signed_data.decode())

``` Though everything in this example is accurate, it is more likely that reading the input data from another file and writing the result to a new file will be performed more like the way it is done in the next example. Even if the output format is ASCII armoured.

```python
import gpg

with open("/path/to/statement.txt", "rb") as tfile:
    text = tfile.read()

c = gpg.Context()
signed_data, result = c.sign(text, mode=gpg.constants.sig.mode.NORMAL)

with open("/path/to/statement.txt.sig", "wb") as afile:
    afile.write(signed_data)

``` *** Detached signing messages and files

Detached signatures will often be needed in programmatic uses of GPGME, either for signing files (e.g. tarballs of code releases) or as a component of message signing (e.g. PGP/MIME encoded email).
# BEGIN_SRC python -i
import gpg

text0 = """"""Declaration of ... something.

##
text = text0.encode()

c = gpg.Context(armor=True)
signed_data, result = c.sign(text, mode=gpg.constants.sig.mode.DETACH)

with open("/path/to/statement.txt.asc", "w") as afile:
    afile.write(signed_data.decode())
# END_SRC

As with normal signatures, detached signatures are best handled as byte literals, even when the output is ASCII armoured.

# BEGIN_SRC python -i
import gpg

with open("/path/to/statement.txt", "rb") as tfile:
    text = tfile.read()

c = gpg.Context(signers=sig_src)
signed_data, result = c.sign(text, mode=gpg.constants.sig.mode.DETACH)

with open("/path/to/statement.txt.sig", "wb") as afile:
    afile.write(signed_data)
# END_SRC

*** Clearsigning messages or text

:PROPERTIES:
:CUSTOM_ID: howto-basic-signing-clear
:END:

Though PGP/in-line messages are no longer encouraged in favour of PGP/MIME, there is still sometimes value in utilising in-line signatures. This is where clear-signed messages or text is of value.

# BEGIN_SRC python -i
import gpg

text0 = """"""Declaration of ... something.

##
In spite of the appearance of a clear-signed message, the data handled by GPGME in signing it must still be byte literals.

** Signature verification

Essentially there are two principal methods of verification of a signature. The first of these is for use with the normal or default signing method and for clear-signed messages. The second is for use with files and data with detached signatures.

The following example is intended for use with the default signing method where the file was not ASCII armoured:
try:
    data, result = c.verify(open(gpg_file))
    verified = True
except gpg.errors.BadSignatures as e:
    verified = False
    print(e)

if verified is True:
    for i in range(len(result.signatures)):
        sign = result.signatures[i]
        print('''Good signature from:
{0}
with key {1}
made at {2}
'''.format(c.get_key(sign.fpr).uids[0].uid, sign.fpr,
            time.ctime(sign.timestamp)))
else:
    pass

Whereas this next example, which is almost identical would work with normal ASCII armoured files and with clear-signed files:

```python
import gpg
import time
filename = "statement.txt"
asc_file = "statement.txt.asc"
c = gpg.Context()

try:
    data, result = c.verify(open(asc_file))
    verified = True
except gpg.errors.BadSignatures as e:
    verified = False
    print(e)

if verified is True:
    for i in range(len(result.signatures)):
        sign = result.signatures[i]
        print('''Good signature from:
{0}
with key {1}
made at {2}
'''.format(c.get_key(sign.fpr).uids[0].uid, sign.fpr,
            time.ctime(sign.timestamp)))
```
In both of the previous examples it is also possible to compare the original data that was signed against the signed data in `data` to see if it matches with something like this:

```python
with open(filename, "rb") as afile:
    text = afile.read()

if text == data:
    print("Good signature."")
else:
    pass
```

The following two examples, however, deal with detached signatures. With his method of verification the data that was signed does not get returned since it is already being explicitly referenced in the first argument of `c.verify`. So `data` is `None` and only the information in `result` is available.

```python
import gpg
import time

filename = "statement.txt"
 sig_file = "statement.txt.sig"

c = gpg.Context()

try:
    data, result = c.verify(open(filename), open(sig_file))
    verified = True
except gpg.errors.BadSignatures as e:
    verified = False
    print(e)

if verified is True:
    for i in range(len(result.signatures)):
        sign = result.signatures[i]
        print("Good signature from: {0} with key {1} made at {2}"
            .format(c.get_key(sign.fpr).uids[0].uid, sign.fpr,
            ...)}
time.ctime(sign.timestamp)))

else:
    pass

#+END_SRC

#+BEGIN_SRC python -i
import gpg
import time

filename = "statement.txt"
asc_file = "statement.txt.asc"

c = gpg.Context()

try:
    data, result = c.verify(open(filename), open(asc_file))
    verified = True
except gpg.errors.BadSignatures as e:
    verified = False
    print(e)

if verified is True:
    for i in range(len(result.signatures)):
        sign = result.signatures[i]
        print("Good signature from:
{0}
with key {1}
made at {2}
".format(c.get_key(sign.fpr).uids[0].uid, sign.fpr,
    time.ctime(sign.timestamp)))
else:
    pass

#+END_SRC

* Creating keys and subkeys

The one thing, aside from GnuPG itself, that GPGME depends on, of
Of course, is the keys themselves. So it is necessary to be able to
Generate them and modify them by adding subkeys, revoking or disabling
them, sometimes deleting them and doing the same for user IDs.

In the following examples a key will be created for the world's
greatest secret agent, Danger Mouse. Since Danger Mouse is a secret
agent he needs to be able to protect information to =SECRET= level
clearance, so his keys will be 3072-bit keys.

The pre-configured =gpg.conf= file which sets cipher, digest and other preferences contains the following configuration parameters:

## Primary key

Generating a primary key uses the =create_key= method in a Context. It contains multiple arguments and keyword arguments, including:
- =userid=, =algorithm=, =expires_in=, =expires=, =sign=, =encrypt=, =certify=, =authenticate=, =passphrase= and =force=. The defaults for all of those except =userid=, =algorithm=, =expires_in=, =expires= and =passphrase= is =False=. The defaults for =algorithm= and =passphrase= is =None=. The default for =expires_in= is =0=. The default for =expires= is =True=. There is no default for =userid=.

If =passphrase= is left as =None= then the key will not be generated with a passphrase, if =passphrase= is set to a string then that will be the passphrase and if =passphrase= is set to =True= then gpg-agent will launch pinentry to prompt for a passphrase. For the sake of convenience, these examples will keep =passphrase= set to =None=.

```ini
#+BEGIN_SRC conf
expert
allow-freeform-uid
allow-secret-key-import
trust-model tofu+pgp
tofu-default-policy unknown
able-enable-large-rsa
disable-dsa2
cert-digest-algo SHA512
default-preference-list TWOFISH CAMELLIA256 AES256 CAMELLIA192 AES192 CAMELLIA128 AES BLOWFISH IDEA CAST5 3DES SHA512 SHA384 SHA256 SHA224 RIPEMD160 SHA1 ZLIB BZIP2 ZIP Uncompressed
personal-cipher-preferences TWOFISH CAMELLIA256 AES256 CAMELLIA192 AES192 CAMELLIA128 AES BLOWFISH IDEA CAST5 3DES
personal-digest-preferences SHA512 SHA384 SHA256 SHA224 RIPEMD160 SHA1
personal-compress-preferences ZLIB BZIP2 ZIP Uncompressed
#+END_SRC
```

```python
import gpg
c = gpg.Context()
```
c.home_dir = "~/gnupg-dm"
userid = "Danger Mouse <dm@secret.example.net>"

dmkey = c.create_key(userid, algorithm="rsa3072", expires_in=31536000,
  sign=True, certify=True)

One thing to note here is the use of setting the =c.home_dir= parameter. This enables generating the key or keys in a different location. In this case to keep the new key data created for this example in a separate location rather than adding it to existing and active key store data. As with the default directory, =~/.gnupg=, any temporary or separate directory needs the permissions set to only permit access by the directory owner. On posix systems this means setting the directory permissions to 700.

The =temp-homedir-config.py= script in the HOWTO examples directory will create an alternative homedir with these configuration options already set and the correct directory and file permissions.

The successful generation of the key can be confirmed via the returned =GenkeyResult= object, which includes the following data:

```
Fingerprint:  {0}
Primary Key:  {1}
Public Key:  {2}
Secret Key:  {3}
Sub Key:  {4}
User IDs:  {5}
```

Alternatively the information can be confirmed using the command line program:

```
bash-4.4$ gpg --homedir ~/.gnupg-dm -K
~/.gnupg-dm/pubring.kbx
----------------------
sec   rsa3072 2018-03-15 [SC] [expires: 2019-03-15]
177B7C25DB99745EE2EE13ED026D2F19E99E63AA
uid           [ultimate] Danger Mouse <dm@secret.example.net>

bash-4.4$
```
As with generating keys manually, to preconfigure expanded preferences for the cipher, digest and compression algorithms, the =gpg.conf= file must contain those details in the home directory in which the new key is being generated. I used a cut down version of my own =gpg.conf= file in order to be able to generate this:

```shell
bash-4.4$ gpg --homedir ~/.gnupg-dm --edit-key 177B7C25DB99745EE2EE13ED026D2F19E99E63AA showpref
quit
Secret key is available.

sec rsa3072/026D2F19E99E63AA
    trust: ultimate validity: ultimate
    [ultimate] (1). Danger Mouse <dm@secret.example.net>

    [ultimate] (1). Danger Mouse <dm@secret.example.net>
       Cipher: TWOFISH, CAMELLIA256, AES256, CAMELLIA192, AES192, CAMELLIA128, AES, BLOWFISH, IDEA, CAST5, 3DES
       Digest: SHA512, SHA384, SHA256, SHA224, RIPEMD160, SHA1
       Compression: ZLIB, BZIP2, ZIP, Uncompressed
       Features: MDC, Keyserver no-modify

bash-4.4$
```

** Subkeys

Adding subkeys to a primary key is fairly similar to creating the primary key with the =create_subkey= method. Most of the arguments are the same, but not quite all. Instead of the =userid= argument there is now a =key= argument for selecting which primary key to add the subkey to.

In the following example an encryption subkey will be added to the primary key. Since Danger Mouse is a security conscious secret agent, this subkey will only be valid for about six months, half the length of the primary key.

```python -i
import gpg
```
c = gpg.Context()
c.home_dir = "~/gnupg-dm"

key = c.get_key(dmkey.fpr, secret=True)
dmsub = c.create_subkey(key, algorithm="rsa3072", expires_in=15768000, encrypt=True)

As with the primary key, the results here can be checked with:

```python -i
print('Fingerprint:  {0}
Primary Key:  {1}
Public Key:  {2}
Secret Key:  {3}
Sub Key:  {4}
User IDs:  {5}')

print(dmsub.fpr, dmsub.primary, dmsub.pubkey, dmsub.seckey, dmsub.sub, dmsub.uid)
```

As well as on the command line with:

```shell
bash-4.4$ gpg --homedir ~/.gnupg-dm -K
~/.gnupg-dm/pubring.kbx

--

sec  rsa3072 2018-03-15 [SC] [expires: 2019-03-15]
177B7C25DB99745EE2EE13ED026D2F19E99E63AA
uid  [ultimate] Danger Mouse <dm@secret.example.net>

bash-4.4$
```

** User IDs

```properties
:PROPERTIES:
:CUSTOM_ID: keygen-uids
:END:
```

*** Adding User IDs

```properties
:PROPERTIES:
:CUSTOM_ID: keygen-uids-add
:END:
```
By comparison to creating primary keys and subkeys, adding a new user ID to an existing key is much simpler. The method used to do this is =key_add_uid= and the only arguments it takes are for the =key= and the new =uid=.

```python
import gpg

c = gpg.Context()
c.home_dir = "~/.gnupg-dm"

dmfpr = "177B7C25DB97745EE2EE13ED026D2F19E99E63AA"
key = c.get_key(dmfpr, secret=True)
uid = "Danger Mouse <danger.mouse@secret.example.net>"

c.key_add_uid(key, uid)
```

Unsurprisingly the result of this is:

```shell
bash-4.4$ gpg --homedir ~/.gnupg-dm -K
~/.gnupg-dm/pubring.kbx
----------------------
sec   rsa3072 2018-03-15 [SC] [expires: 2019-03-15]
177B7C25DB97745EE2EE13ED026D2F19E99E63AA
uid           [ultimate] Danger Mouse <danger.mouse@secret.example.net>
uid           [ultimate] Danger Mouse <dm@secret.example.net>
ssb  rsa3072 2018-03-15 [E] [expires: 2018-09-13]

bash-4.4$
```

*** Revoking User IDs

Revoking a user ID is a fairly similar process, except that it uses the =key_revoke_uid= method.

```python
import gpg

c = gpg.Context()
c.home_dir = "~/.gnupg-dm"
```
** Key certification

:PROPERTIES:
:CUSTOM_ID: key-sign
:END:

Since key certification is more frequently referred to as key signing, the method used to perform this function is `key_sign`.

The `key_sign` method takes four arguments: `key=`, `uids=`, `expires_in=` and `local=`. The default value of `uids=` is `None` and which results in all user IDs being selected. The default value of both `expires_in=` and `local=` is `False=`; which results in the signature never expiring and being able to be exported.

The `key=` is the key being signed rather than the key doing the signing. To change the key doing the signing refer to the signing key selection above for signing messages and files.

If the `uids=` value is not `None=` then it must either be a string to match a single user ID or a list of strings to match multiple user IDs. In this case the matching of those strings must be precise and it is case sensitive.

To sign Danger Mouse's key for just the initial user ID with a signature which will last a little over a month, do this:

```python
import gpg
c = gpg.Context()
uid = "Danger Mouse <dm@secret.example.net>"

dmfpr = "177B7C25DB99745EE2EE13ED026D2F19E99E63AA"
key = c.get_key(dmfpr, secret=True)
c.key_sign(key, uids=uid, expires_in=2764800)
```

*** Verifying key certifications

:PROPERTIES:
```python
import gpg
import time

c = gpg.Context()
dmfpr = "177B7C25DB99745EE2EE13ED026D2F19E99E63AA"
keys = list(c.keylist(pattern=dmuid, mode=gpg.constants.keylist.mode.SIGS))
key = keys[0]

for user in key.uids:
    for sig in user.signatures:
        print("0x{0}".format(sig.keyid), ",", time.ctime(sig.timestamp), ",", sig.uid)
```

Which for Danger Mouse displays the following:

```example
0x92E3F615435C65A  Thu Mar 15 13:17:44 2018  Danger Mouse <dm@secret.example.net>
0x321E4E2373590E5D  Mon Nov 26 12:46:05 2018  Ben McGinnes <ben@adversary.org>
```

The two key signatures listed are for the self-certification of Danger Mouse's key made when the key was created in March, 2018; and the second is a signature made by the author and set to expire at the end of the year. Note that the second signature was made with the following code (including the preceding code to display the output of the certifications or key signatures):

```python
import gpg
import math
import pendulum
import time

hd = "/home/dm/.gnupg"
c = gpg.Context()
d = gpg.Context(home_dir=hd)
dmfpr = "177B7C25DB99745EE2EE13ED026D2F19E99E63AA"
dmuid = "Danger Mouse <dm@secret.example.net>"
dkeys = list(c.keylist(pattern=dmuid))
dmkey = dkeys[0]

c.key_import(d.key_export(pattern=None))
```
tp = pendulum.period(pendulum.now(tz="local"), pendulum.datetime(2019, 1, 1))
ts = tp.total_seconds()
total_secs = math.ceil(ts)
c.key_sign(dmkey, uids=dmuid, expires_in=total_secs)

d.key_import(c.key_export(pattern=dmuid))
keys = list(c.keylist(pattern=dmuid, mode=gpg.constants.keylist.mode.SIGS))
key = keys[0]

for user in key.uids:
    for sig in user.signatures:
        print("0x{0}".format(sig.keyid), ",", time.ctime(sig.timestamp), ",", sig.uid)

Note that this final code block includes the use of a module which is 
/not/ part of Python's standard library, the [[https://pendulum.eustace.io/][pendulum module]].  Unlike
the standard datetime module, pendulum makes working with dates and
times significantly easier in Python; just as the requests module
makes working with HTTP and HTTPS easier than the builtin modules do.

Though neither requests nor pendulum are required modules for using
the GPGME Python bindings, they are both highly recommended more
generally.

* Advanced or Experimental Use Cases

** C plus Python plus SWIG plus Cython

In spite of the apparent incongruence of using Python bindings to a C
interface only to generate more C from the Python; it is in fact quite
possible to use the GPGME bindings with [[http://docs.cython.org/en/latest/index.html][Cython]].  Though in many
cases
the benefits may not be obvious since the most computationally
intensive work never leaves the level of the C code with which GPGME
itself is interacting with.

Nevertheless, there are some situations where the benefits are
demonstrable.  One of the better and easier examples being the one of
the early examples in this HOWTO, the [[#howto-keys-counting][key counting]] code.  Running that
example as an executable Python script, =keycount.py= (available in
the =examples/howto/= directory), will take a noticeable amount of time
to run on most systems where the public keybox or keyring contains a
few thousand public keys.

Earlier in the evening, prior to starting this section, I ran that
script on my laptop; as I tend to do periodically and timed it using
=time= utility, with the following results:

#BEGIN_SRC shell
bash-4.4$ time keycount.py

Number of secret keys:  23
Number of public keys:  12112

real11m52.945s
user0m0.913s
sys0m0.752s

bash-4.4$
#END_SRC

Sometime after that I imported another key and followed it with a
little test of Cython. This test was kept fairly basic, essentially
lifting the material from the [[http://docs.cython.org/en/latest/src/tutorial/cython_tutorial.html][Cython Basic
Tutorial]] to demonstrate
compiling Python code to C. The first step was to take the example
key counting code quoted previously, essentially from the importing of
the =gpg= module to the end of the script:

#BEGIN_SRC python -i
import gpg
c = gpg.Context()
seckeys = c.keylist(pattern=None, secret=True)
pubkeys = c.keylist(pattern=None, secret=False)

seclist = list(seckeys)
secnum = len(seclist)

publist = list(pubkeys)
pubnum = len(publist)

print("\nNumber of secret keys:  \{0\}
Number of public keys:  \{1\}\n")
Save that into a file called =keycount.pyx= and then create a =setup.py= file which contains this:

#+BEGIN_SRC python -i
from distutils.core import setup
from Cython.Build import cythonize

setup(
    ext_modules = cythonize("keycount.pyx")
)
#+END_SRC

Compile it:

#+BEGIN_SRC shell
bash-4.4$ python setup.py build_ext --inplace
bash-4.4$
#+END_SRC

Then run it in a similar manner to =keycount.py=:

#+BEGIN_SRC shell
bash-4.4$ time python3.7 -c "import keycount"
Number of secret keys: 23
Number of public keys: 12113
real   6m47.905s
user   0m0.785s
sys    0m0.331s
bash-4.4$
#+END_SRC

Cython turned =keycount.pyx= into an 81KB =keycount.o= file in the =build/= directory, a 24KB =keycount.cpython-37m-darwin.so= file to be imported into Python 3.7 and a 113KB =keycount.c= generated C source code file of nearly three thousand lines. Quite a bit bigger than the 314 bytes of the =keycount.pyx= file or the full 1,452 bytes of the full executable =keycount.py= example script.

On the other hand it ran in nearly half the time; taking 6 minutes and 47.905 seconds to run. As opposed to the 11 minutes and 52.945 seconds which the CPython script alone took.
The `keycount.pyx` and `setup.py` files used to generate this example have been added to the `examples/howto/advanced/cython/` directory. The example versions include some additional options to annotate the existing code and to detect Cython's use. The latter comes from the [Magic Attributes](http://docs.cython.org/en/latest/src/tutorial/pure.html#magic-attributes-within-the-pxd) section of the Cython documentation.

* Miscellaneous extras and work-arounds

** Group lines

There is not yet an easy way to access groups configured in the `gpg.conf` file from within GPGME. As a consequence these central groupings of keys cannot be shared amongst multiple programs, such as MUAs readily.

The following code, however, provides a work-around for obtaining this information in Python.

```python
import subprocess
import sys

if sys.platform == "win32":
    gpgconfcmd = "gpgconf.exe --list-options gpg"
else:
    gpgconfcmd = "gpgconf --list-options gpg"

process = subprocess.Popen(gpgconfcmd.split(), stdout=subprocess.PIPE)
procom = process.communicate()
lines = procom[0].splitlines()
```
else:
    lines = procom[0].decode().splitlines()

for line in lines:
    if line.startswith("group") is True:
        break

groups = line.split(":")[1].replace(\'\', \'\').split(\',\')

group_lines = []
group_lists = []

for group in groups:
    group_lines.append(group.split("="))
    group_lists.append(group.split("="))

for glist in group_lists:
    glist[1] = glist[1].split()

#+END_SRC

The result of that code is that =group_lines= is a list of lists where
=group_lines[i][0]= is the name of the group and =group_lines[i][1]=
is the key IDs of the group as a string.

The =group_lists= result is very similar in that it is a list of
lists. The first part, =group_lists[i][0]= matches
=group_lines[i][0]= as the name of the group, but =group_lists[i][1]=
is the key IDs of the group as a list.

A demonstration of using the =groups.py= module is also available in
the form of the executable =mutt-groups.py= script. This second
script reads all the group entries in a user's =gpg.conf= file and
converts them into crypt-hooks suitable for use with the Mutt and
Neomutt mail clients.

** Keyserver access for Python

:PROPERTIES:
:CUSTOM_ID: hkp4py
:END:

The [[https://github.com/Selfnet/hkp4py][hkp4py]] module by Marcel Fest was originally a port of the old
[[https://github.com/dgladkov/python-hkp][python-hkp]] module from Python 2 to Python 3 and updated to use the
[[http://docs.python-requests.org/en/latest/index.html][requests]] module instead. It has since been modified to
provide support for Python 2.7 as well and is available via PyPI.

Since it rewrites the =hkp= protocol prefix as =http= and =hkps= as
The `hkp4py` module returns key data via requests as string literals (`r.text`) instead of byte literals (`r.content`). This means that the returned key data must be encoded to UTF-8 when importing that key material using a `gpg.Context().key_import()` method.

For this reason an alternative method has been added to the `search` function of `hkp4py.KeyServer` which returns the key in the correct format as expected by `key_import`. When importing using this module, it is now possible to import with this:

```python
for key in keys:
    if key.revoked is False:
        gpg.Context().key_import(key.key_blob)
    else:
        pass
```

Without that recent addition it would have been necessary to encode the contents of each `hkp4py.KeyServer().search()[i].key` in `hkp4py.KeyServer().search()` before trying to import it.

An example of this is included in the [[howto-import-key][Importing Keys]] section of this HOWTO and the corresponding executable version of that example is available in the `lang/python/examples/howto` directory as normal; the executable version is the `import-keys-hkp.py` file.

** GPGME version checking

For various reasons it may be necessary to check which version of GPGME the bindings have been built against; including whether a minimum required version of GPGME is in use.
For the most part the \texttt{=gpg.version.versionstr=} and \texttt{=gpg.version.versionlist=} methods have been quite sufficient. The former returns the same string as \texttt{=gpgme-config --version=} , while the latter returns the major, minor and patch values in a list.

To check if the installed bindings have actually been built against the current installed libgpgme version, this check can be performed:

```python
import gpg
import subprocess
import sys

# Import gpgme and subprocess
# Define gpgme_version_call and communicate

if sys.version_info[0] == 2:
    gpgme_version = gpgme_version_str[0].strip()
elif sys.version_info[0] >= 3:
    gpgme_version = gpgme_version_str[0].decode().strip()
else:
    gpgme_version = None

if gpgme_version is not None:
    if gpgme_version == gpg.version.versionstr:
        print("The GPGME Python bindings match libgpgme.")
    else:
        print("The GPGME Python bindings do NOT match libgpgme.")
else:
    print("Upgrade Python and reinstall the GPGME Python bindings.")
```

For many developers, however, the preferred checking means checking for a minimum version or point release. This is now readily available via the \texttt{=gpg.version.versionintlist=} method (added in version \texttt{=1.12.1-beta79=} ). It is also now possible to easily check whether the installed GPGME Python bindings were built from a development or beta branch of the GPGME source code.

The following code demonstrates how both of those methods may be used:

```python
try:
    if gpg.version.is_beta is True:
```
print("The installed GPGME Python bindings were built from beta code.")
else:
    print("The installed GPGME Python bindings are a released version.")
except Exception as e:
    print(e)

try:
    if gpg.version.versionintlist[0] == 1:
        if gpg.version.versionintlist[1] == 12:
            if gpg.version.versionintlist[2] == 1:
                print("This is the minimum version for using versionintlist.")
            elif gpg.version.versionintlist[2] > 1:
                print("The versionintlist method is available.")
            else:
                pass
        elif gpg.version.versionintlist[1] > 12:
            print("The versionintlist method is available.")
        else:
            pass
    elif gpg.version.versionintlist[0] > 1:
        print("The versionintlist method is available.")
    else:
        pass
except Exception as e:
    print(e)
#+END_SRC

The points where =pass= is used in the above example will most likely also produce an =Exception= error since those results should only occur in versions which do not have the =gpgme.version.is_beta= and =gpgme.version.versionintlist= methods available.

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** Draft Editions of this HOWTO
Draft editions of this HOWTO may be periodically available directly from the author at any of the following URLs:

- [https://files.au.adversary.org/crypto/gpgme-python-howto.html][GPGME Python Bindings HOWTO draft (HTML single file, AWS S3 SSL)]
- [http://files.au.adversary.org/crypto/gpgme-python-howto.html][GPGME Python Bindings HOWTO draft (HTML single file, AWS S3 no SSL)]
- [https://files.au.adversary.org/crypto/gpgme-python-howto-split/index.html][GPGME Python Bindings HOWTO draft (HTML multiple files, AWS S3 SSL)]
- [http://files.au.adversary.org/crypto/gpgme-python-howto/index.html][GPGME Python Bindings HOWTO draft (HTML multiple files, AWS S3 no SSL)]

These draft versions have been generated from this document via GNU Emacs [https://orgmode.org/][Org mode] to =.texi= and [https://www.gnu.org/software/texinfo/][GNU Texinfo] to HTML. Though it is likely that the specific [https://files.au.adversary.org/crypto/gpgme-python-howto][file] [http://files.au.adversary.org/crypto/gpgme-python-howto.org][version] used will be on the same server with the generated output formats. Occasionally I may include the Org mode generated XHTML versions:

- [https://files.au.adversary.org/crypto/gpgme-python-howto.xhtml][GPGME Python Bindings HOWTO draft (HTML single file, AWS S3 SSL)]
- [http://files.au.adversary.org/crypto/gpgme-python-howto.xhtml][GPGME Python Bindings HOWTO draft (HTML single file, AWS S3 no SSL)]

That XHTML version, however, is exported in a way which inherits a colour scheme from [https://github.com/holomorph/emacs-zenburn][the author's Emacs theme] (which is a higher contrast version of [http://kippura.org/zenburnpage/][Zenburn] ported by [https://github.com/holomorph][Holomorph]). So it's fine for people who prefer dark themed web pages, but not so great for everyone else.

The GNU Texinfo and reStructured Text versions ship with the software, while the GNU Emacs Info version is generated from the Texinfo version using GNU Texinfo or GNU Makeinfo. The Texinfo format is generated from the original Org mode source file in Org mode itself either within GNU Emacs or via the command line by invoking Emacs in batch mode:

```shell
#+BEGIN_SRC shell
  emacs gpgme-python-howto.org --batch -f org-texinfo-export-to-texinfo --kill
  emacs gpgme-python-howto --batch -f org-texinfo-export-to-texinfo --kill
#+END_SRC```
The reStructuredText format is also generated from the Org mode source file, except it is generated using [[https://pandoc.org][Pandoc]] with either of the following commands (depending on the filename):

```
#+BEGIN_SRC shell
  pandoc -f org -t rst+smart -o gpgme-python-howto.rst gpgme-python-howto.org
  pandoc -f org -t rst+smart -o gpgme-python-howto.rst gpgme-python-howto
#+END_SRC
```

Note that the Org mode source files are identified as such via a mode line at the top of each file and have had their =.org= file extensions dropped in order to make scripted generation of output formats easier and not require renaming files post-conversion.

Due to a bug in Org mode's texinfo conversion method, the recommended steps for generating the Texinfo files for all the files in the =lang/python/doc/src/= directory are as follows:

```
#+BEGIN_SRC shell
  for x in * ; do
    emacs $x --batch -f org-texinfo-export-to-texinfo --kill
    cat $x.texi | sed -e 's/@documentencoding UTF-8/@documentencoding utf-8/g' > ../texinfo/$x.texi
    pandoc -f org -t rst+smart -o ../rst/$x.rst $x
    done ;
  rm -fv *.texi
  cd ../texinfo
  mkdir info
  mkdir html
  for x in *.texi ; do
    makeinfo -v $x
    makeinfo --html --no-split $x
  done ;
  mv *.info info/
  mv *.html html/
#+END_SRC
```

This code snippet includes the generation of the reStructuredText files and would be expected to be run from the =doc/src/= directory containing the Org mode source files. It also assumes that the commands are being run on POSIX compliant systems with basic tools like sed, the Bourne shell and GNU Emacs[fn:6] available. The code snippet also includes the steps for generating the Emacs Info files and HTML files from the Texinfo files. Using reStructuredText files with Sphinx is best left for the documentation of that project.

In addition to these there is a significantly less frequently updated version as a HTML [[https://files.au.adversary.org/crypto/gpgme-python/dita/webhelp/index.html][WebHelp site]] (AWS S3 SSL); generated from DITA XML
source files, which can be found in [https://dev.gnupg.org/source/gpgme/browse/ben%252Fhowto-dita][an alternative branch] of the GPGME git repository.

Various generated output formats may occasionally be found in subdirectories of the [https://s3.amazonaws.com/files.au.adversary.org/crypto/gpgme-python][gpgme-python] directory. In particular within the [https://s3.amazonaws.com/files.au.adversary.org/crypto/gpgme-python/dita][DITA], [https://s3.amazonaws.com/files.au.adversary.org/crypto/gpgme-python/rst][reStructuredText] and [https://s3.amazonaws.com/files.au.adversary.org/crypto/gpgme-python/texinfo][Texinfo] subdirectories. The =rst= directory contains output files generated with Sphinx and may include a considerable number of its possible output formats, but there are no guarantees as to how recent these are or even if they are present.

These draft editions are not official documents and the version of documentation in the master branch or which ships with released versions is the only official documentation. Nevertheless, these draft editions may occasionally be of use by providing more accessible web versions which are updated between releases. They are provided on the understanding that they may contain errors or may contain content subject to change prior to an official release.

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* Footnotes

[fn:1] =short-history= and/or =short-history.html=.

[fn:2] With no issues reported specific to Python 3.7, the release of Python 3.7.1 at around the same time as GPGME 1.12.0 and the testing with Python 3.7.1rc1, there is no reason to delay moving 3.7 ahead of 3.6 now. Production environments with more conservative requirements will always enforce their own policies anyway and installation to each
supported minor release is quite possible too.

[fn:3] Yes, even if you use virtualenv with everything you do in Python. If you want to install this module as just your user account then you will need to manually configure, compile and install the /entire/ GnuPG stack as that user as well. This includes libraries which are not often installed that way. It can be done and there are circumstances under which it is worthwhile, but generally only on POSIX systems which utilise single user mode (some even require it).

[fn:4] You probably don't really want to do this. Searching the keyservers for "gnupg.org" produces over 400 results, the majority of which aren't actually at the gnupg.org domain, but just included a comment regarding the project in their key somewhere.

[fn:5] Such as with ProtonMail servers. This also means that restricted servers which only advertise either HTTP or HTTPS end points and not HKP or HKPS end points must still be identified as as HKP or HKPS within the Python Code. The =hkp4py= module will rewrite these appropriately when the connection is made to the server.

[fn:6] Okay, Emacs might not necessarily qualify as a basic tool, but it is common enough that having it installed on a system isn't too great an expectation, nor is it difficult to add to most POSIX systems, even if the users of those systems do not personally use it.

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;;;; Software Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA
;;;; 02111-1307, USA.

(defunpackage #:gpgme-system
  (:use #:common-lisp #:asdf))
The contents of this directory are the examples included in the /GNU Privacy Guard (GnuPG) Made Easy Python Bindings HOWTO/ file. Each script is explicitly for Python 3 and specifically for Python 3.4 or later.

Some of these scripts may work with Python 2.7, but there are no guarantees. They will include the relevant imports from the =__future__=_ module to facilitate that if possible.

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Unless otherwise stated, all the examples in this directory are released under the same terms as GPGME itself; that is they are dual licensed under the terms of both the GNU General Public License version 2.0 (or any later version) *and* the GNU Lesser General Public License version 2.1 (or any later version).

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GNU Privacy Guard (GnuPG) Made Easy Python Bindings

Contents:

- A short history of the project
- What's New
  - Maintenance Mode (from January, 2019)
- What Was New
- GPGME Python Bindings HOWTO

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Conventions:

gpg-error is used for error handling.

Standard I/O streams are used for input and output.

(defpackage #:gpgme
  (:use #:common-lisp #:cffi #:gpg-error)
  (:import-from #:trivial-garbage
    #:finalize)
  (:export #:check-version
    #:*version*
    #:context
    #:protocol
    #:armor
    #:textmode
    #:+include-certs-default+
    #:include-certs
    #:keylist-mode
    #:signers
    #:sig-notations
    #:with-context
    #:key-data
    #:get-key
    #:op-encrypt
    #:op-decrypt
    #:op-sign
    #:op-verify
    #:op-import
    #:op-export))

2011-12-02 Werner Koch <wk@g10code.com>
NB: ChangeLog files are no longer manually maintained. Starting on December 1st, 2011 we put change information only in the GIT commit log, and generate a top-level ChangeLog file from logs at "make dist". See doc/HACKING for details.

2011-05-12 Marcus Brinkmann <marcus@g10code.com>

* gpgme.texi (I/O Callback Example): Fix example code.

* gpgme.texi (Generating Keys): Fix OpenPGP parameters and reference GPG and GPGSM manual.

2010-01-05 Werner Koch <wk@g10code.com>

* gpgme.texi (Changing Passphrases): New.

2009-07-21 Werner Koch <wk@g10code.com>

* uiserver.texi (UI Server Encrypt): Add --expect-sign option to PREP_ENCRYPT.

2009-06-16 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Result Management): New section.

2009-06-16 Werner Koch <wk@g10code.com>

* gpgme.texi (Exporting Keys): Document gpgme_op_export_keys.
(Data Buffer Meta-Data): Document URL encodings.

2009-05-28 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Library Version Check): Document selftest error.
(Creating Contexts): Likewise.

2009-05-18 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Encrypting a Plaintext): Document GPGME_ENCRYPT_NO_ENCRYPT_TO.

2009-05-05 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Engine Information): Replace path by file_name.

2008-11-28 Werner Koch <wk@g10code.com>

* gpgme.texi (Listing Keys): Change description of the return
value to match the code. Spotted by Colin Leroy.

2008-10-15 Werner Koch <wk@g10code.com>

* uiserver.texi (Miscellaneous UI Server Commands): Add option
  --protocol to the SENDER command.

2008-07-17 Werner Koch <wk@g10code.com>

* module-overview.sk: New.

2008-07-04 Werner Koch <wk@g10code.com>

* gpgme.texi (Algorithms): Add a hint on symmetric only encryption.

2008-06-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Cancellation): Document gpgme_cancel_async.

2008-06-25 Werner Koch <wk@g10code.com>

* gpgme.texi (Listing Keys): Updated example to the current API.
  Noted by Nico Schottelius.

2008-06-05 Werner Koch <wk@g10code.com>

* uiserver.texi (Miscellaneous UI Server Commands): Describe
  START_CONFDIALOG.

2008-06-04 Werner Koch <wk@g10code.com>

* gpgme.texi: Use @copying command. Change license to
  GPLv3. Include protocol specis from GpgOL and GPGEx. Minor
  cleanups.

2008-03-11 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (File Based Data Buffers): Document the need for
  blocking operations.
  (Callback Based Data Buffers): Likewise.

2008-03-05 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Library Version Check): Rename snippet function to
  init_gpgme.
  (I/O Callback Example): Call it here.

2008-01-28 Marcus Brinkmann <marcus@g10code.de>
* gpgme.texi: Document that data encoding affects some output data objects now.

2007-09-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Protocols and Engines): Document GPGME_PROTOCOL_UNKNOWN.

2007-09-11 Werner Koch <wk@g10code.com>

* gpgme.texi (I/O Callback Example): Typo fix.

2007-08-07 Werner Koch <wk@g10code.com>

* gpgme.texi (Verify): Describe chain_model.

2007-07-12 Werner Koch <wk@g10code.com>

* gpgme.texi (Library Version Check): Add remark that the socket layer will get initialized.

2007-06-05 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Advanced Key Editing): New section.

2007-05-21 Werner Koch <wk@g10code.com>

* Makefile.am (online): New target.

2007-05-18 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Error Strings): Fix documentation of gpgme_strerror_r.

2006-11-01 Moritz Schulte <moritz@g10code.com>

* gpgme.texi (Data Buffer I/O Operations): Fixed entry for gpgme_data_seek: OFFSET is not a pointer; some s/whence/offset/.

2006-09-25 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Destroying Data Buffers): Clarify that gpgme_data_release_and_get_mem destroys DH unconditionally.

2005-03-24 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Library Version Check): Make example code compatible to W32 systems.
2006-06-21 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Passphrase Callback): Fix inverted condition in description.

2005-12-20 Werner Koch <wk@g10code.com>

* gpgme.texi (Verify): Document pka_trust.

2005-12-06 Werner Koch <wk@g10code.com>

* gpgme.texi (Key Management): Updated to match the fixes for subkey fingerprints and the secret flag.

2005-10-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Destroying Data Buffers): Document gpgme_free.

2005-10-02 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Key Management): Add the new member notations of gpgme_sig_key_t.
  (Key Listing Mode): Document GPGME_KEYLIST_MODE_SIG_NOTATIONS.

2005-10-01 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi: Enclose all return parameters of deftypefuns in curly brackets,

* gpgme.texi (Signature Notation Data): New section.
  (Verify): Added more about the notation data structure.

2005-09-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Data Buffer I/O Operations, Data Buffer Meta-Data): New subsections.

* gpgme.texi: Replace plaintext_filename with file_name.

* gpgme.texi (Key Management): Document is_qualified.

2005-07-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Decrypt): Add plaintext_filename to gpgme_decrypt_result_t.
  (Verify): Likewise for gpgme_verify_result_t.
2005-06-03 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Verify): Add information about new fields in gpgme_signature_t.

* gpgme.texi (Decrypt): Add gpgme_recipient_t.

2005-05-28 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Key Listing Mode): Fix return type of gpgme_set_keylist_mode.
Reported by "Sergio" <ml_sergico@virgilio.it>.

2005-04-28 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Included Certificates): Document GPGME_INCLUDE_CERTS_DEFAULT.

2005-01-12 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Engine Configuration): New section.
(Crypto Engine): New subsection.

2004-12-07 Marcus Brinkmann <marcus@g10code.de>

* lesser.texi (Library Copying): Change from @appendixsec to @appendix.
* gpgme.texi (Features): Change reference to GPL to one to LGPL.

* Makefile.am: Change license to LGPL.
(gpgme_TEXINFOS): Replace gpl.texi with lesser.texi.

* gpgme.texi: Change license to LGPL (also for documentation of GPGME's license).
* gpl.texi: File removed.

* gpgme.texi (Creating Contexts): Fix cut&paste error. Reported by Noel Torres <envite@rolamasao.org>.

2004-09-30 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (gpgme_TEXINFOS): Remove fdl.texi.
* gpgme.texi: Do not include fdl.texi. Change license to GPL.
* fdl.texi: File removed.

2004-09-29 Marcus Brinkmann <marcus@g10code.de>
* gpgme.texi (Key Management): Change type of keylist_mode in gpgme_key_t to gpgme_keylist_mode_t.

2004-09-28 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Passphrase Callback): Fix last change.

2004-09-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Passphrase Callback): Document GPG_ERR_NOT_IMPLEMENTED.

* gpgme.texi: Update copyright year for tex version.

2004-07-29 Moritz Schulte <moritz@g10code.com>

* gpgme.texi (Verify): Fix gpgme_get_key example (ancient force_update argument was still there).

2004-06-08 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Listing Keys): Elaborate on the length restrictions on search patterns.

* gpgme.texi (Decrypt and Verify): Document the NO_DATA error code. (Verify): Document the relationship between gpgme_op_verify_result and the decrypt and verify operations.

2004-05-21 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Verify): Document GPG_ERR_CERT_REVOKED status.

* gpgme.texi (Decrypt): Add note about new field wrong_key_usage of gpgme_decrypt_result_t.

* gpgme.texi (Key Management): Add note about new field keylist_mode of gpgme_key_t.

2004-04-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Verify): Correct type of member wrong_key_usage.

2004-03-29 Moritz Schulte <moritz@duesseldorf.ccc.de>

* gpgme.texi (Verify): Fix type of gpgme_op_verify_result.
* gpgme.texi (Key Listing Mode): Typo fix.
2004-03-23 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Library Version Check): Fix the instruction when to
set the locale.

2004-03-03 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (I/O Callback Example Qt): New section by Marc Mutz.

2004-02-24 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (cancellation): New section.

2004-02-17 Werner Koch <wk@gnupg.org>

* gpgme.texi (Key Listing Mode): Doc KEYLIST_MODE_VALIDATE.

2004-02-06 Moritz Schulte <mo@g10code.com>

* gpgme.texi: A couple of small fixes regarding the Largfile
Support section.

2004-02-01 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Largefile Support): New section.

2004-01-13 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Key Management): Fix exportable field.

2003-12-25 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Key Management): Rename member class in
gpgme_key_sig_t to sig_class.
(Creating a Signature): Likewise for gpgme_signature_t.

2003-12-23 Moritz Schulte <mo@g10code.com>

* gpgme.texi (Listing Keys): Minor clarification for
gpgme_get_key.

2003-10-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Signal Handling): New section.

2003-09-14 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Multi Threading): Correct documentation on memory
synchronization requirement.

* gpgme.texi (Locale): New section.
  (Multi Threading): Set locale in example.

2003-09-13 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Error Strings): Add gpgme_strerror_r.

2003-09-13 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Multi Threading): Update documentation.

2003-09-03 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Header): We don't use the assuan namespace anymore.
  Document new thread options.

2003-08-14 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Creating a Signature): Change type of member class
to unsigned int.

2003-08-04 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Verify): Get error code from SIG->status in the code
  for gpgme_get_sig_status.

2003-07-31 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Key Management): Add can_authenticate flag.

* gpgme.texi (Listing Keys): Document GPG_ERR_AMBIGUOUS_NAME for
  gpgme_get_key.

2003-07-29 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (EXTRA_DIST): Remove variable.

* gpgme.texi (Encrypting a Plaintext): Bad passphrase is only
  possible with symmetric encryption, change the wording to reflect
  that.

* gpgme.texi (Creating a Signature): Document
  GPG_ERR_UNUSABLE_SECKEY.

* gpgme.texi (Encrypting a Plaintext): Mention encrypt and sign
  operations in result function.
(Creating a Signature): Likewise.

2003-07-23 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Key Listing Mode): Remove word duplication.
(Listing Keys): Remove mentioning of force argument.
(Verify): Don't mention r_stat. Fix some typos.
(Decrypt and Verify): Correct info how to get the result. Don't mention r_stat.
(Manipulating Data Buffers): Fix documentation of return value.
(Listing Keys): Update examples.
(Decrypt): Result might also be available when operation failed.
(Verify): Result might also be available when operation failed.
All spotted by Stphane Corthsy.

2003-07-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Error Sources): Fix cut and paste error.

2003-07-09 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Key Management): Clarify difference between can_sign and can_certify.
(Information About Keys): Likewise for GPGME_ATTR_CAN_SIGN and GPGME_ATTR_CAN_CERTIFY.

2003-07-08 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Progress Meter Callback): Change return type of gpgme_progress_cb_t to void.

2003-06-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi: Add 2003 to copyright notice.

* gpgme.texi (Header): Fix name space documentation on libgpg-error.

2003-06-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Multi Threading): Remove reference to gpgme_recipients_t.

2003-06-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Crypto Operations): Rename gpgme_invalid_user_id_t to gpgme_invalid_key_t.
* gpgme.texi: Change error codes to GPG_ERR_* variants.  
  (Error Handling): Rewritten.

2003-05-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Exporting Keys): Change and document prototypes.  
  Add new gpgme_op_export_ext and gpgme_op_export_ext_start 
  variants.  
  (Selecting Recipients): Section removed.  
  (Encrypting a Plaintext): Change prototypes and document the 
  changes.

2003-05-28 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Exporting Keys): Change argument type from 
  gpgme_recipient_t to gpgme_user_id_t.  
  (Encrypting a Plaintext): Likewise.  
  (Selecting Recipients): Rewritten.

2003-05-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Protocol Selection): Do not use @acronym in @node 
  because that breaks texi2dvi.  

* gpgme.texi (Passphrase Callback): Document new prototype.

2003-05-18 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Header): Remove Gpgme as namespace prefix.  Add 
  _GPGME to namespace prefix.  
  * gpgme.texi (Multi Threading): Add note about link order.

2003-05-04 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Listing Keys): Document what happens if key is not 
  found.

* gpgme.texi (Importing Keys): Fix cut and paste error.

2003-04-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Encrypting a Plaintext): Remove reference to 
  gpgme_get_op_info.  
  (Detailed Results): Subsection removed.

* gpgme.texi (Key Listing Mode): Add GPGME_KEYLIST_MODE_SIGS.
(Manipulating Keys): Add obsoleteness note.
(Key Signatures): Likewise.
(Information About Keys): Likewise.
(Key Management): Add new data types GpgmeSubkey, GpgmeKeySig, GpgmeUserID, and all the information about GpgmeKey.

2003-04-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Listing Keys): Remove force_update argument from gpgme_get_key.

* gpgme.texi (Trust Item Management): Add data members of GpgmeTrustItem type.
(Information About Trust Items): Add note about obsoleteness.
(Manipulating Trust Items): Add gpgme_trust_item_ref and gpgme_trust_item_unref.

2003-04-28 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Verify): Rewritten to take into account new and deprecated functions and data types.

* gpgme.texi (Decrypt): Descript gpgme_op_decrypt_result and GpgmeDecryptResult.

2003-04-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Encrypting a Plaintext): Add info about GpgmeEncryptResult and gpgme_op_encrypt_result.

* gpgme.texi (Creating a Signature): Add info about GpgmeNewSignature, GpgmeSignResult and gpgme_op_sign_result.
(Crypto Operations): Add GpgmeInvalidUserID.

* gpgme.texi (Deleting Keys): Document GPGME_Ambiguous_Specification.
(Error Values): Remove GPGME_Invalid_Type and GPGME_Invalid_Mode.
Add GPGME_Unknown_Reason, GPGME_Not_Found, GPGME_Ambiguous_Specification, GPGME_Wrong_Key_Usage, GPGME_Key_Revoked, GPGME_Key_Expired, GPGME_No_CRL_Known, GPGME_CRL_Too_Old, GPGME_Policy_Mismatch, GPGME_No_Secret_Key, GPGME_Key_Not_Trusted, GPGME_Issuer_Missing, GPGME_Chain_Too_Long, GPGME_Unsupported_Algorithm, GPGME_Sig_Expired, GPGME_Bad_Signature, GPGME_No_Public_Key.

2003-04-25 Marcus Brinkmann <marcus@g10code.de>
* gpgme.texi (Importing Keys): Change GPGME_IMPORT_PRIVATE to GPGME_IMPORT_SECRET.

* gpgme.texi (Importing Keys): Remove note about gpgme_get_op_info. (Detailed Results): Remove note about import.

* gpgme.texi (Importing Keys): Add documentation for GpgmeImportStatus, GpgmeImportResult and gpgme_op_import_result.

* gpgme.texi (Generating Keys): Fix documentation of public and secret arguments.

2003-04-24 Marcus Brinkmann <marcus@g10code.de>


* gpgme.texi (Error Values): Rename GPGME_No_Passphrase to GPGME_Bad_Passphrase.
  * gpgme.texi (Decrypt): Likewise.
  (Decrypt and Verify): Likewise.
  (Creating a Signature): Likewise.
  (Encrypting a Plaintext): Likewise.

* gpgme.texi (Error Values): Rename GPGME_No_Recipients to GPGME_No_UserID and GPGME_Invalid_Recipient to GPGME_Invalid_UserID.
  (Encrypting a Plaintext): Likewise.

* gpgme.texi (Error Values): Remove GPGME_Busy and GPGME_No_Request.
  (Listing Keys): Likewise.
  (Listing Trust Items): Likewise.

2003-02-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Cancelling an Operation): Removed.

2003-01-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Engine Information): Rename member part to file_name.

* gpgme.texi (Protocols and Engines): Document gpgme_get_protocol_name.

* gpgme.texi (Engine Information): Rewritten.
2003-01-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (I/O Callback Interface): Document new even
  GPGME_EVENT_START.
  (Waiting For Completion): Document new possible return values.

2003-01-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Hooking Up Into Idle Time): Section removed.

2002-12-24 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Verify): Drop R_STAT argument in gpgme_op_verify.
  * gpgme.texi (Decrypt and Verify): Likewise for
    gpgme_op_decrypt_verify.

2002-12-23 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Information About Keys): Document that
  GPGME_ATTR_IS_SECRET is not representable as a string anymore.

2002-12-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Key Signatures): New section.
  (Listing Keys): Add gpgme_get_key.

2002-12-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Memory Based Data Buffers): New subsection.
  (File Based Data Buffers): Likewise.
  (Callback Based Data Buffers): Likewise.
  (Manipulating Data Buffers): Update interfaces. Add
  gpgme_data_seek.
  * gpgme.texi (Engine Version Check): Remove gpgme_check_engine.

2002-11-21 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Verify): Document the new interface.

2002-11-19 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Generating Keys): Document new argument to
  gpgme_op_genkey.

2002-11-05 Marcus Brinkmann <marcus@g10code.de>
* gpgme.texi (Verify): Fix prototype of gpgme_get_sig_key.
  Reported by Miguel Coca <e970095@zipi.fi.upm.es>.

  2002-08-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Selecting Signers): Fix reference count.

  2002-08-21 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Header): Document name space.

  2002-08-20 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Importing Keys): Document gpgme_op_import_ext.

* gpgme.texi (Importing Keys): Undocument EOF.

  2002-08-14 Werner Koch <wk@gnupg.org>

* gpgme.texi (Information About Keys): Changed GPGME_ATTR_TYPE.

  2002-07-25 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Deleting Keys): Say that secret keys might not be deleted.

  2002-07-25 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Information About Keys): Document (badly) the new key attributes.

* gpgme.texi (Manipulating Data Buffers): Mention that backend tries to detect encoding automatically.

  2002-07-03 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Run Control): Update this section.
  (Waiting For Completion): Likewise for this subsection.
  (Cancelling an Operation): Likewise for this subsection.
  (Using External Event Loops): New subsection with several subsubsections.

  2002-06-28 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Multi Threading): Remove item about the need to synchronize anything against gpgme_wait (except gpgme_wait itself).
2002-06-27 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Information About Keys): Fix documentation for IDX.
(Information About Trust Items): Likewise.

2002-06-26 Werner Koch <wk@gnupg.org>

* gpgme.texi (Importing Keys): Document the return value -1 of
gpgme_op_import.

2002-06-20 Werner Koch <wk@gnupg.org>

* gpgme.texi (Verify): Explain the new whatidx variable.

2002-06-10 Werner Koch <wk@gnupg.org>

* gpgme.texi (Verify): Document attribute GPGME_ATTR_ERRTOK.

2002-06-04 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Multi Threading): Document new autodetection.

2002-06-04 Marcus Brinkmann <marcus@g10code.de>

* Makefile.am (DISTCLEANFILES): New variable.

2002-05-26 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi: Some typographical corrections throughout.

2002-05-09 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Using Automake): New section.

2002-05-09 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Multi Threading): Escape { and }.

2002-05-09 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Overview): Replace note about thread-safeness.
(Multi Threading): New section.

2002-05-03 Werner Koch <wk@gnupg.org>

* gpgme.texi (Manipulating Data Buffers): Changed some data types
to void*.
(Protocol Selection): Added gpgme_get_protocol.
(Verify): Updated to include the new attribute functions and status codes.

2002-04-27 Werner Koch <wk@gnupg.org>

* gpgme.texi (Manipulating Data Buffers): New type GpgmeDataEncoding.

2002-04-23 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Passphrase Callback): Document that either return argument can be NULL.
  (Progress Meter Callback): Likewise.

2002-04-22 Marcus Brinkmann <marcus@g10code.de>

  (Progress Meter Callback): Document the new function gpgme_get_progress_cb.

2002-04-16 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Creating a Signature): Fix function name. Reported by Wichert Ackerman <wichert@debian.org>.

2002-03-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (dirent): End index entry with a full stop.
  Patch submitted by Jose Carlos Garcia Sogo <jsogo@debian.org>.

2002-03-17 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Detailed Results): Fix syntax error in last change.

2002-03-08 Werner Koch <wk@gnupg.org>

* gpgme.texi (Detailed Results): Import does also return info.

2002-03-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Encrypting a Plaintext): Document symmetric encryption.

2002-03-06 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Error Strings): Add example.
* gpgme.texi (Listing Keys): Likewise.
2002-03-03  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.texi (Information About Keys): Document GPGME_ATTR_EXPIRE.

2002-03-03  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.texi (Verify): Document verification of normal and cleartext signatures.

2002-02-27  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.texi (Listing Keys): Document gpgme_op_keylist_ext_start.

2002-02-27  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.texi (Encrypting a Plaintext): Document GPGME_Invalid_Recipients.
  (Error Values): Likewise.

2002-02-26  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.texi (Encrypting a Plaintext): Document gpgme_op_encrypt_sign and gpgme_op_encrypt_sign_start.

2002-02-25  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.texi (Creating a Signature): Add a note about certificates to include.
  (Included Certificates): New section.

2002-02-09  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.texi (Detailed Results): Remove literal tags.
  (Generating Keys): Update documentation.

* gpgme.texi (Generating Keys): Fix syntax error.

2002-02-06  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.texi (Waiting For Completion): Adjust doc to changes in the code.

2002-02-06  Marcus Brinkmann  <marcus@g10code.de>

* gpgme.texi (Key Listing Mode): Update documentation.

2002-01-31  Marcus Brinkmann  <marcus@g10code.de>
* gpgme.texi (Generating Keys): Document error at creation failure.

2002-01-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Deleting Keys): Document new error values.

2002-01-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Importing Keys): Add reference to gpgme_get_op_info.

2002-01-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi: Some spell checking.

2002-01-30 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi: Add all the gpgme_op_*_start functions. Fill the concept index with many, many entries.

2002-01-29 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Run Control): New section.
  (Verify): Document gpgme_get_notation.

2002-01-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Passphrase callback): Change GpgmePassphraseCb's R_HD type from void* to void**.

2002-01-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Creating data buffers): Change gpgme_data_new_from_filepart's LENGTH type from off_t to size_t.

2002-01-22 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi (Generating keys): New subsection.
  (Exporting keys): Likewise.
  (Importing keys): Likewise.
  (Deleting keys): Likewise.

2002-01-16 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi: g10Code -> g10 Code

* gpgme.texi (Top): Complete detailmenu.
* gpgme.texi: Convert embarrassing cruft to the real thing.

2002-01-16 Marcus Brinkmann <marcus@g10code.de>

* gpgme.texi: Likewise.
* gpl.texi: Likewise.
* fdl.texi: Likewise.
* Makefile.am (info_TEXINFOS): New variable.
  (gpgme_TEXINFOS): Likewise.

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@documentencoding UTF-8
@setfilename gpgme.info
@include defs.inc
@settitle The `GnuPG Made Easy' Reference Manual

@dircategory GNU Libraries
@direntry
  * @acronym{GPGME}: (gpgme). Adding support for cryptograpy to your program.
@end direntry

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@end copying

@c Macros used by the description of the UI server protocol
@macro clnt{string}
@sc{c:} \string
@end macro
@macro srvr{string}
@sc{s:} \string
@end macro

@c API version.
@macro since{string}
@sc{Since:} \string
@end macro

@c
@c T I T L E  P A G E
@c
@ifinfo
This file documents the @acronym{GPGME} library.

This is Edition @value{EDITION}, last updated @value{UPDATED}, of
@cite{The `GnuPG Made Easy' Reference Manual}, for Version
@value{VERSION}.

@c NOTE: Don't forget to update the year for the TeX version, too.
@end ifinfo

@end ifinfo

@c We do not want that bastard short titlepage.
@c @iftex
@c @shorttitlepage The `GnuPG Made Easy' Reference Manual
@c @end iftex
@titlepage
@center @titlefont{The `GnuPG Made Easy'}
@sp 1
@center @titlefont{Reference Manual}
@sp 6
@center Edition @value{EDITION}
@sp 1
@center last updated @value{UPDATED}
@sp 1
This is Edition @value{EDITION}, last updated @value{UPDATED}, of @cite{The `GnuPG Made Easy' Reference Manual}, for Version @value{VERSION} of the @acronym{GPGME} library.

@menu
* Introduction:: How to use this manual.
* Preparation:: What you should do before using the library.
* Protocols and Engines:: Supported crypto protocols.
* Algorithms:: Supported algorithms.
* Error Handling:: Error numbers and their meanings.
* Exchanging Data:: Passing data to and from @acronym{GPGME}.
* Contexts:: Handling @acronym{GPGME} contexts.

Appendices

* Debugging:: How to solve problems.
* Deprecated Functions:: Documentation of deprecated functions.
* Library Copying:: The GNU Lesser General Public License says how you can copy and share `GnuPG Made Easy'.
* Copying:: The GNU General Public License says how you can copy and share this manual.

Indices

* Concept Index:: Index of concepts and programs.
* Function and Data Index:: Index of functions, variables and data types.

--- The Detailed Node Listing ---
Introduction

* Getting Started:: Purpose of the manual, and how to use it.
* Features:: Reasons to install and use @acronym{GPGME}.
* Overview:: Basic architecture of the @acronym{GPGME} library.

Preparation

* Header:: What header file you need to include.
* Building the Source:: Compiler options to be used.
* Largefile Support (LFS):: How to use @acronym{GPGME} with LFS.
* Using Automake:: Compiler options to be used the easy way.
* Using Libtool:: Avoiding compiler options entirely.
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* Signal Handling:: How @acronym{GPGME} affects signal handling.
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* Key Management:: Managing keys with @acronym{GPGME}.
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* Importing Keys:: Adding keys to the key ring.
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* I/O Callback Example:: An example how to use I/O callbacks.
* I/O Callback Example GTK+:: How to integrate @acronym{GPGME} in GTK+.
* I/O Callback Example GDK:: How to integrate @acronym{GPGME} in GDK.
* I/O Callback Example Qt:: How to integrate @acronym{GPGME} in Qt.

@end detailmenu
@end menu
'GnuPG Made Easy' (@acronym{GPGME}) is a C language library that allows to add support for cryptography to a program. It is designed to make access to public key crypto engines like GnuPG or GpgSM easier for applications. @acronym{GPGME} provides a high-level crypto API for encryption, decryption, signing, signature verification and key management.

@acronym{GPGME} uses GnuPG and GpgSM as its backends to support OpenPGP and the Cryptographic Message Syntax (CMS).

@menu
* Getting Started:: Purpose of the manual, and how to use it.
  * Features:: Reasons to install and use @acronym{GPGME}.
  * Overview:: Basic architecture of the @acronym{GPGME} library.
@end menu

@node Getting Started
@section Getting Started

This manual documents the @acronym{GPGME} library programming interface. All functions and data types provided by the library are explained.

The reader is assumed to possess basic knowledge about cryptography in general, and public key cryptography in particular. The underlying cryptographic engines that are used by the library are not explained, but where necessary, special features or requirements by an engine are mentioned as far as they are relevant to @acronym{GPGME} or its users.

This manual can be used in several ways. If read from the beginning to the end, it gives a good introduction into the library and how it can be used in an application. Forward references are included where necessary. Later on, the manual can be used as a reference manual to get just the information needed about any particular interface of the library. Experienced programmers might want to start looking at the examples at the end of the manual, and then only read up those parts of the interface which are unclear.

The documentation for the language bindings is currently not included in this manual. Those languages bindings follow the general programming model of @acronym{GPGME} but may provide some extra high level abstraction on top of the @acronym{GPGME} style API. For now please see the README files in the @file{lang/} directory of the source distribution.
@node Features
@section Features

@acro{GPGME} has a couple of advantages over other libraries doing a similar job, and over implementing support for GnuPG or other crypto engines into your application directly.

@table @asis
@item it's free software
Anybody can use, modify, and redistribute it under the terms of the GNU Lesser General Public License (@pxref{Library Copying}).

@item it's flexible
@acro{GPGME} provides transparent support for several cryptographic protocols by different engines. Currently, @acro{GPGME} supports the OpenPGP protocol using GnuPG as the backend, and the Cryptographic Message Syntax using GpgSM as the backend.

@item it's easy
@acro{GPGME} hides the differences between the protocols and engines from the programmer behind an easy-to-use interface. This way the programmer can focus on the other parts of the program, and still integrate strong cryptography in his application. Once support for @acro{GPGME} has been added to a program, it is easy to add support for other crypto protocols once @acro{GPGME} backends provide them.

@item it's language friendly
@acro{GPGME} comes with languages bindings for several common programming languages: Common Lisp, C++, Python 2, and Python 3.
@end table

@node Overview
@section Overview

@acro{GPGME} provides a data abstraction that is used to pass data to the crypto engine, and receive returned data from it. Data can be read from memory or from files, but it can also be provided by a callback function.

The actual cryptographic operations are always set within a context. A context provides configuration parameters that define the behaviour of all operations performed within it. Only one operation per context is allowed at any time, but when one operation is finished, you can run the next operation in the same context. There can be more than one context, and all can run different operations at the same time.
Furthermore, @acronym{GPGME} has rich key management facilities including listing keys, querying their attributes, generating, importing, exporting and deleting keys, and acquiring information about the trust path.

With some precautions, @acronym{GPGME} can be used in a multi-threaded environment, although it is not completely thread safe and thus needs the support of the application.

@node Preparation
chapter Preparation

To use @acronym{GPGME}, you have to perform some changes to your sources and the build system. The necessary changes are small and explained in the following sections. At the end of this chapter, it is described how the library is initialized, and how the requirements of the library are verified.

@menu
* Header::                               What header file you need to include.
* Building the Source::                 Compiler options to be used.
* Largefile Support (LFS)::            How to use @acronym{GPGME} with LFS.
* Using Automake::                      Compiler options to be used the easy way.
* Using Libtool::                      Avoiding compiler options entirely.
* Library Version Check::              Getting and verifying the library version.
* Signal Handling::                    How @acronym{GPGME} affects signal handling.
* Multi-Threading::                    How @acronym{GPGME} can be used in an MT environment.
@end menu

@node Header
section Header
@cindex header file
@cindex include file

All interfaces (data types and functions) of the library are defined in the header file `gpgme.h'. You must include this in all programs using the library, either directly or through some other header file, like this:

@example
#include <gpgme.h>
@end example

The name space of @acronym{GPGME} is @code{gpgme_*} for function names and data types and @code{GPGME_*} for other symbols. Symbols internal to @acronym{GPGME} take the form @code{_gpgme_*} and @code{_GPGME_*}. 
Because @acronym{GPGME} makes use of the GPG Error library, using @acronym{GPGME} will also use the @code{GPG_ERR_*} name space directly, and the @code{gpg_err*}, @code{gpg_str*}, and @code{gpgrt_*} name space indirectly.

@node Building the Source
@section Building the Source
@cindex compiler options
@cindex compiler flags

If you want to compile a source file including the `gpgme.h' header file, you must make sure that the compiler can find it in the directory hierarchy. This is accomplished by adding the path to the directory in which the header file is located to the compilers include file search path (via the @option{-I} option).

However, the path to the include file is determined at the time the source is configured. To solve this problem, gpgme ships with a small helper program @command{gpgme-config} that knows about the path to the include file and other configuration options. The options that need to be added to the compiler invocation at compile time are output by the @option{--cflags} option to @command{gpgme-config}. The following example shows how it can be used at the command line:

@example
gcc -c foo.c `gpgme-config --cflags`
@end example

Adding the output of @samp{gpgme-config --cflags} to the compiler command line will ensure that the compiler can find the @acronym{GPGME} header file.

A similar problem occurs when linking the program with the library. Again, the compiler has to find the library files. For this to work, the path to the library files has to be added to the library search path (via the @option{-L} option). For this, the option @option{--libs} to @command{gpgme-config} can be used. For convenience, this option also outputs all other options that are required to link the program with @acronym{GPGME} (in particular, the @samp{-lgpgme} option). The example shows how to link @file{foo.o} with the @acronym{GPGME} library to a program @command{foo}.

@example
gcc -o foo foo.o `gpgme-config --libs`
@end example
Of course you can also combine both examples to a single command by specifying both options to \texttt{gpgme-config}:

\begin{verbatim}
@example
gcc -o foo foo.c `gpgme-config --cflags --libs`
@end example
\end{verbatim}

If you need to detect the installed language bindings you can use list them using:

\begin{verbatim}
@example
gpgme-config --print-lang
@end example
\end{verbatim}

or test for the availability using

\begin{verbatim}
@example
gpgme-config --have-lang=python && echo 'Bindings for Pythons available'
@end example
\end{verbatim}

\node{Largefile Support (LFS)}
\section{Largefile Support (LFS)}
\cindex{largefile support}
\cindex{LFS}
\acronym{GPGME} is compiled with largefile support by default, if it is available on the system. This means that GPGME supports files larger than two gigabyte in size, if the underlying operating system can. On some systems, largefile support is already the default. On such systems, nothing special is required. However, some systems provide only support for files up to two gigabyte in size by default. Support for larger file sizes has to be specifically enabled.

To make a difficult situation even more complex, such systems provide two different types of largefile support. You can either get all relevant functions replaced with alternatives that are largefile capable, or you can get new functions and data types for largefile support added. Those new functions have the same name as their smallfile counterparts, but with a suffix of 64.

An example: The data type \texttt{off_t} is 32 bit wide on GNU/Linux PC systems. To address offsets in large files, you can either enable largefile support add-on. Then a new data type \texttt{off64_t} is provided, which is 64 bit wide. Or you can replace the existing \texttt{off_t} data type with its 64 bit wide counterpart. All occurrences of \texttt{off_t} are then automagically replaced.
As if matters were not complex enough, there are also two different types of file descriptors in such systems. This is important because if file descriptors are exchanged between programs that use a different maximum file size, certain errors must be produced on some file descriptors to prevent subtle overflow bugs from occurring.

As you can see, supporting two different maximum file sizes at the same time is not at all an easy task. However, the maximum file size does matter for GPGME, because some data types it uses in its interfaces are affected by that. For example, the `off_t` data type is used in the `gpgme_data_seek` function, to match its [POSIX] counterpart. This affects the call-frame of the function, and thus the ABI of the library. Furthermore, file descriptors can be exchanged between GPGME and the application.

For you as the user of the library, this means that your program must be compiled in the same file size mode as the library. Luckily, there is absolutely no valid reason for new programs to not enable largefile support by default and just use that. The compatibility modes (small file sizes or dual mode) can be considered an historic artefact, only useful to allow for a transitional period.

On POSIX platforms GPGME is compiled using largefile support by default. This means that your application must do the same, at least as far as it is relevant for using the `gpgme.h` header file. All types in this header files refer to their largefile counterparts, if they are different from any default types on the system.

On 32 and 64 bit Windows platforms `off_t` is declared as 32 bit signed integer. There is no specific support for LFS in the C library. The recommendation from Microsoft is to use the native interface (`CreateFile` et al.) for large files. Released binary versions of GPGME (libgpgme-11.dll) have always been build with a 32 bit `off_t`. To avoid an ABI break we stick to this convention for 32 bit Windows by using `long` there.

GPGME versions for 64 bit Windows have never been released and thus we are able to use `int64_t` instead of `off_t` there. For easier migration the typedef `gpgme_off_t` has been defined. The reason we cannot use `off_t` directly is that some toolchains (e.g. mingw64) introduce a POSIX compatible hack for `off_t`. Some widely used toolkits make use of this hack and in turn GPGME would need to use it also. However, this would introduce an ABI break and existing software making use of libgpgme might suffer from a severe break. Thus with version 1.4.2 we redefined all functions using `off_t` to use `gpgme_off_t` which is defined as explained above. This way we keep the ABI well defined and independent of any toolchain hacks. The bottom line is
that LFS support in @acronym{GPGME} is only available on 64 bit versions of Windows.

On POSIX platforms you can enable largefile support, if it is different from the default on the system the application is compiled on, by using the Autoconf macro @code{AC_SYS_LARGEFILE}. If you do this, then you don't need to worry about anything else: It will just work. In this case you might also want to use @code{AC_FUNC_FSEEKO} to take advantage of some new interfaces, and @code{AC_TYPE_OFF_T} (just in case).

If you do not use Autoconf, you can define the preprocessor symbol @code{_FILE_OFFSET_BITS} to 64 @emph{before} including any header files, for example by specifying the option @code{-D_FILE_OFFSET_BITS=64} on the compiler command line. You will also want to define the preprocessor symbol @code{LARGEFILE_SOURCE} to 1 in this case, to take advantage of some new interfaces.

If you do not want to do either of the above, you probably know enough about the issue to invent your own solution. Just keep in mind that the @acronym{GPGME} header file expects that largefile support is enabled, if it is available. In particular, we do not support dual mode (@code{_LARGEFILE64_SOURCE}).

@c A simple macro for optional variables.
@macro ovar{varname}
@r{[}@var{varname}@r{]}
@end macro
@defmac AM_PATH_GPGME (@ovar{minimum-version}, @ovar{action-if-found}, @ovar{action-if-not-found})
@defmacx AM_PATH_GPGME_PTH (@ovar{minimum-version}, @ovar{action-if-found}, @ovar{action-if-not-found})
@defmacx AM_PATH_GPGME_PTHREAD (@ovar{minimum-version}, @ovar{action-if-found}, @ovar{action-if-not-found})
Check whether @acronym{GPGME} (at least version @var{minimum-version}, if given) exists on the host system. If it is found, execute @var{action-if-found}, otherwise do @var{action-if-not-found}, if given.
Additionally, the function defines `GPGME_CFLAGS` to the flags needed for compilation of the program to find the `gpgme.h` header file, and `GPGME_LIBS` to the linker flags needed to link the program to the `GPGME` library. If the used helper script does not match the target type you are building for a warning is printed and the string `libgcrypt` is appended to the variable `gpg_config_script_warn`.

`AM_PATH_GPGME_PTH` checks for the version of `GPGME` that can be used with GNU Pth, and defines `GPGME_PTH_CFLAGS` and `GPGME_PTH_LIBS`.

`AM_PATH_GPGME_PTHREAD` checks for the version of `GPGME` that can be used with the native pthread implementation, and defines `GPGME_PTHREAD_CFLAGS` and `GPGME_PTHREAD_LIBS`. Since version 1.8.0 this is no longer required to `GPGME_PTHREAD` as `GPGME` itself is thread safe.

This macro searches for `gpgme-config` along the PATH. If you are cross-compiling, it is useful to set the environment variable `SYSROOT` to the top directory of your target. The macro will then first look for the helper program in the `bin` directory below that top directory. An absolute directory name must be used for `SYSROOT`. Finally, if the configure command line option `--with-gpgme-prefix` is used, only its value is used for the top directory below which the helper script is expected.

You can use the defined Autoconf variables like this in your `Makefile.am`:

```
example
AM_CPPFLAGS = $(GPGME_CFLAGS)
LDADD = $(GPGME_LIBS)
@end example
```

The easiest way is to just use GNU Libtool. If you use libtool, and link to `libgpgme.la`, `libgpgme-pth.la` or `libgpgme-pthread.la` respectively, everything will be done automatically by Libtool.
The function `gpgme_check_version` has four purposes. It can be used to retrieve the version number of the library. In addition it can verify that the version number is higher than a certain required version number. In either case, the function initializes some sub-systems, and for this reason alone it must be invoked early in your program, before you make use of the other functions in `GPGME`. The last purpose is to run selftests.

As a side effect for W32 based systems, the socket layer will get initialized.

If `required_version` is `NULL`, the function returns a pointer to a statically allocated string containing the version number of the library.

If `required_version` is not `NULL`, it should point to a string containing a version number, and the function checks that the version of the library is at least as high as the version number provided. In this case, the function returns a pointer to a statically allocated string containing the version number of the library. If `REQUIRED_VERSION` is not a valid version number, or if the version requirement is not met, the function returns `NULL`.

If you use a version of a library that is backwards compatible with older releases, but contains additional interfaces which your program uses, this function provides a run-time check if the necessary features are provided by the installed version of the library.

If a selftest fails, the function may still succeed. Selftest errors are returned later when invoking `gpgme_new` or `gpgme-data_new`, so that a detailed error code can be returned (historically, `gpgme_check_version` does not return a detailed error code).

```c
@deftypefun {int} gpgme_set_global_flag (@const char *name, @const char *value)
```

```c
@deftypefun {const char *} gpgme_check_version (@const char *required_version))
```
On some systems it is not easy to set environment variables and thus hard to use @acronym{GPGME}'s internal trace facility for debugging. This function has been introduced as an alternative way to enable debugging and for a couple of other rarely used tweaks. It is important to assure that only one thread accesses @acronym{GPGME} functions between a call to this function and after the return from the call to @code{gpgme_check_version}.

All currently supported features require that this function is called as early as possible --- even before @code{gpgme_check_version}. The features are identified by the following values for @var{name}:

@table @code
@item debug
To enable debugging use the string `"debug" for @var{name} and @var{value} identical to the value used with the environment variable @code{GPGME_DEBUG}.

@item disable-gpgconf
Using this feature with any @var{value} disables the detection of the gpgconf program and thus forces GPGME to fallback into the simple OpenPGP only mode. It may be used to force the use of GnuPG-1 on systems which have both GPG versions installed. Note that in general the use of @code{gpgme_set_engine_info} is a better way to select a specific engine version.

@item gpgconf-name
@itemx gpg-name
Set the name of the gpgconf respective gpg binary. The defaults are @code{GNU/GnuPG/gpgconf} and @code{GNU/GnuPG/gpg}. Under Unix the leading directory part is ignored. Under Windows the leading directory part is used as the default installation directory; the @code{.exe} suffix is added by GPGME. Use forward slashed even under Windows.

@item require-gnupg
Set the minimum version of the required GnuPG engine. If that version is not met, GPGME fails early instead of trying to use the existent version. The given version must be a string with major, minor, and micro number. Example: "2.1.0".

@item w32-inst-dir
On Windows GPGME needs to know its installation directory to find its spawn helper. This is in general no problem because a DLL has this information. Some applications however link statically to GPGME and thus GPGME can only figure out the installation directory of this
application which may be wrong in certain cases. By supplying an installation directory as value to this flag, GPGME will assume that that directory is the installation directory. This flag has no effect on non-Windows platforms.

@end table

This function returns @code{0} on success. In contrast to other functions the non-zero return value on failure does not convey any error code. For setting `debug` the only possible error cause is an out of memory condition; which would exhibit itself later anyway. Thus the return value may be ignored.
@end deftypefun

After initializing @acronym{GPGME}, you should set the locale information to the locale required for your output terminal. This locale information is needed for example for the curses and Gtk pinentry. Here is an example of a complete initialization:

@example
#include <locale.h>
#include <gpgme.h>

void
init_gpgme (void)
@
{
/* Initialize the locale environment. */
setlocale (LC_ALL, "");
gpgme_check_version (NULL);
gpgme_set_locale (NULL, LC_CTYPE, setlocale (LC_CTYPE, NULL));
#ifdef LC_MESSAGES
  gpgme_set_locale (NULL, LC_MESSAGES, setlocale (LC_MESSAGES, NULL));
#endif

@}
@end example

Note that you are highly recommended to initialize the locale settings like this. @acronym{GPGME} can not do this for you because it would not be thread safe. The conditional on LC_MESSAGES is only necessary for portability to W32 systems.

@node Signal Handling
@section Signal Handling
@cindex signals
@cindex signal handling
The @acronym{GPGME} library communicates with child processes (the crypto engines). If a child process dies unexpectedly, for example due to a bug, or system problem, a @code{SIGPIPE} signal will be delivered to the application. The default action is to abort the program. To protect against this, @code{gpgme_check_version} sets the @code{SIGPIPE} signal action to @code{SIG_IGN}, which means that the signal will be ignored.

@acronym{GPGME} will only do that if the signal action for @code{SIGPIPE} is @code{SIG_DEF} at the time @code{gpgme_check_version} is called. If it is something different, @code{GPGME} will take no action.

This means that if your application does not install any signal handler for @code{SIGPIPE}, you don't need to take any precautions. If you do install a signal handler for @code{SIGPIPE}, you must be prepared to handle any @code{SIGPIPE} events that occur due to @acronym{GPGME} writing to a defunct pipe. Furthermore, if your application is multi-threaded, and you install a signal action for @code{SIGPIPE}, you must make sure you do this either before @code{gpgme_check_version} is called or afterwards.

@node Multi-Threading
@section Multi-Threading
@cindex thread-safeness
@cindex multi-threading

The @acronym{GPGME} library is mostly thread-safe, and can be used in a multi-threaded environment but there are some requirements for multi-threaded use:

@itemize @bullet
@item The function @code{gpgme_check_version} must be called before any other function in the library, because it initializes the thread support subsystem in @acronym{GPGME}. To achieve this in multi-threaded programs, you must synchronize the memory with respect to other threads that also want to use @acronym{GPGME}. For this, it is sufficient to call @code{gpgme_check_version} before creating the other threads using @acronym{GPGME}@footnote{At least this is true for POSIX threads, as @code{pthread_create} is a function that synchronizes memory with respects to other threads. There are many functions which have this property, a complete list can be found in POSIX, IEEE Std 1003.1-2003, Base Definitions, Issue 6, in the definition of the term ``Memory Synchronization''. For other thread packages other, more relaxed or more strict rules may apply.}.
Any @code{gpgme_data_t} and @code{gpgme_ctx_t} object must only be accessed by one thread at a time. If multiple threads want to deal with the same object, the caller has to make sure that operations on that object are fully synchronized.

Only one thread at any time is allowed to call @code{gpgme_wait}. If multiple threads call this function, the caller must make sure that all invocations are fully synchronized. It is safe to start asynchronous operations while a thread is running in gpgme_wait.

The function @code{gpgme_strerror} is not thread safe. You have to use @code{gpgme_strerror_r} instead.

@node Protocols and Engines
@chapter Protocols and Engines
@cindex protocol
@cindex engine
@cindex crypto engine
@cindex backend
@cindex crypto backend

@acronym{GPGME} supports several cryptographic protocols, however, it does not implement them. Rather it uses backends (also called engines) which implement the protocol. @acronym{GPGME} uses inter-process communication to pass data back and forth between the application and the backend, but the details of the communication protocol and invocation of the backend is completely hidden by the interface. All complexity is handled by @acronym{GPGME}. Where an exchange of information between the application and the backend is necessary, @acronym{GPGME} provides the necessary callback function hooks and further interfaces.

@deftp {Data type} {enum gpgme_protocol_t}
@tindex gpgme_protocol_t
The @code{gpgme_protocol_t} type specifies the set of possible protocol values that are supported by @acronym{GPGME}. The following protocols are supported:

@table @code
@item GPGME_PROTOCOL_OpenPGP
@itemx GPGME_PROTOCOL_OPENPGP
This specifies the OpenPGP protocol.
@item GPGME_PROTOCOL_CMS
This specifies the Cryptographic Message Syntax.

@item GPGME_PROTOCOL_GPGCONF
Under development. Please ask on @email{gnupg-devel@gnupg.org} for help.

@item GPGME_PROTOCOL_ASSUAN
@since{1.2.0}
This specifies the raw Assuan protocol.

@item GPGME_PROTOCOL_G13
@since{1.3.0}
Under development. Please ask on @email{gnupg-devel@gnupg.org} for help.

@item GPGME_PROTOCOL_UISERVER
Under development. Please ask on @email{gnupg-devel@gnupg.org} for help.

@item GPGME_PROTOCOL_SPAWN
@since{1.5.0}
Special protocol for use with @code{gpgme_op_spawn}.

@item GPGME_PROTOCOL_UNKNOWN
Reserved for future extension. You may use this to indicate that the used protocol is not known to the application. Currently, @acronym{GPGME} does not accept this value in any operation, though, except for @code{gpgme_get_protocol_name}.
@end table
@end deftp

@end deftypefun

@deftypefun {const char *} gpgme_get_protocol_name (@w{gpgme_protocol_t @var{protocol}})
The function @code{gpgme_get_protocol_name} returns a statically allocated string describing the protocol @var{protocol}, or @code{NULL} if the protocol number is not valid.
@end deftypefun

@menu
* Engine Version Check::          Verifying the engine version.
* Engine Information::            Obtaining more information about the engines.
* Engine Configuration::          Changing the engine configuration.
* OpenPGP::                       Support for the OpenPGP protocol.
* Cryptographic Message Syntax::  Support for the CMS.
* Assuan::                        Support for the raw Assuan protocol.
@end menu
The function @code{gpgme_get_dirinfo} returns a statically allocated string with the value associated to @var{what}. The returned values are the defaults and won't change even after @code{gpgme_set_engine_info} has been used to configure a different engine. @code{NULL} is returned if no value is available. Commonly supported values for @var{what} are:

@table @code
@item homedir
Return the default home directory.

@item sysconfdir
Return the name of the system configuration directory

@item bindir
Return the name of the directory with GnuPG program files.

@item libdir
Return the name of the directory with GnuPG related library files.

@item libexecdir
Return the name of the directory with GnuPG helper program files.

@item datadir
Return the name of the directory with GnuPG shared data.

@item localedir
Return the name of the directory with GnuPG locale data.

@item agent-socket
Return the name of the socket to connect to the gpg-agent.

@item agent-ssh-socket
Return the name of the socket to connect to the ssh-agent component of gpg-agent.

@item dirmngr-socket
Return the name of the socket to connect to the dirmngr.

@item uiserver-socket

Return the name of the socket to connect to the user interface server.

@item gpgconf-name
Return the file name of the engine configuration tool.

@item gpg-name
Return the file name of the OpenPGP engine.

@item gpgsm-name
Return the file name of the CMS engine.

@item g13-name
Return the name of the file container encryption engine.

@item gpg-wks-client-name
Return the name of the Web Key Service tool.

@end table

@end deftypefun

@deftypefun gpgme_error_t gpgme_engine_check_version (@w{gpgme_protocol_t @var{protocol}})
The function @code{gpgme_engine_check_version} verifies that the engine implementing the protocol @var{PROTOCOL} is installed in the expected path and meets the version requirement of @acronym{GPGME}.

This function returns the error code @code{GPG_ERR_NO_ERROR} if the engine is available and @code{GPG_ERR_INV_ENGINE} if it is not.
@end deftypefun

@node Engine Information
@section Engine Information
@cindex engine, information about

@deftp {Data type} {gpgme_engine_info_t}
@tindex gpgme_protocol_t
The @code{gpgme_engine_info_t} type specifies a pointer to a structure describing a crypto engine. The structure contains the following elements:

@table @code
@item gpgme_engine_info_t next
This is a pointer to the next engine info structure in the linked list, or @code{NULL} if this is the last element.

@item gpgme_protocol_t protocol
This is the protocol for which the crypto engine is used. You can convert this to a string with @code{gpgme_get_protocol_name} for printing.

@item const char *file_name
This is a string holding the file name of the executable of the crypto engine. Currently, it is never @code{NULL}, but using @code{NULL} is reserved for future use, so always check before you use it.

@item const char *home_dir
This is a string holding the directory name of the crypto engine's configuration directory. If it is @code{NULL}, then the default directory is used. See @code{gpgme_get_dirinfo} on how to get the default directory.

@item const char *version
This is a string containing the version number of the crypto engine. It might be @code{NULL} if the version number can not be determined, for example because the executable doesn't exist or is invalid.

@item const char *req_version
This is a string containing the minimum required version number of the crypto engine for @acronym{GPGME} to work correctly. This is the version number that @code{gpgme_engine_check_version} verifies against. Currently, it is never @code{NULL}, but using @code{NULL} is reserved for future use, so always check before you use it.

@end table
@end deftp
@end deftypefun

Here is an example how you can provide more diagnostics if you receive an error message which indicates that the crypto engine is invalid.

@example
gpgme_ctx_t ctx;
gpgme_error_t err;
@end example
if (gpgme_err_code (err) == GPG_ERR_INV_ENGINE)
{@
 gpgme_engine_info_t info;
 err = gpgme_get_engine_info (&info);
 if (!err)
 @{
 while (info && info->protocol != gpgme_get_protocol (ctx))
 info = info->next;
 if (!info)
   fprintf (stderr, "GPGME compiled without support for protocol \%s",
           gpgme_get_protocol_name (info->protocol));
 else if (info->file_name && !info->version)
   fprintf (stderr, "Engine \%s not installed properly",
           info->file_name);
 else if (info->file_name && info->version && info->req_version)
   fprintf (stderr, "Engine \%s version \%s installed, "
           "but at least version \%s required", info->file_name,
           info->version, info->req_version);
 else
   fprintf (stderr, "Unknown problem with engine for protocol \%s",
           gpgme_get_protocol_name (info->protocol));
 @}
 @}
@end example

@node Engine Configuration
@section Engine Configuration
@cindex engine, configuration of
@cindex configuration of crypto backend

You can change the configuration of a backend engine, and thus change
the executable program and configuration directory to be used. You
can make these changes the default or set them for some contexts
individually.

@deftypefun gpgme_error_t gpgme_set_engine_info (@w{gpgme_protocol_t @var{proto}}, @w{const char *@var{file_name}}, @w{const char *@var{home_dir}})
@since{1.1.0}

The function @code{gpgme_set_engine_info} changes the default
configuration of the crypto engine implementing the protocol
@var{proto}.

@var{file_name} is the file name of the executable program
implementing this protocol, and @var{home_dir} is the directory name
of the configuration directory for this crypto engine. If
@var{home_dir} is @code{NULL}, the engine's default will be used.

The new defaults are not applied to already created GPGME contexts.

This function returns the error code @code{GPG_ERR_NO_ERROR} if
successful, or an error code on failure.
@end deftypefun

The functions @code{gpgme_ctx_get_engine_info} and
@code{gpgme_ctx_set_engine_info} can be used to change the engine
configuration per context. @xref{Crypto Engine}.

OpenPGP is implemented by GnuPG, the @acronym{GNU} Privacy Guard.
This is the first protocol that was supported by @acronym{GPGME}.

The OpenPGP protocol is specified by @code{GPGME_PROTOCOL_OpenPGP}.

@acronym{CMS} is implemented by GpgSM, the S/MIME implementation for
GnuPG.

The @acronym{CMS} protocol is specified by @code{GPGME_PROTOCOL_CMS}.

Assuan
Assuan is the RPC library used by the various @acronym{GnuPG} components. The Assuan protocol allows one to talk to arbitrary Assuan servers using @acronym{GPGME}. @xref{Using the Assuan protocol}.

The ASSUAN protocol is specified by @code{GPGME_PROTOCOL_ASSUAN}.

@menu
* Public Key Algorithms:: A list of all public key algorithms.
* Hash Algorithms:: A list of all hash algorithms.
@end menu

Public key algorithms are used for encryption, decryption, signing and verification of signatures.

@deftp {Data type} {enum gpgme_pubkey_algo_t}
@tindex gpgme_pubkey_algo_t
The @code{gpgme_pubkey_algo_t} type specifies the set of all public key algorithms that are supported by @acronym{GPGME}. Possible values are:

@item GPGME_PK_RSA
This value indicates the RSA (Rivest, Shamir, Adleman) algorithm.

@item GPGME_PK_RSA_E
Deprecated. This value indicates the RSA (Rivest, Shamir, Adleman) algorithm for encryption and decryption only.

@item GPGME_PK_RSA_S
Deprecated. This value indicates the RSA (Rivest, Shamir, Adleman) algorithm for signing and verification only.

@item GPGME_PK_DSA
This value indicates DSA, the Digital Signature Algorithm.

@item GPGME_PK_ELG
This value indicates ElGamal.

@item GPGME_PK_ELG_E
This value also indicates ElGamal and is used specifically in GnuPG.

@item GPGME_PK_ECC
@since{1.5.0}
This value is a generic indicator for elliptic curve algorithms.

@item GPGME_PK_ECDSA
@since{1.3.0}
This value indicates ECDSA, the Elliptic Curve Digital Signature Algorithm as defined by FIPS 186-2 and RFC-6637.

@item GPGME_PK_ECDH
@since{1.3.0}
This value indicates ECDH, the Elliptic Curve Diffie-Hellmann encryption algorithm as defined by RFC-6637.

@item GPGME_PK_EDDSA
@since{1.7.0}
This value indicates the EdDSA algorithm.

@end table
@end deftp

@deftypefun {const char *} gpgme_pubkey_algo_name (@w{gpgme_pubkey_algo_t @var{algo}})
The function @code{gpgme_pubkey_algo_name} returns a pointer to a statically allocated string containing a description of the public key algorithm @var{algo}. This string can be used to output the name of the public key algorithm to the user.

If @var{algo} is not a valid public key algorithm, @code{NULL} is returned.
@end deftypefun

@deftypefun {char *} gpgme_pubkey_algo_string (@w{gpgme_subkey_t @var{key}})
The function @code{gpgme_pubkey_algo_string} is a convenience function to build and return an algorithm string in the same way GnuPG does (e.g. ``rsa2048'' or ``ed25519''). The caller must free the result using @code{gpgme_free}. On error (e.g. invalid argument or memory exhausted), the function returns NULL and sets @code{ERRNO}.

Hash (message digest) algorithms are used to compress a long message to make it suitable for public key cryptography.

The @code{gpgme_hash_algo_t} type specifies the set of all hash algorithms that are supported by GPGME. Possible values are:

- GPGME_MD_MD5
- GPGME_MD_SHA1
- GPGME_MD_RMD160
- GPGME_MD_MD2
- GPGME_MD_TIGER
- GPGME_MD_HAVAL
- GPGME_MD_SHA256
- GPGME_MD_SHA384
- GPGME_MD_SHA512
- GPGME_MD_SHA224
  @since{1.5.0}
- GPGME_MD_MD4
- GPGME_MD_CRC32
- GPGME_MD_CRC32_RFC1510
- GPGME_MD_CRC24_RFC2440

The function @code{gpgme_hash_algo_name} returns a pointer to a statically allocated string containing a description of the hash.
algorithm @var{algo}. This string can be used to output the name of the hash algorithm to the user.

If @var{algo} is not a valid hash algorithm, @code{NULL} is returned.
@end deftypefun

@node Error Handling
@chapter Error Handling
@cindex error handling

Many functions in @acronym{GPGME} can return an error if they fail. For this reason, the application should always catch the error condition and take appropriate measures, for example by releasing the resources and passing the error up to the caller, or by displaying a descriptive message to the user and cancelling the operation.

Some error values do not indicate a system error or an error in the operation, but the result of an operation that failed properly. For example, if you try to decrypt a tempered message, the decryption will fail. Another error value actually means that the end of a data buffer or list has been reached. The following descriptions explain for many error codes what they mean usually. Some error values have specific meanings if returned by a certain functions. Such cases are described in the documentation of those functions.

@acronym{GPGME} uses the @code{libgpg-error} library. This allows to share the error codes with other components of the GnuPG system, and thus pass error values transparently from the crypto engine, or some helper application of the crypto engine, to the user. This way no information is lost. As a consequence, @acronym{GPGME} does not use its own identifiers for error codes, but uses those provided by @code{libgpg-error}. They usually start with @code{GPG_ERR_}.

However, @acronym{GPGME} does provide aliases for the functions defined in libgpg-error, which might be preferred for name space consistency.

@menu
* Error Values:: The error value and what it means.
* Error Sources:: A list of important error sources.
* Error Codes:: A list of important error codes.
* Error Strings:: How to get a descriptive string from a value.
@end menu

@node Error Values
@section Error Values
@cindex error values
@cindex error codes
@cindex error sources

@deftp {Data type} {gpgme_err_code_t}
The @code{gpgme_err_code_t} type is an alias for the @code{libgpg-error} type @code{gpg_err_code_t}. The error code indicates the type of an error, or the reason why an operation failed.

A list of important error codes can be found in the next section.
@end deftp

@deftp {Data type} {gpgme_err_source_t}
The @code{gpgme_err_source_t} type is an alias for the @code{libgpg-error} type @code{gpg_err_source_t}. The error source has not a precisely defined meaning. Sometimes it is the place where the error happened, sometimes it is the place where an error was encoded into an error value. Usually the error source will give an indication to where to look for the problem. This is not always true, but it is attempted to achieve this goal.

A list of important error sources can be found in the next section.
@end deftp

@deftp {Data type} {gpgme_error_t}
The @code{gpgme_error_t} type is an alias for the @code{libgpg-error} type @code{gpg_error_t}. An error value like this has always two components, an error code and an error source. Both together form the error value.

Thus, the error value can not be directly compared against an error code, but the accessor functions described below must be used. However, it is guaranteed that only 0 is used to indicate success (@code{GPG_ERR_NO_ERROR}), and that in this case all other parts of the error value are set to 0, too.

Note that in @acronym{GPGME}, the error source is used purely for diagnostical purposes. Only the error code should be checked to test for a certain outcome of a function. The manual only documents the error code part of an error value. The error source is left unspecified and might be anything.
@end deftp

@deftypefun {static inline gpgme_err_code_t} gpgme_err_code (@w{gpgme_error_t @var{err}})
The static inline function @code{gpgme_err_code} returns the @code{gpgme_error_t} component of the error value @var{err}. This function must be used to extract the error code from an error value in order to compare it with the @code{GPG_ERR_ *} error code macros.
The static inline function `gpgme_err_source` returns the component of the error value `var{err}`. This function must be used to extract the error source from an error value in order to compare it with the `GPG_ERR_SOURCE_*` error source macros.

The static inline function `gpgme_err_make` returns the error value consisting of the error source `var{source}` and the error code `var{code}`.

This function can be used in callback functions to construct an error value to return it to the library.

The `libgpg-error` library provides error codes for all system error numbers it knows about. If `err` is an unknown error number, the error code `GPG_ERR_UNKNOWN_ERRNO` is used. The following functions can be used to construct error values from system error numbers.

The function `gpgme_err_make_from_errno` is like `gpgme_err_make`, but it takes a system error like `errno` instead of a `gpgme_err_code_t` error code.

The function `gpgme_error_from_errno` is like `gpgme_error`, but it takes a system error like `errno` instead of a
Sometimes you might want to map system error numbers to error codes
directly, or map an error code representing a system error back to the
system error number. The following functions can be used to do that.

The function `gpgme_err_code_from_errno` returns the error code
for the system error `var{err}`. If `var{err}` is not a known system
error, the function returns `GPG_ERR_UNKNOWN_ERRNO`.

The function `gpgme_err_code_to_errno` returns the system error
for the error code `var{err}`. If `var{err}` is not an error code
representing a system error, or if this system error is not defined on
this system, the function returns `0`.

The library `libgpg-error` defines an error source for every
component of the GnuPG system. The error source part of an error
value is not well defined. As such it is mainly useful to improve the
diagnostic error message for the user.

If the error code part of an error value is `0`, the whole error
value will be `0`. In this case the error source part is of
course `GPG_ERR_SOURCE_UNKNOWN`.

The list of error sources that might occur in applications using
`GPGME` is:

- `GPG_ERR_SOURCE_UNKNOWN`:
  - Error source is not known. The value of this error source is
    `0`.

- `GPG_ERR_SOURCE_GPGME`:
  - Error source is `GPGME` itself. This is the default for
    errors that occur in the `GPGME` library.

- `GPG_ERR_SOURCE_GPG`:
  - Error source is GnuPG, which is the crypto engine used for the
OpenPGP protocol.

@item GPG_ERR_SOURCE_GPGSM
The error source is GPGSM, which is the crypto engine used for the CMS protocol.

@item GPG_ERR_SOURCE_GCRYPT
The error source is @code{libgcrypt}, which is used by crypto engines to perform cryptographic operations.

@item GPG_ERR_SOURCE_GPGAGENT
The error source is @command{gpg-agent}, which is used by crypto engines to perform operations with the secret key.

@item GPG_ERR_SOURCE_PINENTRY
The error source is @command{pinentry}, which is used by @command{gpg-agent} to query the passphrase to unlock a secret key.

@item GPG_ERR_SOURCE_SCD
The error source is the SmartCard Daemon, which is used by @command{gpg-agent} to delegate operations with the secret key to a SmartCard.

@item GPG_ERR_SOURCE_KEYBOX
The error source is @code{libkbx}, a library used by the crypto engines to manage local keyrings.

@item GPG_ERR_SOURCE_USER_1
@item GPG_ERR_SOURCE_USER_2
@item GPG_ERR_SOURCE_USER_3
@item GPG_ERR_SOURCE_USER_4
These error sources are not used by any GnuPG component and can be used by other software. For example, applications using @acronym{GPGME} can use them to mark error values coming from callback handlers. Thus @code{GPG_ERR_SOURCE_USER_1} is the default for errors created with @code{gpgme_error} and @code{gpgme_error_from_errno}, unless you define @code{GPGME_ERR_SOURCE_DEFAULT} before including @file{gpgme.h}.

@end table

@node Error Codes
@section Error Codes
@cindex error codes, list of

The library @code{libgpg-error} defines many error values. Most of them are not used by @code{GPGME} directly, but might be returned by @acronym{GPGME} because it received them from the crypto engine. The
below list only includes such error codes that have a specific meaning in @code{GPGME}, or which are so common that you should know about them.

@table @code
@item GPG_ERR_EOF
This value indicates the end of a list, buffer or file.

@item GPG_ERR_NO_ERROR
This value indicates success. The value of this error code is @code{0}. Also, it is guaranteed that an error value made from the error code @code{0} will be @code{0} itself (as a whole). This means that the error source information is lost for this error code, however, as this error code indicates that no error occurred, this is generally not a problem.

@item GPG_ERR_GENERAL
This value means that something went wrong, but either there is not enough information about the problem to return a more useful error value, or there is no separate error value for this type of problem.

@item GPG_ERR_ENOMEM
This value means that an out-of-memory condition occurred.

@item GPG_ERR_E...
System errors are mapped to GPG_ERR_FOO where FOO is the symbol for the system error.

@item GPG_ERR_INV_VALUE
This value means that some user provided data was out of range. This can also refer to objects. For example, if an empty @code{gpgme_data_t} object was expected, but one containing data was provided, this error value is returned.

@item GPG_ERR_UNUSABLE_PUBKEY
This value means that some recipients for a message were invalid.

@item GPG_ERR_UNUSABLE_SECKEY
This value means that some signers were invalid.

@item GPG_ERR_NO_DATA
This value means that a @code{gpgme_data_t} object which was expected to have content was found empty.

@item GPG_ERR_CONFLICT
This value means that a conflict of some sort occurred.

@item GPG_ERR_NOT_IMPLEMENTED
This value indicates that the specific function (or operation) is not implemented. This error should never happen. It can only occur if you use certain values or configuration options which do not work, but for which we think that they should work at some later time.

@item GPG_ERR_DECRYPT_FAILED
This value indicates that a decryption operation was unsuccessful.

@item GPG_ERR_BAD_PASSPHRASE
This value means that the user did not provide a correct passphrase when requested.

@item GPG_ERR_CANCELED
This value means that the operation was canceled.

@item GPG_ERR_INV_ENGINE
This value means that the engine that implements the desired protocol is currently not available. This can either be because the sources were configured to exclude support for this engine, or because the engine is not installed properly.

@item GPG_ERR_AMBIGUOUS_NAME
This value indicates that a user ID or other specifier did not specify a unique key.

@item GPG_ERR_WRONG_KEY_USAGE
This value indicates that a key is not used appropriately.

@item GPG_ERR_CERT_REVOKED
This value indicates that a key signature was revoked.

@item GPG_ERR_CERT_EXPIRED
This value indicates that a key signature expired.

@item GPG_ERR_NO_CRL_KNOWN
This value indicates that no certificate revocation list is known for the certificate.

@item GPG_ERR_NO_POLICY_MATCH
This value indicates that a policy issue occurred.

@item GPG_ERR_NO_SECKEY
This value indicates that no secret key for the user ID is available.

@item GPG_ERR_MISSING_CERT
This value indicates that a key could not be imported because the issuer certificate is missing.
@item GPG_ERR_BAD_CERT_CHAIN
This value indicates that a key could not be imported because its certificate chain is not good, for example it could be too long.

@item GPG_ERR_UNSUPPORTED_ALGORITHM
This value means a verification failed because the cryptographic algorithm is not supported by the crypto backend.

@item GPG_ERR_BAD_SIGNATURE
This value means a verification failed because the signature is bad.

@item GPG_ERR_NO_PUBKEY
This value means a verification failed because the public key is not available.

@item GPG_ERR_USER_1
@item GPG_ERR_USER_2
@item ...
@item GPG_ERR_USER_16
These error codes are not used by any GnuPG component and can be freely used by other software. Applications using @acronym{GPGME} might use them to mark specific errors returned by callback handlers if no suitable error codes (including the system errors) for these errors exist already.
@end table

@node Error Strings
@section Error Strings
@cindex error values, printing of
@cindex error codes, printing of
@cindex error sources, printing of
@cindex error strings
@deftypefun {const char *} gpgme_strerror (@w{gpgme_error_t @var{err}})
The function @code{gpgme_strerror} returns a pointer to a statically allocated string containing a description of the error code contained in the error value @var{err}. This string can be used to output a diagnostic message to the user.
This function is not thread safe. Use @code{gpgme_strerror_r} in multi-threaded programs.
@end deftypefun

@deftypefun {int} gpgme_strerror_r (@w{gpgme_error_t @var{err}}, @w{char *@var{buf}}, @w{size_t @var{buflen}})
The function @code{gpgme_strerror_r} returns the error string for
@var{err} in the user-supplied buffer @var{buf} of size @var{buflen}.
This function is, in contrast to @code{gpgme_strerror}, thread-safe if
a thread-safe @code{strerror_r} function is provided by the system.
If the function succeeds, 0 is returned and @var{buf} contains the
string describing the error. If the buffer was not large enough,
ERANGE is returned and @var{buf} contains as much of the beginning of
the error string as fits into the buffer.
@end deftypefun

@deftypefun {const char *} gpgme_strsource (@w{gpgme_error_t @var{err}})
The function @code{gpgme_strerror} returns a pointer to a statically
allocated string containing a description of the error source
contained in the error value @var{err}. This string can be used to
output a diagnostic message to the user.
@end deftypefun

The following example illustrates the use of @code{gpgme_strerror}:

@example
gpgme_ctx_t ctx;
gpgme_error_t err = gpgme_new (&ctx);
if (err)
  @{
    fprintf (stderr, "%s: creating GpgME context failed: %s: %s\n",
             argv[0], gpgme_strsource (err), gpgme_strerror (err));
    exit (1);
  @} 
@end example

@node Exchanging Data
@chapter Exchanging Data
@cindex data, exchanging

A lot of data has to be exchanged between the user and the crypto
engine, like plaintext messages, ciphertext, signatures and
information about the keys. The technical details about exchanging
the data information are completely abstracted by @acronym{GPGME}.
The user provides and receives the data via @code{gpgme_data_t} objects,
regardless of the communication protocol between @acronym{GPGME} and
the crypto engine in use.

@deftp {Data type} {gpgme_data_t}
The @code{gpgme_data_t} type is a handle for a container for generic
data, which is used by @acronym{GPGME} to exchange data with the user.
@end deftp
@code{gpgme_data_t} objects do not provide notifications on events. It is assumed that read and write operations are blocking until data is available. If this is undesirable, the application must ensure that all GPGME data operations always have data available, for example by using memory buffers or files rather than pipes or sockets. This might be relevant, for example, if the external event loop mechanism is used.

@deftp {Data type} {gpgme_off_t}
@since{1.4.1}

On POSIX platforms the @code{gpgme_off_t} type is an alias for @code{off_t}; it may be used interchangeable. On Windows platforms @code{gpgme_off_t} is defined as a long (i.e. 32 bit) for 32 bit Windows and as a 64 bit signed integer for 64 bit Windows.
@end deftp

@deftp {Data type} {gpgme_ssize_t}
The @code{gpgme_ssize_t} type is an alias for @code{ssize_t}. It has only been introduced to overcome portability problems pertaining to the declaration of @code{ssize_t} by different toolchains.
@end deftp

@end deftp

@end menu

@node Creating Data Buffers
@section Creating Data Buffers
@cindex data buffer, creation

Data objects can be based on memory, files, or callback functions provided by the user. Not all operations are supported by all objects.

@end menu

@end node

@node Memory Based Data Buffers
@node File Based Data Buffers
@node Callback Based Data Buffers
Memory based data objects store all data in allocated memory. This is convenient, but only practical for an amount of data that is a fraction of the available physical memory. The data has to be copied from its source and to its destination, which can often be avoided by using one of the other data objects.

The function `gpgme_data_new` creates a new `gpgme_data_t` object and returns a handle for it in `@var{dh}`. The data object is memory based and initially empty.

The function returns the error code `GPG_ERR_NO_ERROR` if the data object was successfully created, `GPG_ERR_INV_VALUE` if `@var{dh}` is not a valid pointer, and `GPG_ERR_ENOMEM` if not enough memory is available.

The function `gpgme_data_new_from_mem` creates a new `gpgme_data_t` object and fills it with `size` bytes starting from `buffer`. If `copy` is not zero, a private copy of the data is made. If `copy` is zero, the data is taken from the specified buffer as needed, and the user has to ensure that the buffer remains valid for the whole life span of the data object.

The function returns the error code `GPG_ERR_NO_ERROR` if the data object was successfully created, `GPG_ERR_INV_VALUE` if `@var{dh}` or `@var{buffer}` is not a valid pointer, and `GPG_ERR_ENOMEM` if not enough memory is available.

The function `gpgme_data_new_from_file` creates a new `gpgme_data_t` object and fills it with the content of the file `filename`. If `copy` is not zero, the whole file is read in at initialization time and the file is not used anymore after that. This is the only mode supported currently. Later, a value of zero for `@var{copy}` might cause all reads to be delayed until the data is needed, but this is not yet implemented.
The function returns the error code `GPG_ERR_NO_ERROR` if the data object was successfully created, `GPG_ERR_INV_VALUE` if `@var{dh}` or `@var{filename}` is not a valid pointer, `GPG_ERR_NOT_IMPLEMENTED` if `@var{code}` is zero, and `GPG_ERR_ENOMEM` if not enough memory is available.

@end deftypefun

@deftypefun gpgme_error_t gpgme_data_new_from_filepart (@w{gpgme_data_t *@var{dh}}, @w{const char *@var{filename}}, @w{FILE *@var{fp}}, @w{off_t @var{offset}}, @w{size_t @var{length}})
The function `gpgme_data_new_from_filepart` creates a new `gpgme_data_t` object and fills it with a part of the file specified by `@var{filename}` or `@var{fp}`.

Exactly one of `@var{filename}` and `@var{fp}` must be non-zero, the other must be zero. The argument that is not zero specifies the file from which `@var{length}` bytes are read into the data object, starting from `@var{offset}`.

The function returns the error code `GPG_ERR_NO_ERROR` if the data object was successfully created, `GPG_ERR_INV_VALUE` if `@var{dh}` and exactly one of `@var{filename}` and `@var{fp}` is not a valid pointer, and `GPG_ERR_ENOMEM` if not enough memory is available.
@end deftypefun

@node File Based Data Buffers
@subsection File Based Data Buffers

File based data objects operate directly on file descriptors or streams. Only a small amount of data is stored in core at any time, so the size of the data objects is not limited by `acronym{GPGME}`.

@deftypefun gpgme_error_t gpgme_data_new_from_fd (@w{gpgme_data_t *@var{dh}}, @w{int @var{fd}})
The function `gpgme_data_new_from_fd` creates a new `gpgme_data_t` object and uses the file descriptor `@var{fd}` to read from (if used as an input data object) and write to (if used as an output data object).

When using the data object as an input buffer, the function might read a bit more from the file descriptor than is actually needed by the crypto engine in the desired operation because of internal buffering.

Note that GPGME assumes that the file descriptor is set to blocking mode. Errors during I/O operations, except for EINTR, are usually fatal for crypto operations.

The function returns the error code `GPG_ERR_NO_ERROR` if the data object was successfully created, and `GPG_ERR_ENOMEM` if not
enough memory is available.
@end deftypefun

@deftypefun gpgme_error_t gpgme_data_new_from_stream (@w{gpgme_data_t *@var{dh}}, @w{FILE *@var{stream}})
  The function @code{gpgme_data_new_from_stream} creates a new
  @code{gpgme_data_t} object and uses the I/O stream @var{stream} to read
  from (if used as an input data object) and write to (if used as an
  output data object).

  When using the data object as an input buffer, the function might read
  a bit more from the stream than is actually needed by the crypto
  engine in the desired operation because of internal buffering.

  Note that GPGME assumes that the stream is in blocking mode. Errors
  during I/O operations, except for EINTR, are usually fatal for crypto
  operations.

  The function returns the error code @code{GPG_ERR_NO_ERROR} if the
  data object was successfully created, and @code{GPG_ERR_ENOMEM} if not
  enough memory is available.
@end deftypefun

@deftypefun gpgme_error_t gpgme_data_new_from_estream (@w{gpgme_data_t *@var{dh}},
@w{gpgrt_stream_t @var{stream}})
  The function @code{gpgme_data_new_from_estream} creates a new
  @code{gpgme_data_t} object and uses the gpgrt stream @var{stream} to read
  from (if used as an input data object) and write to (if used as an
  output data object).

  When using the data object as an input buffer, the function might read
  a bit more from the stream than is actually needed by the crypto
  engine in the desired operation because of internal buffering.

  Note that GPGME assumes that the stream is in blocking mode. Errors
  during I/O operations, except for EINTR, are usually fatal for crypto
  operations.

  The function returns the error code @code{GPG_ERR_NO_ERROR} if the
  data object was successfully created, and @code{GPG_ERR_ENOMEM} if not
  enough memory is available.
@end deftypefun

@node Callback Based Data Buffers
@section Callback Based Data Buffers

If neither memory nor file based data objects are a good fit for your
application, you can implement the functions a data object provides
yourself and create a data object from these callback functions.

@deftp {Data type} {ssize_t (*gpgme_data_read_cb_t) (@w{void *@var{handle}}, @w{void @var{*buffer}},
@w{size_t @var{size}})}
@tindex gpgme_data_read_cb_t
The @code{gpgme_data_read_cb_t} type is the type of functions which
@acronym{GPGME} calls if it wants to read data from a user-implemented
data object. The function should read up to @var{size} bytes from the
current read position into the space starting at @var{buffer}. The
@var{handle} is provided by the user at data object creation time.

Note that GPGME assumes that the read blocks until data is available.
Errors during I/O operations, except for EINTR, are usually fatal for
crypto operations.

The function should return the number of bytes read, 0 on EOF, and -1
on error. If an error occurs, @var{errno} should be set to describe
the type of the error.
@end deftp

@deftp {Data type} {ssize_t (*gpgme_data_write_cb_t) (@w{void *@var{handle}}, @w{const void
@var{*buffer}}, @w{size_t @var{size}})}
@tindex gpgme_data_write_cb_t
The @code{gpgme_data_write_cb_t} type is the type of functions which
@acronym{GPGME} calls if it wants to write data to a user-implemented
data object. The function should write up to @var{size} bytes to the
current write position from the space starting at @var{buffer}. The
@var{handle} is provided by the user at data object creation time.

Note that GPGME assumes that the write blocks until data is available.
Errors during I/O operations, except for EINTR, are usually fatal for
crypto operations.

The function should return the number of bytes written, and -1 on
error. If an error occurs, @var{errno} should be set to describe the
type of the error.
@end deftp

@deftp {Data type} {off_t (*gpgme_data_seek_cb_t) (@w{void *@var{handle}}, @w{off_t @var{offset}},
@w{int @var{whence}})}
@tindex gpgme_data_seek_cb_t
The @code{gpgme_data_seek_cb_t} type is the type of functions which
@acronym{GPGME} calls if it wants to change the current read/write
position in a user-implemented data object, just like the @code{seek}
fuction.

The function should return the new read/write position, and -1 on
error. If an error occurs, @var{errno} should be set to describe the
type of the error.
@end deftp

@deftp {Data type} {void (*)(gpgme_data_release_cb_t) (@void *@var{handle})}
@tindex gpgme_data_release_cb_t
The @code{gpgme_data_release_cb_t} type is the type of functions which
@acronym{GPGME} calls if it wants to destroy a user-implemented data
object. The @var{handle} is provided by the user at data object
creation time.
@end deftp

@deftp {Data type} {struct gpgme_data_cbs}
This structure is used to store the data callback interface functions
described above. It has the following members:

@table @code
@item gpgme_data_read_cb_t read
This is the function called by @acronym{GPGME} to read data from the
data object. It is only required for input data object.

@item gpgme_data_write_cb_t write
This is the function called by @acronym{GPGME} to write data to the
data object. It is only required for output data object.

@item gpgme_data_seek_cb_t seek
This is the function called by @acronym{GPGME} to change the current
read/write pointer in the data object (if available). It is optional.

@item gpgme_data_release_cb_t release
This is the function called by @acronym{GPGME} to release a data
object. It is optional.
@end table
@end deftp

@deftypefun gpgme_error_t gpgme_data_new_from_cbs (@gpgme_data_t *@var{dh},
@gpgme_data_cbs_t @var{cbs}, @void *@var{handle})
The function @code{gpgme_data_new_from_cbs} creates a new
@gpgme_data_t object and uses the user-provided callback functions
to operate on the data object.

The handle @var{handle} is passed as first argument to the callback
functions. This can be used to identify this data object.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the
data object was successfully created, and @code{GPG_ERR_ENOMEM} if not
enough memory is available.
@end deftypefun
@node Destroying Data Buffers
@section Destroying Data Buffers
@cindex data buffer, destruction
@deftypefun void gpgme_data_release (@w{gpgme_data_t @var{dh}})
The function @code{gpgme_data_release} destroys the data object with
the handle @var{dh}. It releases all associated resources that were
not provided by the user in the first place.
@end deftypefun

@deftypefun {char *} gpgme_data_release_and_get_mem (@w{gpgme_data_t @var{dh}}, @w{size_t *
@var{length}})
The function @code{gpgme_data_release_and_get_mem} is like
@code{gpgme_data_release}, except that it returns the data buffer and
its length that was provided by the object.

The user has to release the buffer with @code{gpgme_free}. In case
the user provided the data buffer in non-copy mode, a copy will be
made for this purpose.

In case an error returns, or there is no suitable data buffer that can
be returned to the user, the function will return @code{NULL}. In any
case, the data object @var{dh} is destroyed.
@end deftypefun

@deftypefun void gpgme_free (@w{void *@var{buffer}})
@since{1.1.1}
The function @code{gpgme_free} releases the memory returned by
@code{gpgme_data_release_and_get_mem} and
@code{gpgme_pubkey_algo_string}. It should be used instead of the
system libraries @code{free} function in case different allocators are
used by a program. This is often the case if gpgme is used under
Windows as a DLL.
@end deftypefun

@node Manipulating Data Buffers
@section Manipulating Data Buffers
@cindex data buffer, manipulation
Data buffers contain data and meta-data. The following operations can
be used to manipulate both.
@menu
* Data Buffer I/O Operations:: I/O operations on data buffers.
* Data Buffer Meta-Data:: Meta-data manipulation of data buffers.
* Data Buffer Convenience:: Convenience function for data buffers.
@end menu

@node Data Buffer I/O Operations
@subsection Data Buffer I/O Operations
@cindex data buffer, I/O operations
@cindex data buffer, read
@cindex data buffer, write
@cindex data buffer, seek

@deftypefun ssize_t gpgme_data_read (@w{gpgme_data_t @var{dh}}, @w{void *@var{buffer}}, @w{size_t @var{length}})
The function @code{gpgme_data_read} reads up to @var{length} bytes from the data object with the handle @var{dh} into the space starting at @var{buffer}.

If no error occurs, the actual amount read is returned. If the end of the data object is reached, the function returns 0.

In all other cases, the function returns -1 and sets @var{errno}.
@end deftypefun

@deftypefun ssize_t gpgme_data_write (@w{gpgme_data_t @var{dh}}, @w{const void *@var{buffer}}, @w{size_t @var{size}})
The function @code{gpgme_data_write} writes up to @var{size} bytes starting from @var{buffer} into the data object with the handle @var{dh} at the current write position.

The function returns the number of bytes actually written, or -1 if an error occurs. If an error occurs, @var{errno} is set.
@end deftypefun

@deftypefun off_t gpgme_data_seek (@w{gpgme_data_t @var{dh}}, @w{off_t @var{offset}}, @w{int @var{whence}})
The function @code{gpgme_data_seek} changes the current read/write position.

The @var{whence} argument specifies how the @var{offset} should be interpreted. It must be one of the following symbolic constants:

@table @code
@item SEEK_SET
Specifies that @var{offset} is a count of characters from the beginning of the data object.
@end code
@item SEEK_CUR
Specifies that @var{offset} is a count of characters from the current file position. This count may be positive or negative.

@item SEEK_END
Specifies that @var{offset} is a count of characters from the end of the data object. A negative count specifies a position within the current extent of the data object; a positive count specifies a position past the current end. If you set the position past the current end, and actually write data, you will extend the data object with zeros up to that position.
@end table

If successful, the function returns the resulting file position, measured in bytes from the beginning of the data object. You can use this feature together with @code{SEEK_CUR} to read the current read/write position.

If the function fails, -1 is returned and @var{errno} is set.
@end deftypefun

@node Data Buffer Meta-Data
@subsection Data Buffer Meta-Data
@cindex data buffer, meta-data
@cindex data buffer, file name
@cindex data buffer, encoding

@deftypefun {char *} gpgme_data_get_file_name (@w{gpgme_data_t @var{dh}})
@since{1.1.0}

The function @code{gpgme_data_get_file_name} returns a pointer to a string containing the file name associated with the data object. The file name will be stored in the output when encrypting or signing the data and will be returned to the user when decrypting or verifying the output data.

If no error occurs, the string containing the file name is returned. Otherwise, @code{NULL} will be returned.
@end deftypefun

@deftypefun gpgme_error_t gpgme_data_set_file_name (@w{gpgme_data_t @var{dh}}, @w{const char *@var{file_name}})
@since{1.1.0}

The function @code{gpgme_data_set_file_name} sets the file name
associated with the data object. The file name will be stored in the output when encrypting or signing the data and will be returned to the user when decrypting or verifying the output data.

The function returns the error code `GPG_ERR_INV_VALUE` if `dh` is not a valid pointer and `GPG_ERR_ENOMEM` if not enough memory is available.

@end deftypefun

@deftp {Data type} {enum gpgme_data_encoding_t}
@tindex gpgme_data_encoding_t
The `gpgme_data_encoding_t` type specifies the encoding of a `gpgme_data_t` object. For input data objects, the encoding is useful to give the backend a hint on the type of data. For output data objects, the encoding can specify the output data format on certain operations. Please note that not all backends support all encodings on all operations. The following data types are available:

@table @code
@item GPGME_DATA_ENCODING_NONE
This specifies that the encoding is not known. This is the default for a new data object. The backend will try its best to detect the encoding automatically.

@item GPGME_DATA_ENCODING_BINARY
This specifies that the data is encoding in binary form; i.e. there is no special encoding.

@item GPGME_DATA_ENCODING_BASE64
This specifies that the data is encoded using the Base-64 encoding scheme as used by @acronym{MIME} and other protocols.

@item GPGME_DATA_ENCODING_ARMOR
This specifies that the data is encoded in an armored form as used by OpenPGP and PEM.

@item GPGME_DATA_ENCODING_MIME
@since{1.7.0}
This specifies that the data is encoded as a MIME part.

@item GPGME_DATA_ENCODING_URL
@since{1.2.0}
The data is a list of linefeed delimited URLs. This is only useful with `gpgme_op_import`. 
The data is a list of binary zero delimited URLs. This is only useful with \texttt{gpgme_op_import}.

The data is a list of linefeed delimited URLs with all control and space characters percent escaped. This mode is not yet implemented.

The function \texttt{gpgme_data_get_encoding} returns the encoding of the data object with the handle \texttt{dh}. If \texttt{dh} is not a valid pointer (e.g. \texttt{NULL}) \texttt{GPGME_DATA_ENCODING_NONE} is returned.

The function \texttt{gpgme_data_set_encoding} changes the encoding of the data object with the handle \texttt{dh} to \texttt{enc}.

Some minor properties of the data object can be controlled with flags set by this function. The properties are identified by the following values for \texttt{name}:

The value is a decimal number with the length gpgme shall assume for this data object. This is useful if the data is provided by callbacks or via file descriptors but the applications knows the total size of the data. If this is set the OpenPGP engine may use this to decide on buffer allocation strategies and to provide a total value for its progress information.
This function returns `0` on success.

The `gpgme_data_type_t` type is used to return the detected type of the content of a data buffer.

The data is returned by `gpgme_data_identify` if it was not possible to identify the data. Reasons for this might be a non-seekable stream or a memory problem. The value is 0.

The data is an OpenPGP signed message. This may be a binary signature, a detached one or a cleartext signature.

The data is an OpenPGP encrypted message.

The data is an OpenPGP detached signature.

This is a generic OpenPGP message. In most cases this will be encrypted data.

This is an OpenPGP key (private or public).

This is a CMS signed message.

This is a CMS encrypted (enveloped data) message.
This is used for other CMS message types.

- **GPGME_DATA_TYPE_X509_CERT**
The data is a X.509 certificate.
- **GPGME_DATA_TYPE_PKCS12**
The data is a PKCS#12 message. This is commonly used to exchange private keys for X.509.

```c
@deftypefun gpgme_data_type_t gpgme_data_identify (@w{gpgme_data_t @var{dh}})
@since{1.4.3}
```

The function `gpgme_data_identify` returns the type of the data with the handle `@var{dh}`. If it is not possible to perform the identification, the function returns zero (`GPGME_DATA_TYPE_INVALID`). Note that depending on how the data object has been created the identification may not be possible or the data object may change its internal state (file pointer moved). For file or memory based data object, the state should not change.

```c
@c
@c    Chapter Contexts
@c
@node Contexts
@chapter Contexts
@cindex context
```

All cryptographic operations in `GPGME` are performed within a context, which contains the internal state of the operation as well as configuration parameters. By using several contexts you can run several cryptographic operations in parallel, with different configuration.

```c
@end deftp
```

```c
@deftp {Data type} {gpgme_ctx_t}
The `gpgme_ctx_t` type is a handle for a `GPGME` context, which is used to hold the configuration, status and result of cryptographic operations.
@end deftp
```

```c
@menu
* Creating Contexts:: Creating new `GPGME` contexts.
* Destroying Contexts:: Releasing `GPGME` contexts.
* Result Management:: Managing the result of crypto operations.
* Context Attributes:: Setting properties of a context.
* Key Management:: Managing keys with `GPGME`.
* Trust Item Management:: Managing trust items with `GPGME`.
* Crypto Operations:: Using a context for cryptography.
```
* Miscellaneous: Miscellaneous operations
* Run Control: Controlling how operations are run.
@end menu

@node Creating Contexts
@section Creating Contexts
@cindex context, creation

@dfunction gpgme_error_t gpgme_new (@{gpgme_ctx_t *}@var{ctx})
The function @code{gpgme_new} creates a new @code{gpgme_ctx_t} object and returns a handle for it in @var{ctx}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the context was successfully created, @code{GPG_ERR_INV_VALUE} if @var{ctx} is not a valid pointer, and @code{GPG_ERR_ENOMEM} if not enough memory is available. Also, it returns @code{GPG_ERR_NOT_OPERATIONAL} if @code{gpgme_check_version} was not called to initialize GPGME, and @code{GPG_ERR_SELFTEST_FAILED} if a selftest failed. Currently, the only selftest is for Windows MingW32 targets to see if @code{-mms-bitfields} was used (as required).
@end deftypefun

@node Destroying Contexts
@section Destroying Contexts
@cindex context, destruction

@dfunction void gpgme_release (@{gpgme_ctx_t}@var{ctx})
The function @code{gpgme_release} destroys the context with the handle @var{ctx} and releases all associated resources.
@end deftypefun

@node Result Management
@section Result Management
@cindex context, result of operation

The detailed result of an operation is returned in operation-specific structures such as @code{gpgme_decrypt_result_t}. The corresponding retrieval functions such as @code{gpgme_op_decrypt_result} provide static access to the results after an operation completes. Those structures shall be considered read-only and an application must not allocate such a structure on its own. The following interfaces make it possible to detach a result structure from its associated context and give it a lifetime beyond that of the current operation or context.
The function `gpgme_result_ref` acquires an additional reference for the result `result`, which may be of any type `gpgme_*_result_t`. As long as the user holds a reference, the result structure is guaranteed to be valid and unmodified.

The function `gpgme_result_unref` releases a reference for the result `result`. If this was the last reference, the result structure will be destroyed and all resources associated to it will be released.

Note that a context may hold its own references to result structures, typically until the context is destroyed or the next operation is started. In fact, these references are accessed through the `gpgme_op_*_result` functions.

* Protocol Selection:: Selecting the protocol used by a context.
* Crypto Engine:: Configuring the crypto engine.
* Setting the Sender:: How to tell the engine the sender.
* ASCII Armor:: Requesting ASCII armored output.
* Text Mode:: Choosing canonical text mode.
* Offline Mode:: Choosing offline mode.
* Pinentry Mode:: Choosing the pinentry mode.
* Included Certificates:: Including a number of certificates.
* Key Listing Mode:: Selecting key listing mode.
* Passphrase Callback:: Getting the passphrase from the user.
* Progress Meter Callback:: Being informed about the progress.
* Status Message Callback:: Status messages received from gpg.
* Context Flags:: Additional flags for a context.
* Locale:: Setting the locale of a context.
* Additional Logs:: Additional logs of a context.
@subsection Protocol Selection
@cindex context, selecting protocol
@cindex protocol, selecting

@deftypefun gpgme_error_t gpgme_set_protocol (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_protocol_t @var{proto}})
The function @code{gpgme_set_protocol} sets the protocol used within the context @var{ctx} to @var{proto}. All crypto operations will be performed by the crypto engine configured for that protocol. @xref{Protocols and Engines}.

Setting the protocol with @code{gpgme_set_protocol} does intentionally not check if the crypto engine for that protocol is available and installed correctly. @xref{Engine Version Check}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the protocol could be set successfully, and @code{GPG_ERR_INV_VALUE} if @var{protocol} is not a valid protocol.
@end deftypefun

@deftypefun gpgme_protocol_t gpgme_get_protocol (@w{gpgme_ctx_t @var{ctx}})
The function @code{gpgme_get_protocol} retrieves the protocol currently use with the context @var{ctx}.
@end deftypefun

@node Crypto Engine
@subsection Crypto Engine
@cindex context, configuring engine
@cindex engine, configuration per context

The following functions can be used to set and retrieve the configuration of the crypto engines of a specific context. The default can also be retrieved without any particular context. @xref{Engine Information}. The default can also be changed globally. @xref{Engine Configuration}.

@deftypefun gpgme_engine_info_t gpgme_ctx_get_engine_info (@w{gpgme_ctx_t @var{ctx}})
@since{1.1.0}
The function @code{gpgme_ctx_get_engine_info} returns a linked list of engine info structures. Each info structure describes the configuration of one configured backend, as used by the context @var{ctx}.

The result is valid until the next invocation of @code{gpgme_ctx_set_engine_info} for this particular context.
This function can not fail.
@end deftypefun

@end deftypefun

gpgme_error_t gpgme_ctx_set_engine_info (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_protocol_t @var{proto}}, @w{const char *@var{file_name}}, @w{const char *@var{home_dir}})
@since{1.1.0}

The function @code{gpgme_ctx_set_engine_info} changes the configuration of the crypto engine implementing the protocol @var{proto} for the context @var{ctx}.

@var{file_name} is the file name of the executable program implementing this protocol, and @var{home_dir} is the directory name of the configuration directory for this crypto engine. If @var{home_dir} is @code{NULL}, the engine's default will be used.

Currently this function must be used before starting the first crypto operation. It is unspecified if and when the changes will take effect if the function is called after starting the first operation on the context @var{ctx}.

This function returns the error code @code{GPG_ERR_NO_ERROR} if successful, or an error code on failure.
@end deftypefun

@node Setting the Sender
@subsection How to tell the engine the sender.
@cindex context, sender
@cindex sender
@cindex From:

Some engines can make use of the sender's address, for example to figure out the best user id in certain trust models. For verification and signing of mails, it is thus suggested to let the engine know the sender ("From:") address. @acronym{GPGME} provides two functions to accomplish that. Note that the esoteric use of multiple "From:" addresses is not supported.

@end deftypefun

gpgme_error_t gpgme_set_sender (@w{gpgme_ctx_t @var{ctx}}, @w{int @var{address}})
@since{1.8.0}

The function @code{gpgme_set_sender} specifies the sender address for use in sign and verify operations. @var{address} is expected to be the ``addr-spec'' part of an address but may also be a complete mailbox
address, in which case this function extracts the \"addr-spec\" from it. Using @code{NULL} for @var{address} clears the sender address.

The function returns 0 on success or an error code on failure. The most likely failure is that no valid \"addr-spec\" was found in @var{address}.

@end deftypefun

@deftypefun @w{const char *} gpgme_get_sender (@w{gpgme_ctx_t @var{ctx}})
@since{1.8.0}
The function @code{gpgme_get_sender} returns the current sender address from the context, or NULL if none was set. The returned value is valid as long as the @var{ctx} is valid and @code{gpgme_set_sender} has not been called again.

@end deftypefun

@c FIXME: Unfortunately, using @acronym here breaks texi2dvi.
@node ASCII Armor
@subsection @acronym{ASCII} Armor
@cindex context, armor mode
@cindex @acronym{ASCII} armor
@cindex armor mode
@deftypefun void gpgme_set_armor (@w{gpgme_ctx_t @var{ctx}}, @w{int @var{yes}}) The function @code{gpgme_set_armor} specifies if the output should be \acronym{ASCII} armored. By default, output is not \acronym{ASCII} armored.

@acronym{ASCII} armored output is disabled if @var{yes} is zero, and enabled otherwise.
@end deftypefun

@deftypefun int gpgme_get_armor (@w{gpgme_ctx_t @var{ctx}}) The function @code{gpgme_get_armor} returns 1 if the output is \acronym{ASCII} armored, and @code{0} if it is not, or if @var{ctx} is not a valid pointer.
@end deftypefun

@node Text Mode
@subsection Text Mode
The function `gpgme_set_textmode` specifies if canonical text mode should be used. By default, text mode is not used.

Text mode is for example used for the RFC2015 signatures; note that the updated RFC 3156 mandates that the mail user agent does some preparations so that text mode is not needed anymore.

This option is only relevant to the OpenPGP crypto engine, and ignored by all other engines.

Canonical text mode is disabled if `yes` is zero, and enabled otherwise.

The function `gpgme_get_textmode` returns 1 if canonical text mode is enabled, and 0 if it is not, or if `ctx` is not a valid pointer.

The details of the offline mode depend on the used protocol and its backend engine. It may eventually be extended to be more stricter and for example completely disable the use of Dirmngr for any engine.

For the CMS protocol the offline mode specifies whether Dirmngr shall be used to do additional validation that might require connecting external services (e.g. CRL / OCSP checks). Here the offline mode only affects the keylist mode `GPGME_KEYLIST_MODE_VALIDATE`.

For the OpenPGP protocol offline mode entirely disables the use of the
Dirmngr and will thus guarantee that no network connections are done as part of an operation on this context. It has only an effect with GnuPG versions 2.1.23 or later.

For all other protocols the offline mode is currently ignored.

@end deftypefun

@deftypefun int gpgme_get_offline (@w{gpgme_ctx_t @var{ctx}})
@since{1.6.0}

The function @code{gpgme_get_offline} returns 1 if offline mode is enabled, and @code{0} if it is not, or if @var{ctx} is not a valid pointer.
@end deftypefun

@node Pinentry Mode
@subsection Pinentry Mode
@cindex context, pinentry mode
@cindex pinentry mode

@deftypefun gpgme_error_t gpgme_set_pinentry_mode (@w{gpgme_ctx_t @var{ctx}},
@w{gpgme_pinentry_mode_t @var{mode}})
@since{1.4.0}

The function @code{gpgme_set_pinentry_mode} specifies the pinentry mode to be used.

For GnuPG >= 2.1 this option is required to be set to @code{GPGME_PINENTRY_MODE_LOOPBACK} to enable the passphrase callback mechanism in GPGME through @code{gpgme_set_passphrase_cb}.
@end deftypefun

@deftypefun gpgme_pinentry_mode_t gpgme_get_pinentry_mode (@w{gpgme_ctx_t @var{ctx}})
@since{1.4.0}

The function @code{gpgme_get_pinentry_mode} returns the mode set for the context.
@end deftypefun

@deftp {Data type} {enum gpgme_pinentry_mode_t}
@tindex gpgme_pinentry_mode_t
@since{1.4.0}

The @code{gpgme_pinentry_mode_t} type specifies the set of possible pinentry modes that are supported by @acronym{GPGME} if GnuPG >= 2.1 is used.
The following modes are supported:

@table @code
@item GPGME_PINENTRY_MODE_DEFAULT
@since{1.4.0}

Use the default of the agent, which is ask.

@item GPGME_PINENTRY_MODE_ASK
@since{1.4.0}

Force the use of the Pinentry.

@item GPGME_PINENTRY_MODE_CANCEL
@since{1.4.0}

Emulate use of Pinentry's cancel button.

@item GPGME_PINENTRY_MODE_ERROR
@since{1.4.0}

Return a Pinentry error @code{No Pinentry}.

@item GPGME_PINENTRY_MODE_LOOPBACK
@since{1.4.0}

Redirect Pinentry queries to the caller. This enables the use of @code{gpgme_set_passphrase_cb} because pinentry queries are redirected to gpgme.

Note: For 2.1.0 - 2.1.12 this mode requires @code{allow-loopback-pinentry} to be enabled in the @file{gpg-agent.conf} or an agent started with that option.

@end table
@end deftp

@node Included Certificates
@subsection Included Certificates
@cindex certificates, included
@deftypefun void gpgme_set_include_certs (@w{gpgme_ctx_t @var{ctx}}, @w{int @var{nr_of_certs}})
The function @code{gpgme_set_include_certs} specifies how many certificates should be included in an S/MIME signed message. By default, only the sender's certificate is included. The possible values of @var{nr_of_certs} are:

@table @code
Fall back to the default of the crypto backend. This is the default for GPGME.

-2
Include all certificates except the root certificate.

-1
Include all certificates.

0
Include no certificates.

1
Include the sender's certificate only.

n
Include the first n certificates of the certificates path, starting from the sender's certificate. The number @code{n} must be positive.

Values of @code{nr_of_certs} smaller than -2 are undefined.

This option is only relevant to the CMS crypto engine, and ignored by all other engines.

The function @code{gpgme_get_include_certs} returns the number of certificates to include into an S/MIME signed message.

This option is only relevant to the CMS crypto engine, and ignored by all other engines.

The function @code{gpgme_set_keylist_mode} changes the default behaviour of the key listing functions. The value in @code{mode} is a bitwise-or combination of one or multiple of the following bit values:

- @code{GPGME_KEYLIST_MODE_LOCAL}
The @code{GPGME_KEYLIST_MODE_LOCAL} symbol specifies that the local keyring should be searched for keys in the keylisting operation. This is the default. Using only this option results in a @code{--list-keys}.  

Open Source Used In BGP TE Controller Version 4.3.0  16707
@item GPGME_KEYLIST_MODE_EXTERN
The @code{GPGME_KEYLIST_MODE_EXTERN} symbol specifies that an external source should be searched for keys in the keylisting operation. The type of external source is dependent on the crypto engine used and whether it is combined with @code{GPGME_KEYLIST_MODE_LOCAL}. For example, it can be a remote keyserver or LDAP certificate server.

Using only this option results in a @code{--search-keys} for @code{GPGME_PROTOCOL_OpenPGP} and something similar to @code{--list-external-keys} for @code{GPGME_PROTOCOL_CMS}.

@item GPGME_KEYLIST_MODE_LOCATE
This is a shortcut for the combination of @code{GPGME_KEYLIST_MODE_LOCAL} and @code{GPGME_KEYLIST_MODE_EXTERN}, which results in a @code{--locate-keys} for @code{GPGME_PROTOCOL_OpenPGP}.

@item GPGME_KEYLIST_MODE_SIGS
The @code{GPGME_KEYLIST_MODE_SIGS} symbol specifies that the key signatures should be included in the listed keys.

@item GPGME_KEYLIST_MODE_SIG_NOTATIONS
@since{1.1.1}
The @code{GPGME_KEYLIST_MODE_SIG_NOTATIONS} symbol specifies that the signature notations on key signatures should be included in the listed keys. This only works if @code{GPGME_KEYLIST_MODE_SIGS} is also enabled.

@item GPGME_KEYLIST_MODE_WITH_TOFU
@since{1.7.0}
The @code{GPGME_KEYLIST_MODE_WITH_TOFU} symbol specifies that information pertaining to the TOFU trust model should be included in the listed keys.

@item GPGME_KEYLIST_MODE_WITH_SECRET
@since{1.5.1}
The @code{GPGME_KEYLIST_MODE_WITH_SECRET} returns information about the presence of a corresponding secret key in a public key listing. A public key listing with this mode is slower than a standard listing but can be used instead of a second run to list the secret keys. This is only supported for GnuPG versions >= 2.1.

@item GPGME_KEYLIST_MODE_EPHEMERAL
@since{1.2.0}
The `GPGME_KEYLIST_MODE_EPHEMERAL` symbol specifies that keys flagged as ephemeral are included in the listing.

[item GPGME_KEYLIST_MODE_VALIDATE
Since {0.4.5}

The `GPGME_KEYLIST_MODE_VALIDATE` symbol specifies that the backend should do key or certificate validation and not just get the validity information from an internal cache. This might be an expensive operation and is in general not useful. Currently only implemented for the S/MIME backend and ignored for other backends.

@end table

At least one of `GPGME_KEYLIST_MODE_LOCAL` and `GPGME_KEYLIST_MODE_EXTERN` must be specified. For future binary compatibility, you should get the current mode with `gpgme_get_keylist_mode` and modify it by setting or clearing the appropriate bits, and then using that calculated value in the `gpgme_set_keylisting_mode` operation. This will leave all other bits in the mode value intact (in particular those that are not used in the current version of the library).

The function returns the error code `GPG_ERR_NO_ERROR` if the mode could be set correctly, and `GPG_ERR_INV_VALUE` if `ctx` is not a valid pointer or `mode` is not a valid mode.

@end deftypefun

@deftyfndef gpgme_keylist_mode_t gpgme_get_keylist_mode (@w{gpgme_ctx_t @var{ctx}})
The function `gpgme_get_keylist_mode` returns the current key listing mode of the context `ctx`. This value can then be modified and used in a subsequent `gpgme_set_keylisting_mode` operation to only affect the desired bits (and leave all others intact).

The function returns 0 if `ctx` is not a valid pointer, and the current mode otherwise. Note that 0 is not a valid mode value.
@end deftypefun

@node Passphrase Callback
@subsection Passphrase Callback
@cindex callback, passphrase
@cindex passphrase callback
@deftp {Data type} {gpgme_error_t (*gpgme_passphrase_cb_t)(void *@var{hook}, const char *@var{uid_hint}, const char *@var{passphrase_info}, @w{int @var{prev_was_bad}}, @w{int @var{fd}})}
The `gpgme_passphrase_cb_t` type is the type of functions usable as passphrase callback function.

The argument `uid_hint` might contain a string that gives an indication for which user ID the passphrase is required. If this is not available, or not applicable (in the case of symmetric encryption, for example), `uid_hint` will be `NULL`.

The argument `passphrase_info`, if not `NULL`, will give further information about the context in which the passphrase is required. This information is engine and operation specific.

If this is the repeated attempt to get the passphrase, because previous attempts failed, then `prev_was_bad` is 1, otherwise it will be 0.

The user must write the passphrase, followed by a newline character, to the file descriptor `fd`. The function `gpgme_io_writen` should be used for the write operation. Note that if the user returns 0 to indicate success, the user must at least write a newline character before returning from the callback.

If an error occurs, return the corresponding `gpgme_error_t` value. You can use the error code `GPG_ERR_CANCELED` to abort the operation. Otherwise, return `0`.

Note: The passphrase_cb only works with GnuPG 1.x and 2.1.x and not with the 2.0.x series. See `gpgme_set_pinentry_mode` for more details on 2.1.x usage.

Not all crypto engines require this callback to retrieve the passphrase. It is better if the engine retrieves the passphrase from a trusted agent (a daemon process), rather than having each user to implement their own passphrase query. Some engines do not even support an external passphrase callback at all, in this case the error code `GPG_ERR_NOT_SUPPORTED` is returned.
For GnuPG >= 2.1 the pinentry mode has to be set to 
@code{GPGME_PINENTRY_MODE_LOOPBACK} to enable the passphrase callback. 
See @code{gpgme_set_pinentry_mode}.

The user can disable the use of a passphrase callback function by
calling @code{gpgme_set_passwd_callback} with @var{passfunc} being
@code{NULL}.
@end deftypefun

@end deftypefun void gpgme_get_passwd_callback (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_passwd_callback_t
*@var{passfunc}}, @w{void **@var{hook_value}})
The function @code{gpgme_get_passwd_callback} returns the function that
is used when a passphrase needs to be provided by the user in
@var{passfunc}, and the first argument for this function in
@var{hook_value}. If no passphrase callback is set, or @var{ctx} is
not a valid pointer, @code{NULL} is returned in both variables.

@var{passfunc} or @var{hook_value} can be @code{NULL}. In this case,
the corresponding value will not be returned.
@end deftypefun

@node Progress Meter Callback
@subsection Progress Meter Callback
@cindex callback, progress meter
@cindex progress meter callback
@deftp {Data type} {void (*gpgme_progress_cb_t)(void *@var{hook}, const char *@var{what}, int @var{type},
int @var{current}, int @var{total})}
@tindex gpgme_progress_cb_t
The @code{gpgme_progress_cb_t} type is the type of functions usable as
progress callback function.

The arguments are specific to the crypto engine. More information
about the progress information returned from the GnuPG engine can be
found in the GnuPG source code in the file @file{doc/DETAILS} in the
section PROGRESS.
@end deftp

@end deftypefun void gpgme_set_progress_callback (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_progress_callback_t
@var{progfunc}}, @w{void *@var{hook_value}})
The function @code{gpgme_set_progress_callback} sets the function that is
used when progress information about a cryptographic operation is
available. The function @var{progfunc} needs to be implemited by the
user, and whenever it is called, it is called with its first argument
being @var{hook_value}. By default, no progress callback function
is set.
Setting a callback function allows an interactive program to display progress information about a long operation to the user.

The user can disable the use of a progress callback function by calling `gpgme_set_progress_cb` with `progfunc` being `NULL`.

```c
@deftypefun void gpgme_get_progress_cb (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_progress_cb_t *@var{progfunc}}, @w{void **@var{hook_value}})
```

The function `gpgme_get_progress_cb` returns the function that is used to inform the user about the progress made in `progfunc`, and the first argument for this function in `hook_value`. If no progress callback is set, or `ctx` is not a valid pointer, `NULL` is returned in both variables.

`progfunc` or `hook_value` can be `NULL`. In this case, the corresponding value will not be returned.

```c
@end deftypefun
```

### Status Message Callback

The `gpgme_status_cb_t` type is the type of function usable as a status message callback function.

```c
@deftp {Data type} {gpgme_error_t (*gpgme_status_cb_t)(void *@var{hook}, const char *@var{keyword}, const char *@var{args})}
```

@tindex gpgme_status_cb_t

The argument `keyword` is the name of the status message while the `args` argument contains any arguments for the status message.

If an error occurs, return the corresponding `gpgme_error_t` value. Otherwise, return `0`.

```c
@end deftp
```

```c
@deftypefun void gpgme_set_status_cb (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_status_cb_t @var{statusfunc}}, @w{void *@var{hook_value}})
```

@since{1.6.0}

The function `gpgme_set_status_cb` sets the function that is used when a status message is received from gpg to `statusfunc`. The function `statusfunc` needs to be implemented by the user, and whenever it is called, it is called with its first argument being `hook_value`. By default, no status message callback function is set.
The user can disable the use of a status message callback function by calling
@code{gpgme_set_status_cb} with @var{statusfunc} being @code{NULL}.
@end deftypefun

@deftypefun void gpgme_get_status_cb (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_status_cb_t
*@var{statusfunc}}, @w{void **@var{hook_value}})
@since{1.6.0}

The function @code{gpgme_get_status_cb} returns the function that is used to
process status messages from gpg in @var{*statusfunc}, and the first argument
for this function in @var{*hook_value}. If no status message callback is set,
or @var{ctx} is not a valid pointer, @code{NULL} is returned in both
variables.
@end deftypefun

@node Context Flags
@subsection Context Flags
@cindex flags, of a context

@deftypefun {gpgme_error_t} gpgme_set_ctx_flag (@w{gpgme_ctx_t @var{ctx}},
@w{const char *@var{name}}, @w{const char *@var{value}})
@since{1.7.0}

Some minor properties of the context can be controlled with flags set
by this function. The properties are identified by the following
values for @var{name}:

@table @code
@item "redraw"
This flag is normally not changed by the caller because GPGME sets and
clears it automatically: The flag is cleared before an operation and
set if an operation noticed that the engine has launched a Pinentry.
A Curses based application may use this information to redraw the
screen; for example:

@example
err = gpgme_op_keylist_start (ctx, "foo@example.org", 0);
while (!err)
{
    err = gpgme_op_keylist_next (ctx, &key);
    if (err)
        break;
    show_key (key);
    gpgme_key_release (key);
@endexample

Some minor properties of the context can be controlled with flags set
by this function. The properties are identified by the following
values for @var{name}:

@table @code
@item "redraw"
This flag is normally not changed by the caller because GPGME sets and
clears it automatically: The flag is cleared before an operation and
set if an operation noticed that the engine has launched a Pinentry.
A Curses based application may use this information to redraw the
screen; for example:
if ((s = gpgme_get_ctx_flag (ctx, "redraw")) && *s)
  redraw_screen ();
gpgme_release (ctx);
@end example

@item "full-status"
Using a @var{value} of "1" the status callback set by
gpgme_set_status_cb returns all status lines with the exception of
PROGRESS lines. With the default of "0" the status callback is only
called in certain situations.

@item "raw-description"
Setting the @var{value} to "1" returns human readable strings in a raw
format. For example the non breaking space characters ("~") will not
be removed from the @code{description} field of the
@code{gpgme_tofu_info_t} object.

@item "export-session-key"
Using a @var{value} of "1" specifies that the context should try to
export the symmetric session key when decrypting data. By default, or
when using an empty string or "0" for @var{value}, session keys are
not exported.

@item "override-session-key"
The string given in @var{value } is passed to the GnuPG engine to override
the session key for decryption. The format of that session key is
specific to GnuPG and can be retrieved during a decrypt operation when
the context flag "export-session-key" is enabled. Please be aware that
using this feature with GnuPG < 2.1.16 will leak the session key on
many platforms via ps(1).

@item "auto-key-retrieve"
Setting the @var{value} to "1" asks the backend to automatically
retrieve a key for signature verification if possible. Note that this
option makes a "web bug" like behavior possible. Keyserver or Web Key
Directory operators can see which keys you request, so by sending you
a message signed by a brand new key (which you naturally will not have
on your local keyring), the operator can tell both your IP address and
the time when you verified the signature.

@item "request-origin"
The string given in @var{value } is passed to the GnuPG engines to
request restrictions based on the origin of the request. Valid values
are documented in the GnuPG manual and the gpg man page under the
option @option{--request-origin}. Requires at least GnuPG 2.2.6 to have an
effect.
@item "no-symkey-cache"
For OpenPGP disable the passphrase cache used for symmetrical en- and
decryption. This cache is based on the message specific salt value.
Requires at least GnuPG 2.2.7 to have an effect.

@item "ignore-mdc-error"
This flag passes the option @option{--ignore-mdc-error} to gpg. This
can be used to force decryption of a message which failed due to a
missing integrity check. This flag must be used with great caution
and only if it is a known non-corrupted old message and the decryption
result of the former try had the decryption result flag
@code{legacy_cipher_nomdc} set. For failsafe reasons this flag is
reset after each operation.

@item "auto-key-locate"
The string given in @var{value} is passed to gpg. This can be used
to change the behavior of a @code{GPGME_KEYLIST_MODE_LOCATE} keylisting.
Valid values are documented in the GnuPG manual and the gpg man page under
the option @option{--auto-key-locate}.
Requires at least GnuPG 2.1.18.

Note: Keys retrieved through @code{auto-key-locate} are automatically
imported in the keyring.

@item trust-model
@since{1.11.2}
Change the trust-model for all GnuPG engine operations. An empty
string sets the trust-model back to the users default. If the
trust-model is not supported by GnuPG the behavior is undefined
and will likely cause all operations to fail. Example: "tofu+pgp".

This options should be used carefully with a strict version
requirement. In some versions of GnuPG setting the
trust-model changes the default trust-model for future operations.
A change in the trust-model also can have unintended side effects, like
rebuilding the trust-db.

@end table

This function returns @code{0} on success.
@end deftypefun

deftypefun {const char *} gpgme_get_ctx_flag 
(@w{gpgme_ctx_t @var{ctx}}, @
@w{const char *@var{name}})
The value of flags settable by `gpgme_set_ctx_flag` can be retrieved by this function. If `@var{name}` is unknown the function returns `NULL`. For boolean flags an empty string is returned for False and the string "1" is returned for True; either `atoi(3)` or a test for an empty string can be used to get the boolean value.

@end deftypefun

@node Locale
@cindex locale, default
@cindex locale, of a context

A locale setting can be associated with a context. This locale is passed to the crypto engine, and used for applications like the PIN entry, which is displayed to the user when entering a passphrase is required.

The default locale is used to initialize the locale setting of all contexts created afterwards.

@deftypefun gpgme_error_t gpgme_set_locale (@w{gpgme_ctx_t @var{ctx}}, @w{int @var{category}}, @w{const char *@var{value}})
@since{0.4.3}

The function `gpgme_set_locale` sets the locale of the context `@var{ctx}`, or the default locale if `@var{ctx}` is a null pointer.

The locale settings that should be changed are specified by `@var{category}`. Supported categories are `LC_CTYPE`, `LC_MESSAGES`, and `LC_ALL`, which is a wildcard you can use if you want to change all the categories at once.

The value to be used for the locale setting is `@var{value}`, which will be copied to `GPGME`'s internal data structures. `@var{value}` can be a null pointer, which disables setting the locale, and will make PIN entry and other applications use their default setting, which is usually not what you want.

Note that the settings are only used if the application runs on a text terminal, and that the settings should fit the configuration of the output terminal. Normally, it is sufficient to initialize the default value at startup.
The function returns an error if not enough memory is available.
@end deftypefun

@node Additional Logs
@subsection Additional Logs
@cindex auditlog, of the engine
@cindex auditlog

Additional logs can be associated with a context. These logs are engine specific and can be obtained with @code{gpgme_op_getauditlog}.

@deftypefun gpgme_error_t gpgme_op_getauditlog
  (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_data_t @var{output}}, @
  @w{unsigned int @var{flags}})
@end deftypefun

The function @code{gpgme_op_getauditlog} is used to obtain additional logs as specified by @var{flags} into the @var{output} data. If no log is available @code{GPG_ERR_NO_DATA} is returned.

The value in @var{flags} is a bitwise-or combination of one or multiple of the following bit values:

@table @code
@item GPGME_AUDITLOG_DIAG
  @since{1.11.2}

Obtain diagnostic output which would be written to @code{stderr} in interactive use of the engine. This can be used to provide additional diagnostic information in case of errors in other operations.

Note: If log-file has been set in the configuration the log will be empty and @code{GPG_ERR_NO_DATA} will be returned.

Implemented for: @code{GPGME_PROTOCOL_OpenPGP}

@item GPGME_AUDITLOG_DEFAULT
  @since{1.11.2}

This flag has the value 0 for compatibility reasons. Obtains additional information from the engine by issuing the @code{GETAUDITLOG} command. For @code{GPGME_PROTOCOL_CMS} this provides additional information about the X509 certificate chain.
Implemented for: @code{GPGME_PROTOCOL_CMS}

@item GPGME_AUDITLOG_HTML
@since{1.1.1}

Same as @code{GPGME_AUDITLOG_DEFAULT} but in HTML.

Implemented for: @code{GPGME_PROTOCOL_CMS}
@end table
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_getauditlog_start @
     (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_data_t @var{output}}, @
     @w{unsigned int @var{flags}})
@since{1.1.1}
This is the asynchronous variant of @code{gpgme_op_getauditlog}.
@end deftypefun

@node Key Management
@section Key Management
@cindex key management

Some of the cryptographic operations require that recipients or
signers are specified. This is always done by specifying the
respective keys that should be used for the operation. The following
section describes how such keys can be selected and manipulated.

@menu
* Key objects:: Description of the key structures.
  * Listing Keys:: Browsing the list of available keys.
  * Information About Keys:: Requesting detailed information about keys.
  * Manipulating Keys:: Operations on keys.
  * Generating Keys:: Creating new key pairs.
  * Signing Keys:: Adding key signatures to public keys.
  * Exporting Keys:: Retrieving key data from the key ring.
  * Importing Keys:: Adding keys to the key ring.
  * Deleting Keys:: Removing keys from the key ring.
  * Changing Passphrases:: Change the passphrase of a key.
  * Changing TOFU Data:: Changing data pertaining to TOFU.
  * Advanced Key Editing:: Advanced key edit operation.
@end menu

@node Key objects
@subsection Key objects
The keys are represented in GPGME by structures which may only be read by the application but never be allocated or changed. They are valid as long as the key object itself is valid.

@deftp {Data type} gpgme_key_t

The `gpgme_key_t` type is a pointer to a key object. It has the following members:

@table @code
@item gpgme_keylist_mode_t keylist_mode
@since{0.9.0}  
The keylist mode that was active when the key was retrieved.

@item unsigned int revoked : 1
This is true if the key is revoked.

@item unsigned int expired : 1
This is true if the key is expired.

@item unsigned int disabled : 1
This is true if the key is disabled.

@item unsigned int invalid : 1
This is true if the key is invalid. This might have several reasons, for a example for the S/MIME backend, it will be set during key listings if the key could not be validated due to missing certificates or unmatched policies.

@item unsigned int can_encrypt : 1
This is true if the key (ie one of its subkeys) can be used for encryption.

@item unsigned int can_sign : 1
This is true if the key (ie one of its subkeys) can be used to create data signatures.

@item unsigned int can_certify : 1
This is true if the key (ie one of its subkeys) can be used to create key certificates.

@item unsigned int can_authenticate : 1
@since{0.4.5}  
This is true if the key (ie one of its subkeys) can be used for authentication.
@item unsigned int is_qualified : 1
@since{1.1.0}

This is true if the key can be used for qualified signatures according to local government regulations.

@item unsigned int secret : 1
This is true if the key is a secret key. Note, that this will always be true even if the corresponding subkey flag may be false (offline/stub keys). This is only set if a listing of secret keys has been requested or if @code{GPGME_KEYLIST_MODE_WITH_SECRET} is active.

@item unsigned int origin : 5
@since{1.8.0}

Reserved for the origin of this key.

@item gpgme_protocol_t protocol
This is the protocol supported by this key.

@item char *issuer_serial
If @code{protocol} is @code{GPGME_PROTOCOL_CMS}, then this is the issuer serial.

@item char *issuer_name
If @code{protocol} is @code{GPGME_PROTOCOL_CMS}, then this is the issuer name.

@item char *chain_id
If @code{protocol} is @code{GPGME_PROTOCOL_CMS}, then this is the chain ID, which can be used to build the certificate chain.

@item gpgme_validity_t owner_trust
If @code{protocol} is @code{GPGME_PROTOCOL_OpenPGP}, then this is the owner trust.

@item gpgme_subkey_t subkeys
This is a linked list with the subkeys of the key. The first subkey in the list is the primary key and usually available.

@item gpgme_user_id_t uids
This is a linked list with the user IDs of the key. The first user ID in the list is the main (or primary) user ID.

@item char *fpr
@since{1.7.0}

This field gives the fingerprint of the primary key. Note that
this is a copy of the fingerprint of the first subkey. For an incomplete key (for example from a verification result) a subkey may be missing but this field may be set nevertheless.

@example unsigned long last_update
@since{1.8.0}

Reserved for the time of the last update of this key.

@end table
@end deftp

@deftp {Data type} gpgme_subkey_t
@since{1.5.0}

The @code{gpgme_subkey_t} type is a pointer to a subkey structure. Subkeys are one component of a @code{gpgme_key_t} object. In fact, subkeys are those parts that contains the real information about the individual cryptographic keys that belong to the same key object. One @code{gpgme_key_t} can contain several subkeys. The first subkey in the linked list is also called the primary key.

The subkey structure has the following members:

@table @code
@item gpgme_subkey_t next
This is a pointer to the next subkey structure in the linked list, or @code{NULL} if this is the last element.

@item unsigned int revoked : 1
This is true if the subkey is revoked.

@item unsigned int expired : 1
This is true if the subkey is expired.

@item unsigned int disabled : 1
This is true if the subkey is disabled.

@item unsigned int invalid : 1
This is true if the subkey is invalid.

@item unsigned int can_encrypt : 1
This is true if the subkey can be used for encryption.

@item unsigned int can_sign : 1
This is true if the subkey can be used to create data signatures.
@item unsigned int can_certify : 1
This is true if the subkey can be used to create key certificates.

@item unsigned int can_authenticate : 1
@since{0.4.5}
This is true if the subkey can be used for authentication.

@item unsigned int is_qualified : 1
@since{1.1.0}
This is true if the subkey can be used for qualified signatures according to local government regulations.

@item unsigned int is_de_vs : 1
@since{1.8.0}
This is true if the subkey complies with the rules for classified information in Germany at the restricted level (VS-NfD). This are currently RSA keys of at least 2048 bits or ECDH/ECDSA keys using a Brainpool curve.

@item unsigned int secret : 1
This is true if the subkey is a secret key. Note that it will be false if the key is actually a stub key; i.e. a secret key operation is currently not possible (offline-key). This is only set if a listing of secret keys has been requested or if @code{GPGME_KEYLIST_MODE_WITH_SECRET} is active.

@item gpgme_pubkey_algo_t pubkey_algo
This is the public key algorithm supported by this subkey.

@item unsigned int length
This is the length of the subkey (in bits).

@item char *keyid
This is the key ID of the subkey in hexadecimal digits.

@item char *fpr
This is the fingerprint of the subkey in hexadecimal digits, if available.

@item char *keygrip
@since{1.7.0}
The keygrip of the subkey in hex digit form or @code{NULL} if not available.
@item long int timestamp
This is the creation timestamp of the subkey. This is -1 if the
timestamp is invalid, and 0 if it is not available.

@item long int expires
This is the expiration timestamp of the subkey, or 0 if the subkey
does not expire.

@item unsigned int is_cardkey: 1
@since{1.2.0}
True if the secret key is stored on a smart card.

@item char *card_number
@since{1.2.0}
The serial number of a smart card holding this key or @code{NULL}.

@item char *curve
For ECC algorithms the name of the curve.

@end table
@end deftp
@deftp {Data type} gpgme_user_id_t
A user ID is a component of a @code{gpgme_key_t} object. One key can
have many user IDs. The first one in the list is the main (or
primary) user ID.

The user ID structure has the following members.

@table @code
@item gpgme_user_id_t next
This is a pointer to the next user ID structure in the linked list, or
@code{NULL} if this is the last element.

@item unsigned int revoked : 1
This is true if the user ID is revoked.

@item unsigned int invalid : 1
This is true if the user ID is invalid.

@item gpgme_validity_t validity
This specifies the validity of the user ID.

@item char *uid
This is the user ID string.
<table>
<thead>
<tr>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>char *name</td>
<td>This is the name component of @code{uid}, if available.</td>
</tr>
<tr>
<td>char *comment</td>
<td>This is the comment component of @code{uid}, if available.</td>
</tr>
<tr>
<td>char *email</td>
<td>This is the email component of @code{uid}, if available.</td>
</tr>
<tr>
<td>char *address;</td>
<td>The mail address (addr-spec from RFC-5322) of the user ID string.</td>
</tr>
<tr>
<td></td>
<td>This is generally the same as the @code{email} part of this structure</td>
</tr>
<tr>
<td></td>
<td>but might be slightly different. If no mail address is available</td>
</tr>
<tr>
<td></td>
<td>@code{NULL} is stored.</td>
</tr>
<tr>
<td>gpgme_tofu_info_t</td>
<td>If not @code{NULL} information from the TOFU database pertaining to</td>
</tr>
<tr>
<td></td>
<td>this user id.</td>
</tr>
<tr>
<td>gpgme_key_sig_t</td>
<td>This is a linked list with the signatures on this user ID.</td>
</tr>
<tr>
<td>unsigned int origin: 5</td>
<td>Reserved for the origin of this user ID.</td>
</tr>
<tr>
<td>unsigned long last_update</td>
<td>Reserved for the time of the last update of this user ID.</td>
</tr>
</tbody>
</table>

The @code{gpgme_tofu_info_t} type is a pointer to a tofu info structure. Tofu info structures are one component of a @code{gpgme_user_id_t} object, and provide information from the TOFU database pertaining to the user ID.
The tofu info structure has the following members:

@table @code
@item gpgme_key_sig_t next
This is a pointer to the next tofu info structure in the linked list, or @code{NULL} if this is the last element.

@item unsigned int validity : 3
This is the TOFU validity. It can have the following values:

@item 0
The value @code{0} indicates a conflict.

@item 1
The value @code{1} indicates a key without history.

@item 2
The value @code{2} indicates a key with too little history.

@item 3
The value @code{3} indicates a key with enough history for basic trust.

@item unsigned int policy : 4
This is the TOFU policy, see @code{gpgme_tofu_policy_t}.

@item unsigned short signcount
This is the number of signatures seen for this binding (or @code{USHRT_MAX} if there are more than that).

@item unsigned short encrcount
This is the number of encryptions done with this binding (or @code{USHRT_MAX} if there are more than that).

@item unsigned long signfirst
Number of seconds since Epoch when the first signature was seen with this binding.

@item unsigned long signlast
Number of seconds since Epoch when the last signature was seen with this binding.

@item unsigned long encrfirst
Number of seconds since Epoch when the first encryption was done with this binding.

@item unsigned long encrlast
Number of seconds since Epoch when the last encryption was done with this binding.

@item char *description
A human-readable string summarizing the TOFU data (or NULL).

@end table
@end deftp

@deftp [Data type] gpgme_key_sig_t

The @code{gpgme_key_sig_t} type is a pointer to a key signature structure. Key signatures are one component of a @code{gpgme_key_t} object, and validate user IDs on the key in the OpenPGP protocol.

The signatures on a key are only available if the key was retrieved via a listing operation with the @code{GPGME_KEYLIST_MODE_SIGS} mode enabled, because it can be expensive to retrieve all signatures of a key.

The signature notations on a key signature are only available if the key was retrieved via a listing operation with the @code{GPGME_KEYLIST_MODE_SIG_NOTATIONS} mode enabled, because it can be expensive to retrieve all signature notations.

The key signature structure has the following members:

@table @code
@item gpgme_key_sig_t next
This is a pointer to the next key signature structure in the linked list, or @code{NULL} if this is the last element.

@item unsigned int revoked : 1
This is true if the key signature is a revocation signature.

@item unsigned int expired : 1
This is true if the key signature is expired.

@item unsigned int invalid : 1
This is true if the key signature is invalid.

@item unsigned int exportable : 1
This is true if the key signature is exportable.
@item gpgme_pubkey_algo_t pubkey_algo
This is the public key algorithm used to create the signature.

@item char *keyid
This is the key ID of the key (in hexadecimal digits) used to create the signature.

@item long int timestamp
This is the creation timestamp of the key signature. This is -1 if the timestamp is invalid, and 0 if it is not available.

@item long int expires
This is the expiration timestamp of the key signature, or 0 if the key signature does not expire.

@item gpgme_error_t status
This is the status of the signature and has the same meaning as the member of the same name in a @code{gpgme_signature_t} object.

@item unsigned int sig_class
This specifies the signature class of the key signature. The meaning is specific to the crypto engine.

@item char *uid
This is the main user ID of the key used to create the signature.

@item char *name
This is the name component of @code{uid}, if available.

@item char *comment
This is the comment component of @code{uid}, if available.

@item char *email
This is the email component of @code{uid}, if available.

@item gpgme_sig_notation_t notations
This is a linked list with the notation data and policy URLs.
@end table
@end deftp

@node Listing Keys
@subsection Listing Keys
@cindex listing keys
@cindex key listing
@cindex key listing, start

@node Listing Keys
@subsection Listing Keys
@cindex listing keys
@cindex key listing
@cindex key listing, start
The function @code{gpgme_op_keylist_start} initiates a key listing operation inside the context @var{ctx}. It sets everything up so that subsequent invocations of @code{gpgme_op_keylist_next} return the keys in the list.

If @var{pattern} is @code{NULL}, all available keys are returned. Otherwise, @var{pattern} contains an engine specific expression that is used to limit the list to all keys matching the pattern. Note that the total length of the pattern is restricted to an engine-specific maximum (a couple of hundred characters are usually accepted). The pattern should be used to restrict the search to a certain common name or user, not to list many specific keys at once by listing their fingerprints or key IDs.

If @var{secret_only} is not @code{0}, the list is restricted to secret keys only.

The context will be busy until either all keys are received (and @code{gpgme_op_keylist_next} returns @code{GPG_ERR_EOF}), or @code{gpgme_op_keylist_end} is called to finish the operation.

The function returns the error code @code{GPG_ERR_INV_VALUE} if @var{ctx} is not a valid pointer, and passes through any errors that are reported by the crypto engine support routines.

The function @code{gpgme_op_keylist_ext_start} initiates an extended key listing operation inside the context @var{ctx}. It sets everything up so that subsequent invocations of @code{gpgme_op_keylist_next} return the keys in the list.

If @var{pattern} or @var{*pattern} is @code{NULL}, all available keys are returned. Otherwise, @var{pattern} is a @code{NULL} terminated array of strings that are used to limit the list to all keys matching at least one of the patterns verbatim. Note that the total length of all patterns is restricted to an engine-specific maximum (the exact limit also depends on the number of patterns and amount of quoting required, but a couple of hundred characters are usually accepted). Patterns should be used to restrict the search to a certain common name or user.
name or user, not to list many specific keys at once by listing their
fingerprints or key IDs.

If @var{secret_only} is not @code{0}, the list is restricted to secret
keys only.

The value of @var{reserved} must be @code{0}.

The context will be busy until either all keys are received (and
@code{gpgme_op_keylist_next} returns @code{GPG_ERR_EOF}), or
@code{gpgme_op_keylist_end} is called to finish the operation.

The function returns the error code @code{GPG_ERR_INV_VALUE} if
@var{ctx} is not a valid pointer, and passes through any errors that
are reported by the crypto engine support routines.
@end deftypefun

deftypefun gpgme_error_t gpgme_op_keylist_from_data_start @
  (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_data_t @var{data}}, @w{int @var{reserved}})

@since{1.8.0}

The function @code{gpgme_op_keylist_from_data_start} initiates a key
listing operation inside the context @var{ctx}. In contrast to the
other key listing operation the keys are read from the supplied
@var{data} and not from the local key database. The keys are also not
imported into the local key database. The function sets everything up
so that subsequent invocations of @code{gpgme_op_keylist_next} return
the keys from @var{data}.

The value of @var{reserved} must be @code{0}.

This function requires at least GnuPG version 2.1.14 and currently
works only with OpenPGP keys.

The context will be busy until either all keys are received (and
@code{gpgme_op_keylist_next} returns @code{GPG_ERR_EOF}), or
@code{gpgme_op_keylist_end} is called to finish the operation.
While the context is busy @var{data} may not be released.

The function returns the error code @code{GPG_ERR_INV_VALUE} if
@var{ctx} is not a valid pointer, and passes through any errors that
are reported by the crypto engine support routines.
@end deftypefun

deftypefun gpgme_error_t gpgme_op_keylist_next (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_key_t
The function `gpgme_op_keylist_next` returns the next key in the list created by a previous `gpgme_op_keylist_start` operation in the context `ctx`. The key will have one reference for the user. \ref{Manipulating Keys}.

This is the only way to get at `gpgme_key_t` objects in \acronym{GPGME}.

If the last key in the list has already been returned, `gpgme_op_keylist_next` returns `GPG_ERR_EOF`.

The function returns the error code `GPG_ERR_INV_VALUE` if `ctx` or `r_key` is not a valid pointer, and `GPG_ERR_ENOMEM` if there is not enough memory for the operation.

The following example illustrates how all keys containing a certain string (`g10code`) can be listed with their key ID and the name and email address of the main user ID:

```c
if (!err)
  |
  err = gpgme_op_keylist_start (ctx, "g10code", 0);
while (!err)
  |
  err = gpgme_op_keylist_next (ctx, &key);
if (err)
break;
printf ("%s:", key->subkeys->keyid);
if (key->uids && key->uids->name)
    printf (" %s", key->uids->name);
if (key->uids && key->uids->email)
    printf (" <%s>", key->uids->email);
putchar (\n);
gpgme_key_release (key);
}
gpgme_release (ctx);
}
if (gpg_err_code (err) != GPG_ERR_EOF)
{
    fprintf (stderr, "can not list keys: %s\n", gpgme_strerror (err));
    exit (1);
}
@end example

@deftp {Data type} {gpgme_keylist_result_t}
This is a pointer to a structure used to store the result of a
@code{gpgme_op_keylist_*} operation. After successfully ending a key
listing operation, you can retrieve the pointer to the result with
@code{gpgme_op_keylist_result}. The structure contains the following
member:

@table @code
@item unsigned int truncated : 1
This is true if the crypto backend had to truncate the result, and
less than the desired keys could be listed.
@end table
@end deftp

@deftypefun gpgme_keylist_result_t gpgme_op_keylist_result (@w{gpgme_ctx_t @var{ctx}})
The function @code{gpgme_op_keylist_result} returns a
@code{gpgme_keylist_result_t} pointer to a structure holding the
result of a @code{gpgme_op_keylist_*} operation. The pointer is only
valid if the last operation on the context was a key listing
operation, and if this operation finished successfully. The returned
pointer is only valid until the next operation is started on the
context.
@end deftypefun

In a simple program, for which a blocking operation is acceptable, the
following function can be used to retrieve a single key.

@deftypefun gpgme_error_t gpgme_get_key (@w{gpgme_ctx_t @var{ctx}}, @w{const char *@var{fpr}},
@w{gpgme_key_t *@var{r_key}}, @w{int @var{secret}})
The function @code{gpgme_get_key} gets the key with the fingerprint
(or key ID) @var{fpr} from the crypto backend and return it in @var{r_key}. If @var{secret} is true, get the secret key. The currently active keylist mode is used to retrieve the key. The key will have one reference for the user.

If the key is not found in the keyring, @code{gpgme_get_key} returns the error code @code{GPG_ERR_EOF} and *@var{r_key} will be set to @code{NULL}.

The function returns the error code @code{GPG_ERR_INV_VALUE} if @var{ctx} or @var{r_key} is not a valid pointer or @var{fpr} is not a fingerprint or key ID. @code{GPG_ERR_AMBIGUOUS_NAME} if the key ID was not a unique specifier for a key, and @code{GPG_ERR_ENOMEM} if at some time during the operation there was not enough memory available.

@end deftypefun

@node Information About Keys
@subsection Information About Keys
@cindex key, information about
@cindex key, attributes
@cindex attributes, of a key

Please see the beginning of this section for more information about @code{gpgme_key_t} objects.

@deftp {Data type} gpgme_validity_t
The @code{gpgme_validity_t} type is used to specify the validity of a user ID in a key. The following validities are defined:

@table @code
@item GPGME_VALIDITY_UNKNOWN
The user ID is of unknown validity. The string representation of this validity is ``?''.

@item GPGME_VALIDITY_UNDEFINED
The validity of the user ID is undefined. The string representation of this validity is ``q''.

@item GPGME_VALIDITY_NEVER
The user ID is never valid. The string representation of this validity is ``n''.

@item GPGME_VALIDITY_MARGINAL
The user ID is marginally valid. The string representation of this validity is ``m''.

@item GPGME_VALIDITY_FULL

The user ID is fully valid. The string representation of this validity is "$f$".

@item GPGME_VALIDITY_ULTIMATE
The user ID is ultimately valid. The string representation of this validity is "$u$".
@end table
@end deftp

@node Manipulating Keys
@subsection Manipulating Keys
@cindex key, manipulation
@deftypefun void gpgme_key_ref (@{gpgme_key_t @var{key}})
The function @{gpgme_key_ref} acquires an additional reference for the key @var{key}.
@end deftypefun

@deftypefun void gpgme_key_unref (@{gpgme_key_t @var{key}})
The function @{gpgme_key_unref} releases a reference for the key @var{key}. If this was the last reference, the key will be destroyed and all resources associated to it will be released.
@end deftypefun

@node Generating Keys
@subsection Generating Keys
@cindex key, creation
@cindex key ring, add
GPGME provides a set of functions to create public key pairs. Most of these functions require the use of GnuPG 2.1 and later; for older GnuPG versions the @{gpgme_op_genkey} function can be used. Existing code which wants to update to the new functions or new code which shall supports older GnuPG versions may try the new functions first and provide a fallback to the old function if the error code @{GPG_ERR_NOT_SUPPORTED} is received.

@deftypefun gpgme_error_t gpgme_op_createkey (@{gpgme_ctx_t @var{ctx}}, @{const char *@var{userid}}, @{const char *@var{algo}}, @

@deftypefun gpgme_error_t gpgme_op_createkey (@{gpgme_ctx_t @var{ctx}}, @{const char *@var{userid}}, @{const char *@var{algo}}.

@c
@c gpgme_op_createkey
@c
@deftypefun gpgme_error_t gpgme_op_createkey @
( @{gpgme_ctx_t @var{ctx}}, @
 @{const char *@var{userid}}, @
 @{const char *@var{algo}}.

@c
The function `gpgme_op_createkey` generates a new key for the protocol active in the context `ctx`. As of now this function does only work for OpenPGP and requires at least version 2.1.13 of GnuPG.

`userid` is commonly the mail address associated with the key. GPGME does not require a specific syntax but if more than a mail address is given, RFC-822 style format is suggested. The value is expected to be in UTF-8 encoding (i.e. no IDN encoding for mail addresses). This is a required parameter.

`algo` specifies the algorithm for the new key (actually a keypair of public and private key). For a list of supported algorithms, see the GnuPG manual. If `algo` is `NULL` or the string "default", the key is generated using the default algorithm of the engine. If the string "future-default" is used the engine may use an algorithm which is planned to be the default in a future release of the engine; however existing implementation of the protocol may not be able to already handle such future algorithms. For the OpenPGP protocol, the specification of a default algorithm, without requesting a non-default usage via `flags`, triggers the creation of a primary key plus a secondary key (subkey).

`reserved` must be set to zero.

`expires` specifies the expiration time in seconds. If you supply 0, a reasonable expiration time is chosen. Use the flag `GPGME_CREATE_NOEXPIRE` to create keys that do not expire. Note that this parameter takes an unsigned long value and not a `time_t` to avoid problems on systems which use a signed 32 bit `time_t`. Note further that the OpenPGP protocol uses 32 bit values for timestamps and thus can only encode dates up to the year 2106.

`extrakey` is currently not used and must be set to `NULL`. A future version of GPGME may use this parameter to create X.509 keys.

`flags` can be set to the bit-wise OR of the following flags:

- `GPGME_CREATE_SIGN`
Do not create the key with the default capabilities (key usage) of the requested algorithm but use those explicitly given by these flags: "signing", "encryption", "certification", or "authentication".
The allowed combinations depend on the algorithm.

If any of these flags are set and a default algorithm has been selected only one key is created in the case of the OpenPGP protocol.

Request generation of the key without password protection.

For an X.509 key do not create a CSR but a self-signed certificate. This has not yet been implemented.

Do not store the created key in the local key database. This has not yet been implemented.

Return the public or secret key as part of the result structure. This has not yet been implemented.

The engine does not allow the creation of a key with a user ID already existing in the local key database. This flag can be used to override this check.
Request generation of keys that do not expire.

@end table

After the operation completed successfully, information about the created key can be retrieved with `gpgme_op_genkey_result`.

The function returns zero on success, `GPG_ERR_NOT_SUPPORTED` if the engine does not support the command, or a bunch of other error codes.

@end deftypefun

```c
@deftypefun gpgme_error_t gpgme_op_createkey_start (@w{gpgme_ctx_t @var{ctx}}, @w{const char *@var{userid}}, @w{const char *@var{algo}}, @w{unsigned long @var{reserved}}, @w{unsigned long @var{expires}}, @w{gpgme_key_t @var{extrakey}}, @w{unsigned int @var{flags}});
@since{1.7.0}
```

The function `gpgme_op_createkey_start` initiates a `gpgme_op_createkey` operation; see there for details. It must be completed by calling `gpgme_wait` on the context.  
@end deftypefun

```c
@deftypefun gpgme_error_t gpgme_op_createsubkey (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_key_t @var{key}}, @w{const char *@var{algo}}, @w{unsigned long @var{reserved}}, @w{unsigned long @var{expires}}, @w{unsigned int @var{flags}});
@since{1.7.0}
```

The function `gpgme_op_createsubkey` creates and adds a new subkey to the primary OpenPGP key given by `@var{KEY}`. The only allowed protocol in `@var{ctx}` is `GPGME_PROTOCOL_OPENPGP`. 
@end deftypefun
Subkeys (aka secondary keys) are a concept in the OpenPGP protocol to bind several keys to a primary key. As of now this function requires at least version 2.1.13 of GnuPG.

@var{key} specifies the key to operate on.

@var{algo} specifies the algorithm for the new subkey. For a list of supported algorithms, see the GnuPG manual. If @var{algo} is @code{NULL} or the string "default", the subkey is generated using the default algorithm for an encryption subkey of the engine. If the string "future-default" is used the engine may use an encryption algorithm which is planned to be the default in a future release of the engine; however existing implementation of the protocol may not be able to already handle such future algorithms.

@var{reserved} must be set to zero.

@var{expires} specifies the expiration time in seconds. If you supply 0, a reasonable expiration time is chosen. Use the flag @code{GPGME_CREATE_NOEXPIRE} to create keys that do not expire. Note that this parameter takes an unsigned long value and not a @code{time_t} to avoid problems on systems which use a signed 32 bit @code{time_t}. Note further that the OpenPGP protocol uses 32 bit values for timestamps and thus can only encode dates up to the year 2106.

@var{flags} takes the same values as described above for @code{gpgme_op_createkey}.

After the operation completed successfully, information about the created key can be retrieved with @code{gpgme_op_genkey_result}.

The function returns zero on success, @code{GPG_ERR_NOT_SUPPORTED} if the engine does not support the command, or a bunch of other error codes.

@end deftypefun

@end deftypefun gpgme_error_t gpgme_op_createsubkey_start @
  (@w{gpgme_ctx_t @var{ctx}}, @
   @w{gpgme_key_t @var{key}}, @
   @w{const char *@var{algo}}, @
   @w{unsigned long @var{reserved}}, @
   @w{unsigned long @var{expires}}, @
   @w{unsigned int @var{flags}});

  @since{1.7.0}
The function @code{gpgme_op_createsubkey_start} initiates a @code{gpgme_op_adduid} operation; see there for details. It must be completed by calling @code{gpgme_wait} on the context. @xref{Waiting For Completion}.
@end deftypefun

@c
@c gpgme_op_adduid
@c
@deftypefun gpgme_error_t gpgme_op_adduid (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_key_t @var{key}}, @w{const char *@var{userid}}, @w{unsigned int @var{flags}});
@c
@since{1.7.0}

The function @code{gpgme_op_adduid} adds a new user ID to the OpenPGP key given by @var{KEY}. Adding additional user IDs after key creation is a feature of the OpenPGP protocol and thus the protocol for the context @var{ctx} must be set to OpenPGP. As of now this function requires at least version 2.1.13 of GnuPG.

@var{key} specifies the key to operate on.

@var{userid} is the user ID to add to the key. A user ID is commonly the mail address to be associated with the key. GPGME does not require a specific syntax but if more than a mail address is given, RFC-822 style format is suggested. The value is expected to be in UTF-8 encoding (i.e. no IDN encoding for mail addresses). This is a required parameter.

@var{flags} are currently not used and must be set to zero.

The function returns zero on success, @code{GPG_ERR_NOT_SUPPORTED} if the engine does not support the command, or a bunch of other error codes.
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_adduid_start (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_key_t @var{key}}, @w{const char *@var{userid}}, @w{unsigned int @var{flags}});
The function `gpgme_op_adduid_start` initiates a `gpgme_op_adduid` operation; see there for details. It must be completed by calling `gpgme_wait` on the context. \[\text{@xref{Waiting For Completion}}.\]

The function `gpgme_op_revuid` revokes a user ID from the OpenPGP key given by \texttt{key}. Revoking user IDs after key creation is a feature of the OpenPGP protocol and thus the protocol for the context \texttt{ctx} must be set to OpenPGP. As of now this function requires at least version 2.1.13 of GnuPG.

\texttt{key} specifies the key to operate on.

\texttt{userid} is the user ID to be revoked from the key. The user ID must be given verbatim because the engine does an exact and case sensitive match. Thus the \texttt{uid} field from the user ID object (\texttt{gpgme_user_id_t}) is to be used. This is a required parameter.

\texttt{flags} are currently not used and must be set to zero.

Note that the engine won't allow to revoke the last valid user ID. To change a user ID is better to first add the new user ID, then revoke the old one, and finally publish the key.

The function returns zero on success, `GPG_ERR_NOT_SUPPORTED` if the engine does not support the command, or a bunch of other error codes.

The function `gpgme_op_revuid_start` initiates a `gpgme_op_revuid` operation; see there for details. It must be completed by calling `gpgme_wait` on the context. \[\text{@xref{Waiting For Completion}}.\]
The function `gpgme_op_revuid_start` initiates a `gpgme_op_revuid` operation; see there for details. It must be completed by calling `gpgme_wait` on the context. \xref{Waiting For Completion}.

The function `gpgme_op_set_uid_flag` is used to set flags on a user ID from the OpenPGP key given by `key`. Setting flags on user IDs after key creation is a feature of the OpenPGP protocol and thus the protocol for the context `ctx` must be set to OpenPGP.

This function sets the primary flag on the given user ID. All other primary key flag on other user IDs are removed. `value` must be given as NULL. For technical reasons this functions bumps the creation timestamp of all affected self-signatures up by one second.
At least GnuPG version 2.1.20 is required.

The function returns zero on success, \code{GPG_ERR_NOT_SUPPORTED} if the engine does not support the command, or a bunch of other error codes.

The function \code{gpgme_op_set_uid_flag_start} initiates a \code{gpgme_op_set_uid_flag} operation; see there for details. It must be completed by calling \code{gpgme_wait} on the context.

The function \code{gpgme_op_genkey} generates a new key pair in the context \var{ctx}. The meaning of \var{public} and \var{secret} depends on the crypto backend.

GPG does not support \var{public} and \var{secret}, they should be \code{NULL}. GnuPG will generate a key pair and add it to the standard key ring. The fingerprint of the generated key is available with \code{gpgme_op_genkey_result}.

GpgSM requires \var{public} to be a writable data object. GpgSM will generate a secret key (which will be stored by \command{gpg-agent}), and return a certificate request in \var{public}, which then needs to be signed by the certification authority and imported before it can be
used. GpgSM does not make the fingerprint available.

The argument @var{parms} specifies parameters for the key in an string that looks something like XML. The details about the format of @var{parms} are specific to the crypto engine used by @var{ctx}. The first line of the parameters must be @code{<GnupgKeyParams format="internal"}> and the last line must be @code{</GnupgKeyParams>}. Every line in between the first and last lines is treated as a Header: Value pair. In particular, no XML escaping is necessary if you need to include the characters @code{<}, @code{>}, or @code{&}.

Here is an example for GnuPG as the crypto engine (all parameters of OpenPGP key generation are documented in the GPG manual):

@example
<GnupgKeyParms format="internal">
Key-Type: default
Subkey-Type: default
Name-Real: Joe Tester
Name-Comment: with stupid passphrase
Name-Email: joe@foo.bar
Expire-Date: 0
Passphrase: abc
</GnupgKeyParms>
@end example

Here is an example for GpgSM as the crypto engine (all parameters of OpenPGP key generation are documented in the GPGSM manual):

@example
<GnupgKeyParms format="internal">
Key-Type: RSA
Key-Length: 1024
Name-DN: C=de,O=g10 code,OU=Testlab,CN=Joe 2 Tester
Name-Email: joe@foo.bar
</GnupgKeyParms>
@end example

Strings should be given in UTF-8 encoding. The only format supported for now is `"internal". The content of the @code{GnupgKeyParms} container is passed verbatim to the crypto backend. Control statements are not allowed.

After the operation completed successfully, the result can be retrieved with @code{gpgme_op_genkey_result}. The function returns the error code @code{GPG_ERR_NO_ERROR} if the
operation could be started successfully, @code{GPG_ERR_INV_VALUE} if @var{parms} is not a well-formed string (e.g. does not have the expected tag-like headers and footers), @code{GPG_ERR_NOT_SUPPORTED} if @var{public} or @var{secret} is not valid, and @code{GPG_ERR_GENERAL} if no key was created by the backend.
@end deftypefun

@end deftypefun

@deftypefun gpgme_error_t gpgme_op_genkey_start (@w{gpgme_ctx_t @var{ctx}}, @w{const char *@var{parms}}, @w{gpgme_data_t @var{public}}, @w{gpgme_data_t @var{secret}})

The function @code{gpgme_op_genkey_start} initiates a @code{gpgme_op_genkey} operation. It can be completed by calling @code{gpgme_wait} on the context. @xref{Waiting For Completion}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the operation could be started successfully, @code{GPG_ERR_INV_VALUE} if @var{parms} is not a valid XML string, and @code{GPG_ERR_NOT_SUPPORTED} if @var{public} or @var{secret} is not @code{NULL}.
@end deftypefun

@c
@c gpgme_op_genkey_result
@c
@deftype {Data type} {gpgme_genkey_result_t}

This is a pointer to a structure used to store the result of a @code{gpgme_op_genkey} operation. After successfully generating a key, you can retrieve the pointer to the result with @code{gpgme_op_genkey_result}. The structure contains the following members:

@table @code
@item unsigned int primary : 1
This flag is set to 1 if a primary key was created and to 0 if not.

@item unsigned int sub : 1
This flag is set to 1 if a subkey was created and to 0 if not.

@item unsigned int uid : 1
This flag is set to 1 if a user ID was created and to 0 if not.

@item char *fpr
This is the fingerprint of the key that was created. If both a primary and a subkey were generated, the fingerprint of the primary key will be returned. If the crypto engine does not provide the
fingerprint, @code{fpr} will be a null pointer.

@item gpgme_data_t pubkey
@since{1.7.0}

This will eventually be used to return the public key. It is currently not used.

@item gpgme_data_t seckey
@since{1.7.0}

This will eventually be used to return the secret key. It is currently not used.

@end table
@end deftp

@deftypefun gpgme_genkey_result_t gpgme_op_genkey_result (@w{gpgme_ctx_t @var{ctx}})

The function @code{gpgme_op_genkey_result} returns a @code{gpgme_genkey_result_t} pointer to a structure holding the result of a @code{gpgme_op_genkey} operation. The pointer is only valid if the last operation on the context was a @code{gpgme_op_genkey} or @code{gpgme_op_genkey_start} operation, and if this operation finished successfully. The returned pointer is only valid until the next operation is started on the context.

@end deftypefun

@c
@c SIGNING KEYS
@c
@node Signing Keys
@subsection Signing Keys
@cindex key, signing

Key signatures are a unique concept of the OpenPGP protocol. They can be used to certify the validity of a key and are used to create the Web-of-Trust (WoT). Instead of using the @code{gpgme_op_interact} function along with a finite state machine, GPGME provides a convenient function to create key signatures when using modern GnuPG versions.

@c
@c gpgme_op_keysign
@c

The function `gpgme_op_keysign` adds a new key signature to the public key `key`. This function requires at least version 2.1.12 of GnuPG.

`ctx` is the usual context which describes the protocol to use (which must be OpenPGP) and has also the list of signer keys to be used for the signature. The common case is to use the default key for signing other keys. If another key or more than one key shall be used for a key signature, `gpgme_signers_add` can be used. `xref{Selecting Signers}`.

`key` specifies the key to operate on.

`userid` selects the user ID or user IDs to be signed. If `userid` is set to `NULL` all valid user IDs are signed. The user ID must be given verbatim because the engine does an exact and case sensitive match. Thus the `uid` field from the user ID object (`gpgme_user_id_t`) is to be used. To select more than one user ID put them all into one string separated by linefeeds characters (`\n`) and set the flag `GPGME_KEYSIGN_LFSEP`.

`expires` specifies the expiration time of the new signature in seconds. The common case is to use 0 to not set an expiration date. However, if the configuration of the engine defines a default expiration for key signatures, that is still used unless the flag `GPGME_KEYSIGN_NOEXPIRE` is used. Note that this parameter takes an unsigned long value and not a `time_t` to avoid problems on systems which use a signed 32 bit `time_t`. Note further that the OpenPGP protocol uses 32 bit values for timestamps and thus can only encode dates up to the year 2106.

`flags` can be set to the bit-wise OR of the following flags:

`GPGME_KEYSIGN_LOCAL`  
`since{1.7.0}`

Instead of creating an exportable key signature, create a key signature which is marked as non-exportable.
Although linefeeds are uncommon in user IDs this flag is required to explicitly declare that \texttt{userid} may contain several linefeed separated user IDs.

Force the creation of a key signature without an expiration date. This overrides \texttt{expire} and any local configuration of the engine.

The function returns zero on success, \texttt{GPG_ERR_NOT_SUPPORTED} if the engine does not support the command, or a bunch of other error codes.

The function \texttt{gpgme_op_keysign_start} initiates a \texttt{gpgme_op_keysign} operation; see there for details. It must be completed by calling \texttt{gpgme_wait} on the context.

Exporting keys means the same as running \texttt{gpg} with the command \texttt{--export}. However, a mode flag can be used to change the way
the export works. The available mode flags are described below, they may be or-ed together.

@table @code

@item GPGME_EXPORT_MODE_EXTERN
If this bit is set, the output is send directly to the default keyserver. This is currently only allowed for OpenPGP keys. It is good practise to not send more than a few dozens key to a keyserver at one time. Using this flag requires that the @var{keydata} argument of the export function is set to @code{NULL}.

@item GPGME_EXPORT_MODE_MINIMAL
@since{1.3.1}
If this bit is set, the smallest possible key is exported. For OpenPGP keys it removes all signatures except for the latest self-signatures. For X.509 keys it has no effect.

@item GPGME_EXPORT_MODE_SECRET
@since{1.6.0}
Instead of exporting the public key, the secret key is exported. This may not be combined with @code{GPGME_EXPORT_MODE_EXTERN}. For X.509 the export format is PKCS#8.

@item GPGME_EXPORT_MODE_RAW
@since{1.6.0}
If this flag is used with @code{GPGME_EXPORT_MODE_SECRET} for an X.509 key the export format will be changed to PKCS#1. This flag may not be used with OpenPGP.

@item GPGME_EXPORT_MODE_PKCS12
@since{1.6.0}
If this flag is used with @code{GPGME_EXPORT_MODE_SECRET} for an X.509 key the export format will be changed to PKCS#12 which also includes the certificate. This flag may not be used with OpenPGP.

@item GPGME_EXPORT_MODE_NOUID
@since{1.12.0 - experimental}
Do not export user ids. Works only with certain gpg version.

@end table
The function `gpgme_op_export` extracts public keys and returns them in the data buffer `@var{keydata}`. The output format of the key data returned is determined by the @acronym{ASCII} armor attribute set for the context `@var{ctx}`, or, if that is not set, by the encoding specified for `@var{keydata}`.

If `@var{pattern}` is `@code{NULL}`, all available keys are returned. Otherwise, `@var{pattern}` contains an engine specific expression that is used to limit the list to all keys matching the pattern.

`@var{mode}` is usually 0; other values are described above.

The function returns the error code `@code{GPG_ERR_NO_ERROR}` if the operation completed successfully, `@code{GPG_ERR_INV_VALUE}` if `@var{keydata}` is not a valid empty data buffer, and passes through any errors that are reported by the crypto engine support routines.

The function `gpgme_op_export_start` initiates a `gpgme_op_export` operation. It can be completed by calling `gpgme_wait` on the context. @xref{Waiting For Completion}.

The function returns the error code `@code{GPG_ERR_NO_ERROR}` if the operation could be started successfully, and `@code{GPG_ERR_INV_VALUE}` if `@var{keydata}` is not a valid empty data buffer.

The function `gpgme_op_export_ext` extracts public keys and returns them in the data buffer `@var{keydata}`. The output format of the key data returned is determined by the @acronym{ASCII} armor attribute set for the context `@var{ctx}`, or, if that is not set, by the encoding specified for `@var{keydata}`.

If `@var{pattern}` or `@var{*pattern}` is `@code{NULL}`, all available keys are returned. Otherwise, `@var{pattern}` is a `@code{NULL}` terminated array of strings that are used to limit the list to all keys matching at least one of the patterns verbatim.

`@var{mode}` is usually 0; other values are described above.

The function returns the error code `@code{GPG_ERR_NO_ERROR}` if the
The function `gpgme_op_export_ext_start` initiates a `gpgme_op_export_ext` operation. It can be completed by calling `gpgme_wait` on the context. @xref{Waiting For Completion}.

The function returns the error code `GPG_ERR_NO_ERROR` if the operation could be started successfully, and `GPG_ERR_INV_VALUE` if @var{keydata} is not a valid empty data buffer.

The function `gpgme_op_export_keys` extracts public keys and returns them in the data buffer @var{keydata}. The output format of the key data returned is determined by the @acronym{ASCII} armor attribute set for the context @var{ctx}, or, if that is not set, by the encoding specified for @var{keydata}.

The keys to export are taken from the @code{NULL} terminated array @var{keys}. Only keys of the currently selected protocol of @var{ctx} which do have a fingerprint set are considered for export. Other keys specified by the @var{keys} are ignored. In particular OpenPGP keys retrieved via an external key listing are not included.

@var{mode} is usually 0; other values are described above.

The function returns the error code `GPG_ERR_NO_ERROR` if the operation completed successfully, `GPG_ERR_INV_VALUE` if @var{keydata} is not a valid empty data buffer, `GPG_ERR_NO_DATA` if no useful keys are in @var{keys} and passes through any errors that are reported by the crypto engine support routines.

The function `gpgme_op_export_keys_start` initiates a `gpgme_op_export_keys` operation. It can be completed by calling
The function returns the error code @code{GPG_ERR_NO_ERROR} if the operation could be started successfully, and @code{GPG_ERR_INV_VALUE} if @var{keydata} is not a valid empty data buffer, @code{GPG_ERR_NO_DATA} if no useful keys are in @var{keys} and passes through any errors that are reported by the crypto engine support routines.

@end deftypefun

Importing keys means the same as running @command{gpg} with the command @option{--import}.

@end deftypefun

The function @code{gpgme_op_import} adds the keys in the data buffer @var{keydata} to the key ring of the crypto engine used by @var{ctx}.

The format of @var{keydata} can be @acronym{ASCII} armored, for example, but the details are specific to the crypto engine.

After the operation completed successfully, the result can be retrieved with @code{gpgme_op_import_result}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the import was completed successfully, @code{GPG_ERR_INV_VALUE} if @var{keydata} if @var{ctx} or @var{keydata} is not a valid pointer, and @code{GPG_ERR_NO_DATA} if @var{keydata} is an empty data buffer.

@end deftypefun

The function @code{gpgme_op_import_start} initiates a @code{gpgme_op_import} operation. It can be completed by calling @code{gpgme_wait} on the context. @xref{Waiting For Completion}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the import could be started successfully, @code{GPG_ERR_INV_VALUE} if @var{ctx} or @var{keydata} is not a valid pointer, and @code{GPG_ERR_NO_DATA} if @var{keydata} is an empty data buffer.

@end deftypefun

---

@end deftypefun

@end deftypefun

@end deftypefun

@end deftypefun
The function `gpgme_op_import_keys` adds the keys described by the `NULL` terminated array `@var{keys}` to the key ring of the crypto engine used by `@var{ctx}`. It is used to actually import and make keys permanent which have been retrieved from an external source (i.e. using `GPGME_KEYLIST_MODE_EXTERN`) earlier. The external keylisting must have been made with the same context configuration (in particular the same home directory). @footnote{Thus it is a replacement for the usual workaround of exporting and then importing a key to make an X.509 key permanent.} Note that for OpenPGP this may require another access to the keys server over the network.

Only keys of the currently selected protocol of `@var{ctx}` are considered for import. Other keys specified by the `@var{keys}` are ignored. As of now all considered keys must have been retrieved using the same method, i.e. the used key listing mode must be identical.

After the operation completed successfully, the result can be retrieved with `gpgme_op_import_result`.

To move keys from one home directory to another, export and import the keydata using `gpgme_op_export` and `gpgme_op_import`.

The function returns the error code `GPG_ERR_NO_ERROR` if the import was completed successfully, `GPG_ERR_INV_VALUE` if `@var{ctx}` is not a valid pointer, `GPG_ERR_CONFLICT` if the key listing mode does not match, and `GPG_ERR_NO_DATA` if no keys are considered for export.

@end deftypefun

@end deftypefun

@deftp {Data type} {gpgme_import_status_t}
This is a pointer to a structure used to store a part of the result of 
a @code{gpgme_op_import} operation. For each considered key one 
status is added that contains information about the result of the 
import. The structure contains the following members:

@table @code
@item gpgme_import_status_t next
This is a pointer to the next status structure in the linked list, or 
@code{NULL} if this is the last element.

@item char *fpr
This is the fingerprint of the key that was considered.

@item gpgme_error_t result
If the import was not successful, this is the error value that caused 
the import to fail. Otherwise the error code is 
@code{GPG_ERR_NO_ERROR}.

@item unsigned int status
This is a bit-wise OR of the following flags that give more 
information about what part of the key was imported. If the key was 
already known, this might be 0.

@table @code
@item GPGME_IMPORT_NEW
The key was new.

@item GPGME_IMPORT_UID
The key contained new user IDs.

@item GPGME_IMPORT_SIG
The key contained new signatures.

@item GPGME_IMPORT_SUBKEY
The key contained new sub keys.

@item GPGME_IMPORT_SECRET
The key contained a secret key.
@end table
@end code
@end deftp

@end deftp {Data type} {gpgme_import_result_t}
This is a pointer to a structure used to store the result of a 
@code{gpgme_op_import} operation. After a successful import 
operation, you can retrieve the pointer to the result with 
@code{gpgme_op_import_result}. The structure contains the following 
members:
<table>
<thead>
<tr>
<th>@item int considered</th>
<th>The total number of considered keys.</th>
</tr>
</thead>
<tbody>
<tr>
<td>@item int no_user_id</td>
<td>The number of keys without user ID.</td>
</tr>
<tr>
<td>@item int imported</td>
<td>The total number of imported keys.</td>
</tr>
<tr>
<td>@item int imported_rsa</td>
<td>The number of imported RSA keys.</td>
</tr>
<tr>
<td>@item int unchanged</td>
<td>The number of unchanged keys.</td>
</tr>
<tr>
<td>@item int new_user_ids</td>
<td>The number of new user IDs.</td>
</tr>
<tr>
<td>@item int new_sub_keys</td>
<td>The number of new sub keys.</td>
</tr>
<tr>
<td>@item int new_signatures</td>
<td>The number of new signatures.</td>
</tr>
<tr>
<td>@item int new_revocations</td>
<td>The number of new revocations.</td>
</tr>
<tr>
<td>@item int secret_read</td>
<td>The total number of secret keys read.</td>
</tr>
<tr>
<td>@item int secret_imported</td>
<td>The number of imported secret keys.</td>
</tr>
<tr>
<td>@item int secret_unchanged</td>
<td>The number of unchanged secret keys.</td>
</tr>
<tr>
<td>@item int not_imported</td>
<td>The number of keys not imported.</td>
</tr>
<tr>
<td>@item gpgme_import_status_t imports</td>
<td>A list of gpgme_import_status_t objects which contain more information about the keys for which an import was attempted.</td>
</tr>
<tr>
<td>@item int skipped_v3_keys</td>
<td>For security reasons modern versions of GnuPG do not anymore support v3 keys (created with PGP 2.x) and ignores them on import. This</td>
</tr>
</tbody>
</table>
counter provides the number of such skipped v3 keys.

@end table
@end deftp

@deftypefun gpgme_import_result_t gpgme_op_import_result (@code{gpgme_ctx_t @var{ctx}})

The function @code{gpgme_op_import_result} returns a @code{gpgme_import_result_t} pointer to a structure holding the result of a @code{gpgme_op_import} operation. The pointer is only valid if the last operation on the context was a @code{gpgme_op_import} or @code{gpgme_op_import_start} operation, and if this operation finished successfully. The returned pointer is only valid until the next operation is started on the context.
@end deftypefun

@node Deleting Keys
@subsection Deleting Keys
@cindex key, delete
@cindex key ring, delete from

@deftypefun gpgme_error_t gpgme_op_delete_ext (@code{gpgme_ctx_t @var{ctx}}, @code{const gpgme_key_t @var{key}}, @code{unsigned int @var{flags}})

@since{1.9.1}

The function @code{gpgme_op_delete_ext} deletes the key @var{key} from the key ring of the crypto engine used by @var{ctx}.

@var{flags} can be set to the bit-wise OR of the following flags:

@table @code
@item GPGME_DELETE_ALLOW_SECRET
@since{1.9.1}
If not set, only public keys are deleted. If set, secret keys are deleted as well, if that is supported.

@item GPGME_DELETE_FORCE
@since{1.9.1}
If set, the user is not asked to confirm the deletion.
@end table
@end code

The function returns the error code @code{GPG_ERR_NO_ERROR} if the key was deleted successfully, @code{GPG_ERR_INV_VALUE} if @var{ctx} or @var{key} is not a valid pointer, @code{GPG_ERR_NO_PUBKEY} if @var{key} could not be found in the keyring, @code{GPG_ERR_AMBIGUOUS_NAME} if the key was not specified unambiguously, and @code{GPG_ERR_CONFLICT} if the secret key for
@var{key} is available, but @var{allow_secret} is zero.
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_delete_ext_start (@w{gpgme_ctx_t @var{ctx}}, @w{const gpgme_key_t @var{key}}, @w{unsigned int @var{flags}})
@since{1.9.1}

The function @code{gpgme_op_delete_ext_start} initiates a @code{gpgme_op_delete} operation. It can be completed by calling @code{gpgme_wait} on the context. @xref{Waiting For Completion}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the operation was started successfully, and @code{GPG_ERR_INV_VALUE} if @var{ctx} or @var{key} is not a valid pointer.
@end deftypefun

The following functions allow only to use one particular flag.

@deftypefun gpgme_error_t gpgme_op_delete (@w{gpgme_ctx_t @var{ctx}}, @w{const gpgme_key_t @var{key}}, @w{int @var{allow_secret}})
Similar to @code{gpgme_op_delete_ext}, but only the flag @code{GPGME_DELETE_ALLOW_SECRET} can be provided.
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_delete_start (@w{gpgme_ctx_t @var{ctx}}, @w{const gpgme_key_t @var{key}}, @w{int @var{allow_secret}})
Similar to @code{gpgme_op_delete_ext_start}, but only the flag @code{GPGME_DELETE_ALLOW_SECRET} can be provided.
@end deftypefun

@node Changing Passphrases
@subsection Changing Passphrases
@cindex passphrase, change

@deftypefun gpgme_error_t gpgme_op_passwd (@w{gpgme_ctx_t @var{ctx}}, @w{const gpgme_key_t @var{key}}, @w{unsigned int @var{flags}})
@since{1.3.0}

The function @code{gpgme_op_passwd} changes the passphrase of the private key associated with @var{key}. The only allowed value for @var{flags} is @code{0}. The backend engine will usually popup a window to ask for the old and the new passphrase. Thus this function is not useful in a server application (where passphrases are not required anyway).
Note that old @code{gpg} engines (before version 2.0.15) do not support this command and will silently ignore it.
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_passwd_start (@w{gpgme_ctx_t @var{ctx}},       @
@w{const gpgme_key_t @var{key}}, @
@w{unsigned int @var{flags}})

@since{1.3.0}

The function @code{gpgme_op_passwd_start} initiates a @code{gpgme_op_passwd} operation. It can be completed by calling @code{gpgme_wait} on the context. @xref{Waiting For Completion}.

The function returns @code{0} if the operation was started successfully, and an error code if one of the arguments is not valid or the operation could not be started.
@end deftypefun

@c
@c  CHANGING TOFU DATA
@c
@node Changing TOFU Data
@subsection Changing TOFU Data
@cindex validity, TOFU

The OpenPGP engine features a Trust-On-First-Use (TOFU) key validation model. For resolving conflicts it is necessary to declare the policy for a key. See the GnuPG manual for details on the TOFU implementation.

@deftp {Data type} {enum gpgme_tofu_policy_t}
@since{1.7.0}

@tindex gpgme_tofu_policy_t
The @code{gpgme_tofu_policy_t} type specifies the set of possible policy values that are supported by @acronym{GPGME}:

@table @code
@item GPGME_TOFU_POLICY_AUTO
Set the policy to "auto".
@item GPGME_TOFU_POLICY_GOOD
Set the policy to "good".
@item GPGME_TOFU_POLICY_BAD
Set the policy to "bad".
@end table
To change the policy for a key the following functions can be used:

```c
@deftypefun gpgme_error_t gpgme_op_tofu_policy (@w{gpgme_ctx_t @var{ctx}},       @
    @w{const gpgme_key_t @var{key}}, @
    @w{gpgme_tofu_policy_t @var{policy}})
```

The function @code{gpgme_op_tofu_policy} changes the TOFU policy of @var{key}. The valid values for @var{policy} are listed above. As of now this function does only work for OpenPGP and requires at least version 2.1.10 of GnuPG.

The function returns zero on success, @code{GPG_ERR_NOT_SUPPORTED} if the engine does not support the command, or a bunch of other error codes.

```c
@deftypefun gpgme_error_t gpgme_op_tofu_policy_start (@w{gpgme_ctx_t @var{ctx}},       @
    @w{const gpgme_key_t @var{key}}, @
    @w{gpgme_tofu_policy_t @var{policy}})
```

The function @code{gpgme_op_tofu_policy_start} initiates a @code{gpgme_op_tofu_policy} operation. It can be completed by calling @code{gpgme_wait} on the context. @xref{Waiting For Completion}.

The function returns @code{0} if the operation was started successfully, and an error code if one of the arguments is not valid or the operation could not be started.

@node Advanced Key Editing
@subsection Advanced Key Editing
The \texttt{gpgme_interact\_cb\_t} type is the type of functions which \texttt{GPGME} calls if it a key interact operation is on-going. The status keyword \var{status} and the argument line \var{args} are passed through by \texttt{GPGME} from the crypto engine. An empty string represents EOF. The file descriptor \var{fd} is -1 for normal status messages. If \var{status} indicates a command rather than a status message, the response to the command should be written to \var{fd}. The \var{handle} is provided by the user at start of operation.

The function should return \texttt{GPG\_ERR\_FALSE} if it did not handle the status code, \texttt{0} for success, or any other error value.

The function \texttt{gpgme\_op\_interact} processes the key \var{KEY} interactively, using the interact callback function \var{FNC} with the handle \var{HANDLE}. The output of the crypto engine is written to the data object \var{out}.

Note that the protocol between the callback function and the crypto engine is specific to the crypto engine and no further support in implementing this protocol correctly is provided by \texttt{GPGME}.

\var{flags} modifies the behaviour of the function; the only defined bit value is:

\begin{table}[h]
\begin{tabular}{|c|c|}
\hline
\textbf{Flag} & \textbf{Description} \\
\hline
\end{tabular}
\end{table}
This is used for smartcard based keys and uses gpgs
@code{--card-edit} command.

The function returns @code{0} if the edit operation completes
successfully, @code{GPG_ERR_INV_VALUE} if @var{ctx} or @var{key} is
not a valid pointer, and any error returned by the crypto engine or
the edit callback handler.

The function @code{gpgme_op_interact_start} initiates a
@code{gpgme_op_interact} operation. It can be completed by calling
@code{gpgme_wait} on the context. @xref{Waiting For Completion}.

The function returns @code{0} if the operation was started
successfully, and @code{GPG_ERR_INV_VALUE} if @var{ctx} or @var{key}
is not a valid pointer.

The trust items interface is experimental.

The @code{gpgme_trust_item_t} type is a pointer to a trust item object.
It has the following members:

This is a string describing the key to which this trust items belongs.
@item int type
This is the type of the trust item. A value of 1 refers to a key, a
value of 2 refers to a user ID.

@item int level
This is the trust level.

@item char *owner_trust
The owner trust if @code{type} is 1.

@item char *validity
The calculated validity.

@item char *name
The user name if @code{type} is 2.
@end table
@end deftp

@menu
* Listing Trust Items:: Browsing the list of available trust items.
* Manipulating Trust Items:: Operations on trust items.
@end menu

@node Listing Trust Items
@subsection Listing Trust Items
@cindex trust item list
@deftypefun gpgme_error_t gpgme_op_trustlist_start (@w{gpgme_ctx_t @var{ctx}}, @w{const char
*}@var{pattern}), @w{int @var{max_level}})
The function @code{gpgme_op_trustlist_start} initiates a trust item
listing operation inside the context @var{ctx}. It sets everything up
so that subsequent invocations of @code{gpgme_op_trustlist_next} return
the trust items in the list.

The string @var{pattern} contains an engine specific expression that
is used to limit the list to all trust items matching the pattern. It
can not be the empty string.

The argument @var{max_level} is currently ignored.

The context will be busy until either all trust items are received
(and @code{gpgme_op_trustlist_next} returns @code{GPG_ERR_EOF}), or
@code{gpgme_op_trustlist_end} is called to finish the operation.

The function returns the error code @code{GPG_ERR_INV_VALUE} if
@var{ctx} is not a valid pointer, and passes through any errors that
are reported by the crypto engine support routines.
@end deftypefun

@end deftypefun gpgme_error_t gpgme_op_trustlist_next (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_trust_item_t *@var{r_item}})

The function @code{gpgme_op_trustlist_next} returns the next trust
item in the list created by a previous @code{gpgme_op_trustlist_start}
operation in the context @var{ctx}. The trust item can be destroyed
with @code{gpgme_trust_item_release}. @xref{Manipulating Trust Items}.

This is the only way to get at @code{gpgme_trust_item_t} objects in
@acronym{GPGME}.

If the last trust item in the list has already been returned,
@code{gpgme_op_trustlist_next} returns @code{GPG_ERR_EOF}.

The function returns the error code @code{GPG_ERR_INV_VALUE} if @var{ctx} or
@var{r_item} is not a valid pointer, and @code{GPG_ERR_ENOMEM} if
there is not enough memory for the operation.
@end deftypefun

@end deftypefun gpgme_error_t gpgme_op_trustlist_end (@w{gpgme_ctx_t @var{ctx}})

The function @code{gpgme_op_trustlist_end} ends a pending trust list
operation in the context @var{ctx}.

The function returns the error code @code{GPG_ERR_INV_VALUE} if
@var{ctx} is not a valid pointer, and @code{GPG_ERR_ENOMEM} if at some
time during the operation there was not enough memory available.
@end deftypefun

@node Manipulating Trust Items
@subsection Manipulating Trust Items
@cindex trust item, manipulation

@end deftypefun void gpgme_trust_item_ref (@w{gpgme_trust_item_t @var{item}})

The function @code{gpgme_trust_item_ref} acquires an additional
reference for the trust item @var{item}.
@end deftypefun

@end deftypefun void gpgme_trust_item_unref (@w{gpgme_trust_item_t @var{item}})

The function @code{gpgme_trust_item_unref} releases a reference for
the trust item @var{item}. If this was the last reference, the trust
item will be destroyed and all resources associated to it will be
released.
@end deftypefun
Sometimes, the result of a crypto operation returns a list of invalid keys encountered in processing the request. The following structure is used to hold information about such a key.

```c
Data type gpgme_invalid_key_t
This is a pointer to a structure used to store a part of the result of a crypto operation which takes user IDs as one input parameter. The structure contains the following members:
```

- `gpgme_invalid_key_t next`: This is a pointer to the next invalid key structure in the linked list, or `NULL` if this is the last element.
- `char *fpr`: The fingerprint or key ID of the invalid key encountered.
- `gpgme_error_t reason`: An error code describing the reason why the key was found invalid.

The function `gpgme_op_decrypt` decrypts the ciphertext in the data object `cipher` and stores it into the data object `plain`.

```c
GPGME_ERROR_T gpgme_op_decrypt (gpgme_ctx_t @var{ctx}, gpgme_data_t @var{cipher}, gpgme_data_t @var{plain})
The function `gpgme_op_decrypt` decrypts the ciphertext in the data object `cipher` and stores it into the data object `plain`.

The function returns the error code `GPG_ERR_NO_ERROR` if the
ciphertext could be decrypted successfully, @code{GPG_ERR_INV_VALUE} if @var{ctx}, @var{cipher} or @var{plain} is not a valid pointer, @code{GPG_ERR_NO_DATA} if @var{cipher} does not contain any data to decrypt, @code{GPG_ERR_DECRYPT_FAILED} if @var{cipher} is not a valid cipher text, @code{GPG_ERR_BAD_PASSPHRASE} if the passphrase for the secret key could not be retrieved, and passes through some errors that are reported by the crypto engine support routines.
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_decrypt_start (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_data_t @var{cipher}}, @w{gpgme_data_t @var{plain}})

The function @code{gpgme_op_decrypt_start} initiates a @code{gpgme_op_decrypt} operation. It can be completed by calling @code{gpgme_wait} on the context. @xref{Waiting For Completion}. The function returns the error code @code{GPG_ERR_NO_ERROR} if the operation could be started successfully, and @code{GPG_ERR_INV_VALUE} if @var{cipher} or @var{plain} is not a valid pointer.
@end deftypefun

dftypefun gpgme_error_t gpgme_op_decrypt_ext (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_decrypt_flags_t @var{flags}}, @w{gpgme_data_t @var{cipher}}, @w{gpgme_data_t @var{plain}})@since{1.8.0}

The function @code{gpgme_op_decrypt_ext} is the same as @code{gpgme_op_decrypt} but has an additional argument @var{flags}. If @var{flags} is 0 both function behave identically.

The value in @var{flags} is a bitwise-or combination of one or multiple of the following bit values:

@table @code
@item GPGME_DECRYPT_VERIFY@since{1.8.0}
The @code{GPGME_DECRYPT_VERIFY} symbol specifies that this function shall exactly act as @code{gpgme_op_decrypt_verify}.

@item GPGME_DECRYPT_UNWRAP@since{1.8.0}
The @code{GPGME_DECRYPT_UNWRAP} symbol specifies that the output shall be an OpenPGP message with only the encryption layer removed. This
requires GnuPG 2.1.12 and works only for OpenPGP. This is the counterpart to @code{GPGME_ENCRYPT_WRAP}.

@end table

The function returns the error codes as described for @code{gpgme_op_decrypt} respective @code{gpgme_op_encrypt}.
@end deftypefun

@end deftypefun gpgme_error_t gpgme_op_decrypt_ext_start ( @
   @w{gpgme_ctx_t @var{ctx}}, @
   @w{gpgme_decrypt_flags_t @var{flags}}, @
   @w{gpgme_data_t @var{cipher}}, @
   @w{gpgme_data_t @var{plain}})

@since{1.8.0}

The function @code{gpgme_op_decrypt_ext_start} initiates a @code{gpgme_op_decrypt_ext} operation. It can be completed by calling @code{gpgme_wait} on the context. @xref{Waiting For Completion}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the operation could be started successfully, and @code{GPG_ERR_INV_VALUE} if @var{cipher} or @var{plain} is not a valid pointer.
@end deftypefun

@deftp {Data type} {gpgme_recipient_t}
@since{1.1.0}

This is a pointer to a structure used to store information about the recipient of an encrypted text which is decrypted in a @code{gpgme_op_decrypt} operation. This information (except for the status field) is even available before the operation finished successfully, for example in a passphrase callback. The structure contains the following members:

@table @code
@item gpgme_recipient_t next
This is a pointer to the next recipient structure in the linked list, or @code{NULL} if this is the last element.

@item gpgme_pubkey_algo_t
The public key algorithm used in the encryption.

@item char *keyid
This is the key ID of the key (in hexadecimal digits) used as recipient.


@item gpgme_error_t status
This is an error number with the error code GPG_ERR_NO_SECKEY if the secret key for this recipient is not available, and 0 otherwise.
@end table
@end deftp

@deftp {Data type} {gpgme_decrypt_result_t}
This is a pointer to a structure used to store the result of a @code{gpgme_op_decrypt} operation. After successfully decrypting data, you can retrieve the pointer to the result with @code{gpgme_op_decrypt_result}. As with all result structures, it this structure shall be considered read-only and an application must not allocate such a structure on its own. The structure contains the following members:

@table @code
@item char *unsupported_algorithm
If an unsupported algorithm was encountered, this string describes the algorithm that is not supported.

@item unsigned int wrong_key_usage : 1
@since{0.9.0}
This is true if the key was not used according to its policy.

@item unsigned int legacy_cipher_nomdc : 1
@since{1.11.2}
The message was made by a legacy algorithm without any integrity protection. This might be an old but legitimate message.

@item unsigned int is_mime : 1;
@since{1.11.0}
The message claims that the content is a MIME object.

@item unsigned int is_de_vs : 1;
@since{1.10.0}
The message was encrypted in a VS-NfD compliant way. This is a specification in Germany for a restricted communication level.

@item gpgme_recipient_t recipients
@since{1.1.0}
This is a linked list of recipients to which this message was encrypted.

@item char *file_name
This is the filename of the original plaintext message file if it is known, otherwise this is a null pointer.
A textual representation (null-terminated string) of the session key used in symmetric encryption of the message, if the context has been set to export session keys (see \code{gpgme_set_ctx_flag, "export-session-key"}), and a session key was available for the most recent decryption operation. Otherwise, this is a null pointer.

You must not try to access this member of the struct unless \code{gpgme_set_ctx_flag (ctx, "export-session-key")} returns success or \code{gpgme_get_ctx_flag (ctx, "export-session-key")} returns true (non-empty string).

A string with the symmetric encryption algorithm and mode using the format "<algo>.<mode>". Note that the deprecated non-MDC encryption mode of OpenPGP is given as "PGPCFB".

The function \code{gpgme_decrypt_result} returns a \code{gpgme_decrypt_result_t} pointer to a structure holding the result of a \code{gpgme_op_decrypt} operation. The pointer is only valid if the last operation on the context was a \code{gpgme_op_decrypt} or \code{gpgme_op_decrypt_start} operation. If the operation failed this might be a \code{NULL} pointer. The returned pointer is only valid until the next operation is started on the context.

The function \code{gpgme_op_verify} verifies that the signature in the
The results of the individual signature verifications can be retrieved with `gpgme_op_verify_result`.

The function returns the error code `GPG_ERR_NO_ERROR` if the operation could be completed successfully, `GPG_ERR_INV_VALUE` if `ctx`, `sig` or `plain` is not a valid pointer, `GPG_ERR_NO_DATA` if `sig` does not contain any data to verify, and passes through any errors that are reported by the crypto engine support routines.

@end deftypefun

@deftypefun gpgme_error_t gpgme_op_verify_start (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_data_t @var{sig}}, @w{gpgme_data_t @var{signed_text}}, @w{gpgme_data_t @var{plain}})

The function `gpgme_op_verify_start` initiates a `gpgme_op_verify` operation. It can be completed by calling `gpgme_wait` on the context. @xref{Waiting For Completion}.

The function returns the error code `GPG_ERR_NO_ERROR` if the operation could be started successfully, `GPG_ERR_INV_VALUE` if `ctx`, `sig` or `plain` is not a valid pointer, and `GPG_ERR_NO_DATA` if `sig` or `plain` does not contain any data to verify.

@end deftypefun

@deftp {Data type} {gpgme_sig_notation_t}

This is a pointer to a structure used to store a part of the result of a `gpgme_op_verify` operation. The structure contains the following members:

@table @code
@item gpgme_sig_notation_t next
This is a pointer to the next new signature notation structure in the linked list, or `NULL` if this is the last element.

@item char *name
The name of the notation field. If this is `NULL`, then the member `value` will contain a policy URL.

@item int name_len
The length of the `name` field. For strings the length is
counted without the trailing binary zero.

@item char *value
The value of the notation field. If @code{name} is @code{NULL}, then this is a policy URL.

@item int value_len
The length of the @code{value} field. For strings the length is counted without the trailing binary zero.

@item gpgme_sig_notation_flags_t flags
The accumulated flags field. This field contains the flags associated with the notation data in an accumulated form which can be used as an argument to the function @code{gpgme_sig_notation_add}. The value @code{flags} is a bitwise-or combination of one or multiple of the following bit values:

@table @code
@item GPGME_SIG_NOTATION_HUMAN_READABLE
@since{1.1.0}
The @code{GPGME_SIG_NOTATION_HUMAN_READABLE} symbol specifies that the notation data is in human readable form

@item GPGME_SIG_NOTATION_CRITICAL
@since{1.1.0}
The @code{GPGME_SIG_NOTATION_CRITICAL} symbol specifies that the notation data is critical.
@end table

@item unsigned int human_readable : 1
This is true if the @code{GPGME_SIG_NOTATION_HUMAN_READABLE} flag is set and false otherwise. This flag is only valid for notation data, not for policy URLs.

@item unsigned int critical : 1
This is true if the @code{GPGME_SIG_NOTATION_CRITICAL} flag is set and false otherwise. This flag is valid for notation data and policy URLs.
@end table

@end deftp

@deftp {Data type} {gpgme_signature_t}
This is a pointer to a structure used to store a part of the result of a @code{gpgme_op_verify} operation. The structure contains the following members:
@item gpgme_signature_t next
This is a pointer to the next new signature structure in the linked
list, or @code{NULL} if this is the last element.

@item gpgme_sigsum_t summary
This is a bit vector giving a summary of the signature status. It
provides an easy interface to a defined semantic of the signature
status. Checking just one bit is sufficient to see whether a
signature is valid without any restrictions. This means that
you can check for GPGME_SIGSUM_VALID like this:

@example
if ((sig.summary & GPGME_SIGSUM_VALID))
  @{
    ..do stuff if valid..
  @}
else
  @{
    ..do stuff if not fully valid..
  @}
@end example

The defined bits are:
@table @code
@item GPGME_SIGSUM_VALID
The signature is fully valid.

@item GPGME_SIGSUM_GREEN
The signature is good but one might want to display some extra
information. Check the other bits.

@item GPGME_SIGSUM_RED
The signature is bad. It might be useful to check other bits and
display more information, i.e. a revoked certificate might not render a
signature invalid when the message was received prior to the cause for
the revocation.

@item GPGME_SIGSUM_KEY_REVOKED
The key or at least one certificate has been revoked.

@item GPGME_SIGSUM_KEY_EXPIRED
The key or one of the certificates has expired. It is probably a good
idea to display the date of the expiration.

@item GPGME_SIGSUM_SIG_EXPIRED
The signature has expired.
@item GPGME_SIGSUM_KEY_MISSING
Can't verify due to a missing key or certificate.

@item GPGME_SIGSUM_CRL_MISSING
The CRL (or an equivalent mechanism) is not available.

@item GPGME_SIGSUM_CRL_TOO_OLD
Available CRL is too old.

@item GPGME_SIGSUM_BAD_POLICY
A policy requirement was not met.

@item GPGME_SIGSUM_SYS_ERROR
A system error occurred.

@item GPGME_SIGSUM_TOFU_CONFLICT
A TOFU conflict was detected.
@end table

@item char *fpr
This is the fingerprint or key ID of the signature.

@item gpgme_error_t status
This is the status of the signature. In particular, the following status codes are of interest:

@table @code
@item GPG_ERR_NO_ERROR
This status indicates that the signature is valid. For the combined result this status means that all signatures are valid.

@item GPG_ERR_SIG_EXPIRED
This status indicates that the signature is valid but expired. For the combined result this status means that all signatures are valid and expired.

@item GPG_ERR_KEY_EXPIRED
This status indicates that the signature is valid but the key used to verify the signature has expired. For the combined result this status means that all signatures are valid and all keys are expired.

@item GPG_ERR_CERT_REVOKED
This status indicates that the signature is valid but the key used to verify the signature has been revoked. For the combined result this status means that all signatures are valid and all keys are revoked.
@item GPG_ERR_BAD_SIGNATURE
This status indicates that the signature is invalid. For the combined result this status means that all signatures are invalid.

@item GPG_ERR_NO_PUBKEY
This status indicates that the signature could not be verified due to a missing key. For the combined result this status means that all signatures could not be checked due to missing keys.

@item GPG_ERR_GENERAL
This status indicates that there was some other error which prevented the signature verification.
@end table

@item gpgme_sig_notation_t notations
This is a linked list with the notation data and policy URLs.

@item unsigned long timestamp
The creation timestamp of this signature.

@item unsigned long exp_timestamp
The expiration timestamp of this signature, or 0 if the signature does not expire.

@item unsigned int wrong_key_usage : 1
This is true if the key was not used according to its policy.

@item unsigned int pka_trust : 2
This is set to the trust information gained by means of the PKA system. Values are:
@table @code
@item 0
No PKA information available or verification not possible.
@item 1
PKA verification failed.
@item 2
PKA verification succeeded.
@item 3
Reserved for future use.
@end table
Depending on the configuration of the engine, this metric may also be reflected by the validity of the signature.

@item unsigned int chain_model : 1
@since{1.1.6}
This is true if the validity of the signature has been checked using the chain model. In the chain model the time the signature has been created
must be within the validity period of the certificate and the time the certificate itself has been created must be within the validity period of the issuing certificate. In contrast the default validation model checks the validity of signature as well at the entire certificate chain at the current time.

@item gpgme_validity_t validity
The validity of the signature.

@item gpgme_error_t validity_reason
If a signature is not valid, this provides a reason why.

@item gpgme_pubkey_algo_t
The public key algorithm used to create this signature.

@item gpgme_hash_algo_t
The hash algorithm used to create this signature.

@item char *pka_address
The mailbox from the PKA information or @code{NULL}.

@item gpgme_key_t key
@since{1.7.0}
An object describing the key used to create the signature. This key object may be incomplete in that it only conveys information available directly with a signature. It may also be @code{NULL} if such information is not readily available.

@end table
@end deftp

@end deftp {Data type} {gpgme_verify_result_t}
This is a pointer to a structure used to store the result of a @code{gpgme_op_verify} operation. After verifying a signature, you can retrieve the pointer to the result with @code{gpgme_op_verify_result}. If the operation failed this might be a @code{NULL} pointer. The structure contains the following member:

@table @code
@item gpgme_signature_t signatures
A linked list with information about all signatures for which a verification was attempted.

@item char *file_name
This is the filename of the original plaintext message file if it is known, otherwise this is a null pointer. Warning: The filename is
not covered by the signature.

@item unsigned int is_mime : 1;
@since{1.11.0}

The message claims that the content is a MIME object. Warning: This flag is not covered by the signature.

@end table
@end deftp

@end deftypefun

@end deftypefun

@node Decrypt and Verify
@subsection Decrypt and Verify
@cindex decryption and verification
@cindex verification and decryption
@cindex cryptographic operation, decryption and verification

@deftypefun gpgme_error_t gpgme_op_decrypt_verify (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_data_t @var{cipher}}, @w{gpgme_data_t @var{plain}})
The function @code{gpgme_op_decrypt_verify} decrypts the ciphertext in the data object @var{cipher} and stores it into the data object @var{plain}. If @var{cipher} contains signatures, they will be verified.

After the operation completed, @code{gpgme_op_decrypt_result} and @code{gpgme_op_verify_result} can be used to retrieve more information about the signatures.

If the error code @code{GPG_ERR_NO_DATA} is returned, @var{cipher} does not contain any data to decrypt. However, it might still be signed. The information about detected signatures is available with @code{gpgme_op_verify_result} in this case.
The function returns the error code \code{GPG_ERR_NO_ERROR} if the
ciphertext could be decrypted successfully, \code{GPG_ERR_INV_VALUE}
if \var{ctx}, \var{cipher} or \var{plain} is not a valid pointer,
\code{GPG_ERR_NO_DATA} if \var{cipher} does not contain any data to
decrypt, \code{GPG_ERR_DECRYPT_FAILED} if \var{cipher} is not a valid
cipher text, \code{GPG_ERR_BAD_PASSPHRASE} if the passphrase for the
secret key could not be retrieved, and passes through any errors that
are reported by the crypto engine support routines.
@end deftypefun

deftypefun gpgme_error_t gpgme_op_decrypt_verify_start (@w{gpgme_ctx_t \var{ctx}},
@w{gpgme_data_t \var{cipher}},
@w{gpgme_data_t \var{plain}})

The function \code{gpgme_op_decrypt_verify_start} initiates a
\code{gpgme_op_decrypt_verify} operation. It can be completed by
calling \code{gpgme_wait} on the context. @xref{Waiting For
Completion}.

The function returns the error code \code{GPG_ERR_NO_ERROR} if the
operation could be started successfully, \code{GPG_ERR_INV_VALUE} if
\var{ctx}, \var{cipher}, \var{plain} or \var{r_stat} is not a valid
pointer, and \code{GPG_ERR_NO_DATA} if \var{cipher} does not contain
any data to decrypt.
@end deftypefun

When processing mails it is sometimes useful to extract the actual
mail address (the ``addr-spec'') from a string. GPGME provides this
helper function which uses the same semantics as the internal
functions in GPGME and GnuPG:

deftypefun @w{char *} gpgme_addrspec_from_uid (@w{const char *\var{uid}})

@since{1.7.1}

Return the mail address (called ``addr-spec'' in RFC-5322) from the
string \var{uid} which is assumed to be a user id (called ``address''
in RFC-5322). All plain ASCII characters (i.e. those with bit 7
cleared) in the result are converted to lowercase. Caller must free
the result using \code{gpgme_free}. Returns \code{NULL} if no valid
address was found (in which case \code{ERRNO} is set to \code{EINVAL})
or for other errors.
@end deftypefun

@node Sign
@subsection Sign
@cindex signature, creation
A signature can contain signatures by one or more keys. The set of keys used to create a signatures is contained in a context, and is applied to all following signing operations in this context (until the set is changed).

@menu
* Selecting Signers:: How to choose the keys to sign with.
* Creating a Signature:: How to create a signature.
* Signature Notation Data:: How to add notation data to a signature.
@end menu

@node Selecting Signers
@subsubsection Selecting Signers
@cindex signature, selecting signers
@cindex signers, selecting
The key or the keys used to create a signature are stored in the context. The following functions can be used to manipulate this list. If no signer has been set into the context a default key is used for signing.

@deftypefun void gpgme_signers_clear (@w{gpgme_ctx_t @var{ctx}})
The function @code{gpgme_signers_clear} releases a reference for each key on the signers list and removes the list of signers from the context @var{ctx}.

Every context starts with an empty list.
@end deftypefun

@deftypefun gpgme_error_t gpgme_signers_add (@w{gpgme_ctx_t @var{ctx}}, @w{const gpgme_key_t @var{key}})
The function @code{gpgme_signers_add} adds the key @var{key} to the list of signers in the context @var{ctx}.

Calling this function acquires an additional reference for the key.
@end deftypefun

@deftypefun @w{unsigned int} gpgme_signers_count (@w{const gpgme_ctx_t @var{ctx}})
@since{1.4.3}
The function @code{gpgme_signers_count} returns the number of signer keys in the context @var{ctx}.
@end deftypefun
The function `gpgme_signers_enum` returns the `var[seq]`th key in the list of signers in the context `var[ctx]`. An additional reference is acquired for the user.

If `var[seq]` is out of range, `code[NULL]` is returned.

The function `gpgme_op_sign` creates a signature for the text in the data object `var[plain]` and returns it in the data object `var[sig]`. The type of the signature created is determined by the `ASCII` armor and text mode settings of the context `var[ctx]` and the requested signature mode `var[mode]`.

After the operation completed successfully, the result can be retrieved with `code[gpgme_op_sign_result]`.

If an S/MIME signed message is created using the CMS crypto engine, the number of certificates to include in the message can be specified with `code[gpgme_set_include_certs]`. @xref{Included Certificates}.

The function returns the error code `code[GPG_ERR_NO_ERROR]` if the
signature could be created successfully, @code{GPG_ERR_INV_VALUE} if @var{ctx}, @var{plain} or @var{sig} is not a valid pointer, @code{GPG_ERR_NO_DATA} if the signature could not be created, @code{GPG_ERR_BAD_PASSPHRASE} if the passphrase for the secret key could not be retrieved, @code{GPG_ERR_UNUSABLE_SECKEY} if there are invalid signers, and passes through any errors that are reported by the crypto engine support routines.
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_sign_start (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_data_t @var{plain}}, @w{gpgme_data_t @var{sig}}, @w{gpgme_sig_mode_t @var{mode}})
The function @code{gpgme_op_sign_start} initiates a @code{gpgme_op_sign} operation. It can be completed by calling @code{gpgme_wait} on the context. @xref{Waiting For Completion}.
The function returns the error code @code{GPG_ERR_NO_ERROR} if the operation could be started successfully, and @code{GPG_ERR_INV_VALUE} if @var{ctx}, @var{plain} or @var{sig} is not a valid pointer.
@end deftypefun

@deftp {Data type} {gpgme_new_signature_t}
This is a pointer to a structure used to store a part of the result of a @code{gpgme_op_sign} operation. The structure contains the following members:

@table @code
@item gpgme_new_signature_t next
This is a pointer to the next new signature structure in the linked list, or @code{NULL} if this is the last element.

@item gpgme_sig_mode_t type
The type of this signature.

@item gpgme_pubkey_algo_t pubkey_algo
The public key algorithm used to create this signature.

@item gpgme_hash_algo_t hash_algo
The hash algorithm used to create this signature.

@item unsigned int sig_class
The signature class of this signature.

@item long int timestamp
The creation timestamp of this signature.

@item char *fpr
The fingerprint of the key which was used to create this signature.
@end table
This is a pointer to a structure used to store the result of a
@code{gpgme_op_sign} operation. After successfully generating a
signature, you can retrieve the pointer to the result with
@code{gpgme_op_sign_result}. The structure contains the following
members:

- @item gpgme_invalid_key_t invalid_signers
  A linked list with information about all invalid keys for which a
  signature could not be created.

- @item gpgme_new_signature_t signatures
  A linked list with information about all signatures created.
@end table
@end deftp

The function @code{gpgme_op_sign_result} returns a
@code{gpgme_sign_result_t} pointer to a structure holding the result
of a @code{gpgme_op_sign} operation. The pointer is only valid if the
last operation on the context was a @code{gpgme_op_sign},
@code{gpgme_op_sign_start}, @code{gpgme_op_encrypt_sign} or
@code{gpgme_op_encrypt_sign_start} operation. If that operation
failed, the function might return a @code{NULL} pointer. The returned
pointer is only valid until the next operation is started on the
context.
@end deftypefun

Using the following functions, you can attach arbitrary notation data
to a signature. This information is then available to the user when
the signature is verified.

The function @code{gpgme_sig_notation_clear} removes the notation data
from the context @var{ctx}. Subsequent signing operations from this
context will not include any notation data.
Every context starts with an empty notation data list.
@end deftypefun

@deftypefun{gpgme_error_t} gpgme_sig_notation_add (@w{gpgme_ctx_t @var{ctx}}, @w{const char *@var{name}}, @w{const char *@var{value}}, @w{gpgme_sig_notation_flags_t @var{flags}})
@since{1.1.0}

The function @code{gpgme_sig_notation_add} adds the notation data with
the name @var{name} and the value @var{value} to the context
@var{ctx}.

Subsequent signing operations will include this notation data, as well
as any other notation data that was added since the creation of the
context or the last @code{gpgme_sig_notation_clear} operation.

The arguments @var{name} and @var{value} must be @code{NUL}-terminated
strings in human-readable form. The flag
@code{GPGME_SIG_NOTATION_HUMAN_READABLE} is implied
(non-human-readable notation data is currently not supported). The
strings must be in UTF-8 encoding.

If @var{name} is @code{NULL}, then @var{value} should be a policy URL.

The function @code{gpgme_sig_notation_add} returns the error code
@code{GPG_ERR_NO_ERROR} if the notation data could be added
successfully, @code{GPG_ERR_INV_VALUE} if @var{ctx} is not a valid
pointer, or if @var{name}, @var{value} and @var{flags} are an invalid
combination. The function also passes through any errors that are
reported by the crypto engine support routines.
@end deftypefun

@deftypefun{gpgme_sig_notation_t} gpgme_sig_notation_get (@w{const gpgme_ctx_t @var{ctx}})
@since{1.1.0}

The function @code{gpgme_sig_notation_get} returns the linked list of
notation data structures that are contained in the context @var{ctx}.

If @var{ctx} is not a valid pointer, or there is no notation data
added for this context, @code{NULL} is returned.
@end deftypefun

@node Encrypt
@subsection Encrypt
@cindex encryption
@cindex cryptographic operation, encryption
One plaintext can be encrypted for several recipients at the same time. The list of recipients is created independently of any context, and then passed to the encryption operation.

@node Encrypting a Plaintext
@subsubsection Encrypting a Plaintext
@deftypefun gpgme_error_t gpgme_op_encrypt (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_key_t @var{recp}[]}, @w{gpgme_encrypt_flags_t @var{flags}}, @w{gpgme_data_t @var{plain}}, @w{gpgme_data_t @var{cipher}})
The function @code{gpgme_op_encrypt} encrypts the plaintext in the data object @var{plain} for the recipients @var{recp} and stores the ciphertext in the data object @var{cipher}. The type of the ciphertext created is determined by the @acronym{ASCII} armor (or, if that is not set, by the encoding specified for @var{cipher}) and the text mode attributes set for the context @var{ctx}.

@var{recp} must be a @code{NULL}-terminated array of keys. The user must keep references for all keys during the whole duration of the call (but see @code{gpgme_op_encrypt_start} for the requirements with the asynchronous variant).

The value in @var{flags} is a bitwise-or combination of one or multiple of the following bit values:

@table @code
@item GPGME_ENCRYPT_ALWAYS_TRUST
The @code{GPGME_ENCRYPT_ALWAYS_TRUST} symbol specifies that all the recipients in @var{recp} should be trusted, even if the keys do not have a high enough validity in the keyring. This flag should be used with care; in general it is not a good idea to use any untrusted keys.

@item GPGME_ENCRYPT_NO_ENCRYPT_TO
@since{1.2.0}
The @code{GPGME_ENCRYPT_NO_ENCRYPT_TO} symbol specifies that no default or hidden default recipients as configured in the crypto backend should be included. This can be useful for managing different user profiles.

@item GPGME_ENCRYPT_NO_COMPRESS
@since{1.5.0}
The `GPGME_ENCRYPT_NO_COMPRESS` symbol specifies that the plaintext shall not be compressed before it is encrypted. This is in some cases useful if the length of the encrypted message may reveal information about the plaintext.

- **GPGME_ENCRYPT_PREPARE**
- **GPGME_ENCRYPT_EXPECT_SIGN**
  The `GPGME_ENCRYPT_PREPARE` symbol is used with the UI Server protocol to prepare an encryption (i.e. sending the `PREP_ENCRYPT` command). With the `GPGME_ENCRYPT_EXPECT_SIGN` symbol the UI Server is advised to also expect a sign command.

- **GPGME_ENCRYPT_SYMMETRIC**
  @since{1.7.0}
  The `GPGME_ENCRYPT_SYMMETRIC` symbol specifies that the output should be additionally encrypted symmetrically even if recipients are provided. This feature is only supported for the OpenPGP crypto engine.

- **GPGME_ENCRYPT_THROW_KEYIDS**
  @since{1.8.0}
  The `GPGME_ENCRYPT_THROW_KEYIDS` symbols requests that the identifiers for the decryption keys are not included in the ciphertext. On the receiving side, the use of this flag may slow down the decryption process because all available secret keys must be tried. This flag is only honored for OpenPGP encryption.

- **GPGME_ENCRYPT_WRAP**
  @since{1.8.0}
  The `GPGME_ENCRYPT_WRAP` symbol specifies that the input is an OpenPGP message and not a plain data. This is the counterpart to `GPGME_DECRYPT_UNWRAP`.

- **GPGME_ENCRYPT_WANT_ADDRESS**
  @since{1.11.0}
  The `GPGME_ENCRYPT_WANT_ADDRESS` symbol requests that all supplied keys or key specifications include a syntactically valid mail address. If this is not the case the operation is not even tried and the error code `GPG_ERR_INV_USER_ID` is returned. Only the address part of the key specification is conveyed to the backend. As of now the key must be specified using the `recpstring` argument of the extended encrypt functions. This feature is currently only supported for the OpenPGP crypto engine.
If `GPG_ERR_UNUSABLE_PUBKEY` is returned, some recipients in
`recp` are invalid, but not all. In this case the plaintext might
be encrypted for all valid recipients and returned in `cipher` (if
this happens depends on the crypto engine). More information about
the invalid recipients is available with
`gpgme_op_encrypt_result`.

If `recp` is `NULL`, symmetric rather than public key
encryption is performed. Symmetrically encrypted cipher text can be
deciphered with `gpgme_op_decrypt`. Note that in this case the
crypto backend needs to retrieve a passphrase from the user.
Symmetric encryption is currently only supported for the OpenPGP
crypto backend.

The function returns the error code `GPG_ERR_NO_ERROR` if the
ciphertext could be created successfully, `GPG_ERR_INV_VALUE` if
`ctx`, `recp`, `plain` or `cipher` is not a valid
pointer, `GPG_ERR_UNUSABLE_PUBKEY` if `recp` contains some
invalid recipients, `GPG_ERR_BAD_PASSPHRASE` if the passphrase
for the symmetric key could not be retrieved, and passes through any
errors that are reported by the crypto engine support routines.
@end deftypefun

@end deftypefun

The function `gpgme_op_encrypt_start` initiates a
`gpgme_op_encrypt` operation. It can be completed by calling
`gpgme_wait` on the context. @xref{Waiting For Completion}.

References to the keys only need to be held for the duration of this
call. The user can release its references to the keys after this
function returns, even if the operation is not yet finished.

The function returns the error code `GPG_ERR_NO_ERROR` if the
operation could be started successfully, `GPG_ERR_INV_VALUE` if
`ctx`, `rset`, `plain` or `cipher` is not a valid
pointer, and `GPG_ERR_UNUSABLE_PUBKEY` if `rset` does not
contain any valid recipients.
@end deftypefun

@end deftypefun

(`ctx`, `rset`, `plain` or `cipher` is not a valid
pointer, and `GPG_ERR_UNUSABLE_PUBKEY` if `rset` does not
contain any valid recipients.)
This is an extended version of `gpgme_op_encrypt` with `recpstring` as additional parameter. If `recp` is NULL and `recpstring` is not NULL, the latter is expected to be a linefeed delimited string with the set of key specifications. In contrast to `recp` the keys are given directly as strings and there is no need to first create key objects. Leading and trailing white space is remove from each line in `recpstring`. The keys are then passed verbatim to the backend engine.

For the OpenPGP backend several special keywords are supported to modify the operation. These keywords are given instead of a key specification. The currently supported keywords are:

- `--hidden`  `--no-hidden`  These keywords toggle between normal and hidden recipients for all following key specifications. When a hidden recipient is requested the gpg option `--R` (or `--F` in file mode) is used instead of `--r` (`--f` in file mode).
- `--file`  `--no-file`  These keywords toggle between regular and file mode for all following key specification. In file mode the option `--f` or `--F` is passed to gpg. At least GnuPG version 2.1.14 is required to handle these options. The `GPGME_ENCRYPT_WANT_ADDRESS` flag is ignored in file mode.
- `--`  This keyword disables all keyword detection up to the end of the string. All keywords are treated as verbatim arguments.

To create a `recpstring` it is often useful to employ a strconcat style function. For example this function creates a string to encrypt to two keys:

```c
char * xbuild_recpstring (const char *key1, const char *key2)
{
    @w{gpgme_encrypt_flags_t @var{flags}}, @w{gpgme_data_t @var{plain}}, @w{gpgme_data_t @var{cipher}}

    @since{1.11.0}
```
char *result = gpgrt_strconcat ("--\n", key1, "$n", key2, NULL);
if (!result)
    @{ perror ("strconcat failed"); exit (2); @} return result;
@end example

Note the use of the double dash here; unless you want to specify a keyword, it is a good idea to avoid any possible trouble with key specifications starting with a double dash. The used strconcat function is available in Libgpg-error 1.28 and later; Libgpg-error (aka Gpgrt) is a dependency of GPGME. The number of arguments to @code{gpgrt_strconcat} is limited to 47 but that should always be sufficient. In case a larger and non-fixed number of keys are to be supplied the following code can be used:

@example
char *
xbuild_long_recptstring (void)
{@
gpgrt_stream_t memfp;
const char *s;
void *result;

    memfp = gpgrt_fopenmem (0, "w+b");
    if (!memfp)
        @{ perror ("fopenmem failed"); exit (2); @} gpgrt_fputs ("--", memfp);
    while ((s = get_next_keyspec ()))
        @{
            gpgrt_fputc (\n', memfp);
            gpgrt_fputs (s, memfp);
            @}
gepgrt_fputc (0, memfp);
    if (gpgrt_ferror (memfp))
        @{ perror ("writing to memstream failed"); exit (2); @} if (gpgrt_fclose_snatch (memfp, &result, NULL))
        @{ perror ("fclose_snatch failed"); exit (2); @} return result;
@end example

In this example @code{get_next_keyspec} is expected to return the next key to be added to the string. Please take care: Encrypting to a large number of recipients is often questionable due to security reasons and also for the technicality that all keys are currently passed on the command line to @command{gpg} which has as a platform specific length limitation.
This is an extended version of `gpgme_op_encrypt_start` with `recpstring` as additional parameter. If `recp` is NULL and `recpstring` is not NULL, the latter is expected to be a linefeed delimited string with the set of key specifications. In contrast to `recp` the keys are given directly as strings and there is no need to first create key objects. The keys are passed verbatim to the backend engine.

This is a pointer to a structure used to store the result of an `gpgme_op_encrypt` operation. After successfully encrypting data, you can retrieve the pointer to the result with `gpgme_op_encrypt_result`. The structure contains the following members:

- `invalid_recipients`: A linked list with information about all invalid keys for which the data could not be encrypted.

The function `gpgme_op_encrypt_result` returns a pointer to a structure holding the result of an `gpgme_op_encrypt` operation. The pointer is only valid if the last operation on the context was a `gpgme_encrypt_result` operation. The pointer is only valid until the next operation is started on the context.
The function @code{gpgme_op_encrypt_sign} does a combined encrypt and sign operation. It is used like @code{gpgme_op_encrypt}, but the ciphertext also contains signatures for the signers listed in @var{ctx}.

The combined encrypt and sign operation is currently only available for the OpenPGP crypto engine.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the operation could be started successfully, and @code{GPG_ERR_INV_VALUE} if @var{ctx}, @var{rset}, @var{plain} or @var{cipher} is not a valid pointer.

This is an extended version of @code{gpgme_op_encrypt_sign} with @var{recpstring} as additional parameter. If @var{recp} is NULL and @var{recpstring} is not NULL, the latter is expected to be a linefeed delimited string with the set of key specifications. In contrast to @var{recp} the keys are given directly as strings and there is no need to first create the key objects. The keys are passed verbatim to the backend engine.
@w{gpgme_key_t @var{recp}[][], @
@w{const char *@var{recpstring}}, @
@w{gpgme_encrypt_flags_t @var{flags}}, @
@w{gpgme_data_t @var{plain}}, @w{gpgme_data_t @var{cipher}})

@since{1.11.0}

This is an extended version of @code{gpgme_op_encrypt_sign_start} with
@var{recpstring} as additional parameter. If @var{recp} is NULL and
@var{recpstring} is not NULL, the latter is expected to be a linefeed
delimited string with the set of key specifications. In contrast to
@var{recp} the keys are given directly as strings and there is no need
to first create the key objects. The keys are passed verbatim to the
backend engine.

@end deftypefun

@node Miscellaneous
@section Miscellaneous operations

Here are some support functions which are sometimes useful.

@menu
* Running other Programs::      Running other Programs
* Using the Assuan protocol::   Using the Assuan protocol
* Checking for updates::        How to check for software updates
@end menu

@node Running other Programs
@subsection Running other Programs

GPGME features an internal subsystem to run the actual backend
engines. Along with data abstraction object this subsystem can be
used to run arbitrary simple programs which even need not be related
to cryptographic features. It may for example be used to run tools
which are part of the GnuPG system but are not directly accessible
with the GPGME API.

@deftypefun gpgme_error_t gpgme_op_spawn @
  (@w{gpgme_ctx_t @var{ctx}}, @w{const char *@var{file}}, @
  @w{const char *@var{argv}[][], @w{gpgme_data_t @var{datain}}, @
  @w{gpgme_data_t @var{dataout}}, @w{gpgme_data_t @var{dataerr}}, @
  @w{unsigned int @var{flags}})

@since{1.5.0}
The function @code{gpgme_op_spawn} runs the program @var{file} with the arguments taken from the NULL terminated array @var{argv}. If no arguments are required @var{argv} may be given as @code{NULL}. In the latter case or if @code{argv[0]} is the empty string, GPGME uses the basename of @var{file} for @code{argv[0]}. The file descriptors @code{stdin}, @code{stdout}, and @code{stderr} are connected to the data objects @var{datain}, @var{dataout}, and @var{dataerr}. If NULL is passed for one of these data objects the corresponding file descriptor is connected to @file{/dev/null}.

The value in @var{flags} is a bitwise-or combination of one or multiple of the following bit values:

@table @code
@item GPGME_SPAWN_DETACHED
@since{1.5.0}
Under Windows this flag inhibits the allocation of a new console for the program. This is useful for a GUI application which needs to call a command line helper tool.
@item GPGME_SPAWN_ALLOW_SET_FG
@since{1.5.0}
Under Windows this flag allows the called program to put itself into the foreground.
@end table
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_spawn_start (@w{gpgme_ctx_t @var{ctx}}, @w{const char *@var{file}}, @w{const char *@var{argv}[]} , @w{gpgme_data_t @var{datain}}, @w{gpgme_data_t @var{dataout}}, @w{gpgme_data_t @var{dataerr}}, @w{unsigned int @var{flags}})
@since{1.5.0}
This is the asynchronous variant of @code{gpgme_op_spawn}.
@end deftypefun

@node Using the Assuan protocol
@subsection Using the Assuan protocol

The Assuan protocol can be used to talk to arbitrary Assuan servers. By default it is connected to the GnuPG agent, but it may be connected to arbitrary servers by using @code{gpgme_ctx_set_engine_info}. 

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passing the location of the servers socket as @var{file_name} argument, and an empty string as @var{home_dir} argument.

The Assuan protocol functions use three kinds of callbacks to transfer data:

@deftp {Data type} {gpgme_error_t (*gpgme_assuan_data_cb_t) @
   (@w{void *@var{opaque}}, @w{const void *@var{data}}, @
   @w{size_t @var{datalen}})}

@since{1.2.0}

This callback receives any data sent by the server. @var{opaque} is the pointer passed to @code{gpgme_op_assuan_transact_start}, @var{data} of length @var{datalen} refers to the data sent.
@end deftp

@deftp {Data type} {gpgme_error_t (*gpgme_assuan_inquire_cb_t) @
   (@w{void *@var{opaque}}, @w{const char *@var{name}}, @
   @w{const char *@var{args}}, @w{gpgme_data_t *@var{r_data}})}

@since{1.2.0}

This callback is used to provide additional data to the Assuan server. @var{opaque} is the pointer passed to @code{gpgme_op_assuan_transact_start}, @var{name} and @var{args} specify what kind of data the server requested, and @var{r_data} is used to return the actual data.

Note: Returning data is currently not implemented in @acronym{GPGME}.
@end deftp

@deftp {Data type} {gpgme_error_t (*gpgme_assuan_status_cb_t) @
   (@w{void *@var{opaque}}, @w{const char *@var{status}}, @
   @w{const char *@var{args}})}

@since{1.2.0}

This callback receives any status lines sent by the server. @var{opaque} is the pointer passed to @code{gpgme_op_assuan_transact_start}, @var{status} and @var{args} denote the status update sent.
@end deftp

@deftypefun gpgme_error_t gpgme_op_assuan_transact_start @
   (@w{gpgme_ctx_t @var{ctx}}, @w{const char *@var{command}}, @
   @w{void * @var{data_cb_value}}, @
   @w{gpgme_assuan_data_cb_t @var{data_cb}}, @
   @w{gpgme_assuan_inquire_cb_t @var{inquire_cb}}, @
   @w{gpgme_assuan_status_cb_t @var{status_cb}})}

The Assuan protocol functions use three kinds of callbacks to transfer data:
Send the Assuan \texttt{command} and return results via the callbacks. Any callback may be \texttt{NULL}. The result of the operation may be retrieved using \texttt{gpgme_wait_ext}.

Asynchronous variant.

Synchronous variant.

@node Checking for updates
@subsection How to check for software updates

The GnuPG Project operates a server to query the current versions of software packages related to GnuPG. GPGME can be used to access this online database and check whether a new version of a software package is available.

This is a pointer to a structure used to store the result of a \texttt{gpgme_op_query_swdb} operation. After success full call to that function, you can retrieve the pointer to the result with \texttt{gpgme_op_query_swdb_result}. The structure contains the following member:
@table @code
@item name
This is the name of the package.

@item iversion
The currently installed version or an empty string. This value is
either a copy of the argument given to @code{gpgme_op_query_swdb} or
the version of the installed software as figured out by GPGME or GnuPG.

@item created
This gives the date the file with the list of version numbers has
originally be created by the GnuPG project.

@item retrieved
This gives the date the file was downloaded.

@item warning
If this flag is set either an error has occurred or some of the
information in this structure are not properly set. For example if
the version number of the installed software could not be figured out,
the @code{update} flag may not reflect a required update status.

@item update
If this flag is set an update of the software is available.

@item urgent
If this flag is set an available update is important.

@item noinfo
If this flag is set, no valid information could be retrieved.

@item unknown
If this flag is set the given @code{name} is not known.

@item tooold
If this flag is set the available information is not fresh enough.

@item error
If this flag is set some other error has occurred.

@item version
The version string of the latest released version.

@item reldate
The release date of the latest released version.

@end table
@end deftp
Query the software version database for software package \texttt{name} and check against the installed version given by \texttt{iversion}. If \texttt{iversion} is given as \texttt{NULL} a check is only done if GPGME can figure out the version by itself (for example when using "gpgme" or "gnupg"). If \texttt{NULL} is used for \texttt{name} the current gpgme version is checked. \texttt{reserved} must be set to 0.

Here is an example on how to check whether GnuPG is current:

```c
#include <gpgme.h>

int
main (void)
@{ 
  gpg_error_t err;
  gpgme_ctx_t ctx;
  gpgme_query_swdb_result_t result;

  gpgme_check_version (NULL);
  err = gpgme_new (&ctx);
  if (err)
fprintf (stderr, "error creating context: %s\n", gpg_strerror (err));
else
 @{
 gpgme_set_protocol (ctx, GPGME_PROTOCOL_GPGCONF);

 err = gpgme_op_query_swdb (ctx, "gnupg", NULL, 0);
 if (err)
   fprintf (stderr, "error querying swdb: %s\n", gpg_strerror (err));
 else
   @{
     result = gpgme_op_query_swdb_result (ctx);
     if (!result)
       fprintf (stderr, "error querying swdb\n");
     if (!result->warning && !result->update)
       printf ("GnuPG version %s is current\n",
               result->iversion);
     else if (!result->warning && result->update)
       printf ("GnuPG version %s can be updated to %s\n",
               result->iversion, result->version);
     else
       fprintf (stderr, "error finding the update status\n");
   }
 gpgme_release (ctx);
 @{
 return 0;
 @{
 @}@end example

@node Run Control
@section Run Control
@cindex run control
@cindex cryptographic operation, running

@acro{GPGME} supports running operations synchronously and asynchronously. You can use asynchronous operation to set up a context up to initiating the desired operation, but delay performing it to a later point.

Furthermore, you can use an external event loop to control exactly when @acro{GPGME} runs. This ensures that @acro{GPGME} only runs when necessary and also prevents it from blocking for a long time.

@menu
* Waiting For Completion:: Waiting until an operation is completed.
* Using External Event Loops:: Advanced control over what happens when.
* Cancellation:: How to end pending operations prematurely.

The function `gpgme_wait` continues the pending operation within the context `ctx`. In particular, it ensures the data exchange between `GPGME` and the crypto backend and watches over the run time status of the backend process.

If `hang` is true, the function does not return until the operation is completed or cancelled. Otherwise the function will not block for a long time.

The error status of the finished operation is returned in `status` if `gpgme_wait` does not return `NULL`.

The `ctx` argument can be `NULL`. In that case, `gpgme_wait` waits for any context to complete its operation.

`gpgme_wait` can be used only in conjunction with any context that has a pending operation initiated with one of the `gpgme_op_*_start` functions except `gpgme_op_keylist_start` and `gpgme_op_trustlist_start` (for which you should use the corresponding `gpgme_op_*_next` functions). If `ctx` is `NULL`, all of such contexts are waited upon and possibly returned. Synchronous operations running in parallel, as well as key and trust item list operations, do not affect `gpgme_wait`.

In a multi-threaded environment, only one thread should ever call `gpgme_wait` at any time, regardless of whether `ctx` is specified or not. This means that all calls to this function should be fully synchronized by locking primitives. It is safe to start asynchronous operations while a thread is running in `gpgme_wait`.

The function returns the `ctx` of the context which has finished the operation. If `hang` is false, and the timeout expires, `NULL` is returned and `status` will be set to 0. If an error occurs, `NULL` is returned and the error is returned in `status`.

@end deftypefun
@node Using External Event Loops
@subsection Using External Event Loops
@cindex event loop, external

@acronym{GPGME} hides the complexity of the communication between the library and the crypto engine. The price of this convenience is that the calling thread can block arbitrary long waiting for the data returned by the crypto engine. In single-threaded programs, in particular if they are interactive, this is an unwanted side-effect. OTOH, if @code{gpgme_wait} is used without the @var{hang} option being enabled, it might be called unnecessarily often, wasting CPU time that could be used otherwise.

The I/O callback interface described in this section lets the user take control over what happens when. @acronym{GPGME} will provide the user with the file descriptors that should be monitored, and the callback functions that should be invoked when a file descriptor is ready for reading or writing. It is then the user's responsibility to decide when to check the file descriptors and when to invoke the callback functions. Usually this is done in an event loop, that also checks for events in other parts of the program. If the callback functions are only called when the file descriptors are ready, @acronym{GPGME} will never block. This gives the user more control over the program flow, and allows to perform other tasks when @acronym{GPGME} would block otherwise.

By using this advanced mechanism, @acronym{GPGME} can be integrated smoothly into GUI toolkits like GTK+ even for single-threaded programs.

@menu
* I/O Callback Interface::        How I/O callbacks are registered.
  * Registering I/O Callbacks::     How to use I/O callbacks for a context.
  * I/O Callback Example::          An example how to use I/O callbacks.
    * I/O Callback Example GTK+:     How to use @acronym{GPGME} with GTK+.
    * I/O Callback Example GDK::      How to use @acronym{GPGME} with GDK.
    * I/O Callback Example Qt::       How to use @acronym{GPGME} with Qt.
@end menu

@node I/O Callback Interface
@subsubsection I/O Callback Interface

@deftp {Data type} {gpgme_error_t (*gpgme_io_cb_t) (@w{void *@var{data}}, @w{int @var{fd}})}
@tindex gpgme_io_cb_t
The @code{gpgme_io_cb_t} type is the type of functions which @acronym{GPGME} wants to register as I/O callback handlers using the @code{gpgme_register_io_cb_t} functions provided by the user.
@var{data} and @var{fd} are provided by @acronym{GPGME} when the I/O callback handler is registered, and should be passed through to the handler when it is invoked by the user because it noticed activity on the file descriptor @var{fd}.

The callback handler always returns @code{0}, but you should consider the return value to be reserved for later use.
@end deftp

@deftp {Data type} {gpgme_error_t (*gpgme_register_io_cb_t) (@w{void *@var{data}}, @w{int @var{fd}}, @w{int @var{dir}}, @w{gpgme_io_cb_t @var{fnc}}, @w{void *@var{fnc_data}}, @w{void **@var{tag}})}
@tindex gpgme_register_io_cb_t

The @code{gpgme_register_io_cb_t} type is the type of functions which can be called by @acronym{GPGME} to register an I/O callback function @var{fnc} for the file descriptor @var{fd} with the user.

@var{fnc_data} should be passed as the first argument to @var{fnc} when the handler is invoked (the second argument should be @var{fd}).

If @var{dir} is 0, @var{fnc} should be called by the user when @var{fd} is ready for writing. If @var{dir} is 1, @var{fnc} should be called when @var{fd} is ready for reading.

@var{data} was provided by the user when registering the @code{gpgme_register_io_cb_t} function with @acronym{GPGME} and will always be passed as the first argument when registering a callback function.

For example, the user can use this to determine the event loop to which the file descriptor should be added.

@acronym{GPGME} will call this function when a crypto operation is initiated in a context for which the user has registered I/O callback handler functions with @code{gpgme_set_io_cbs}. It can also call this function when it is in an I/O callback handler for a file descriptor associated to this context.

The user should return a unique handle in @var{tag} identifying this I/O callback registration, which will be passed to the @code{gpgme_register_io_cb_t} function without interpretation when the file descriptor should not be monitored anymore.
@end deftp

@deftp {Data type} {void (*gpgme_remove_io_cb_t) (@w{void *@var{tag}})}
@tindex gpgme_remove_io_cb_t

The @code{gpgme_remove_io_cb_t} type is the type of functions which can be called by @acronym{GPGME} to remove an I/O callback handler that was registered before. @var{tag} is the handle that was returned by the @code{gpgme_register_io_cb_t} for this I/O callback.

@acronym{GPGME} can call this function when a crypto operation is in an I/O callback. It will also call this function when the context is
destroyed while an operation is pending.
@end deftp

@endftp

@endftp
{Data type} {enum gpgme_event_io_t}
@tindex gpgme_event_io_t
The @code{gpgme_event_io_t} type specifies the type of an event that is reported to the user by @acronym{GPGME} as a consequence of an I/O operation. The following events are defined:

@table
@item GPGME_EVENT_START
The operation is fully initialized now, and you can start to run the registered I/O callback handlers now. Note that registered I/O callback handlers must not be run before this event is signalled. @var{type_data} is @code{NULL} and reserved for later use.

@item GPGME_EVENT_DONE
The operation is finished, the last I/O callback for this operation was removed. The accompanying @var{type_data} points to a @code{struct gpgme_io_event_done_data} variable that contains the status of the operation that finished. This event is signalled after the last I/O callback has been removed.

@item GPGME_EVENT_NEXT_KEY
In a @code{gpgme_op_keylist_start} operation, the next key was received from the crypto engine. The accompanying @var{type_data} is a @code{gpgme_key_t} variable that contains the key with one reference for the user.

@item GPGME_EVENT_NEXT_TRUSTITEM
In a @code{gpgme_op_trustlist_start} operation, the next trust item was received from the crypto engine. The accompanying @var{type_data} is a @code{gpgme_trust_item_t} variable that contains the trust item with one reference for the user.
@end table
@end deftp

@endftp
{Data type} {void (*gpgme_event_io_cb_t) (@w{void *@var{data}}, @w{gpgme_event_io_t @var{type}}, @w{void *@var{type_data}})}
The @code{gpgme_event_io_cb_t} type is the type of functions which can be called by @acronym{GPGME} to signal an event for an operation running in a context which has I/O callback functions registered by the user.

@var{data} was provided by the user when registering the @code{gpgme_event_io_cb_t} function with @acronym{GPGME} and will always be passed as the first argument when registering a callback function.
For example, the user can use this to determine the context in which this event has occurred.
@var{type} will specify the type of event that has occurred.
@var{type_data} specifies the event further, as described in the above
list of possible @code{gpgme_event_io_t} types.

@acronym{GPGME} can call this function in an I/O callback handler.
@end deftp

@node Registering I/O Callbacks
@subsubsection Registering I/O Callbacks

@deftp {Data type} {struct gpgme_io_cbs}
@tindex gpgme_event_io_t
This structure is used to store the I/O callback interface functions
described in the previous section. It has the following members:

@table @code
@item gpgme_register_io_cb_t add
This is the function called by @acronym{GPGME} to register an I/O
callback handler. It must be specified.

@item void *add_priv
This is passed as the first argument to the @code{add} function when
it is called by @acronym{GPGME}. For example, it can be used to
determine the event loop to which the file descriptor should be added.

@item gpgme_remove_io_cb_t remove
This is the function called by @acronym{GPGME} to remove an I/O
callback handler. It must be specified.

@item gpgme_event_io_cb_t event
This is the function called by @acronym{GPGME} to signal an event for
an operation. It must be specified, because at least the start event
must be processed.

@item void *event_priv
This is passed as the first argument to the @code{event} function when
it is called by @acronym{GPGME}. For example, it can be used to
determine the context in which the event has occurred.
@end table
@end deftp

@deftypefun void gpgme_set_io_cbs (@w{gpgme_ctx_t @var{ctx}}, @w{struct gpgme_io_cbs *@var{io_cbs}})
The function @code{gpgme_set_io_cbs} enables the I/O callback
interface for the context @var{ctx}. The I/O callback functions are
specified by @var{io_cbs}.
If `@var{io_cbs}-@code{add} is @code{NULL}`, the I/O callback interface is disabled for the context, and normal operation is restored.

@end deftypefun

@end deftypefun void gpgme_get_io_cbs (@w{gpgme_ctx_t @var{ctx}}, @w{struct gpgme_io_cbs *@var{io_cbs}})

The function `gpgme_get_io_cbs` returns the I/O callback functions set with `gpgme_set_io_cbs` in `@var{io_cbs}`.

@end deftypefun

@node I/O Callback Example
@subsubsection I/O Callback Example

To actually use an external event loop, you have to implement the I/O callback functions that are used by GPGME to register and unregister file descriptors. Furthermore, you have to actually monitor these file descriptors for activity and call the appropriate I/O callbacks.

The following example illustrates how to do that. The example uses locking to show in which way the callbacks and the event loop can run concurrently. For the event loop, we use a fixed array. For a real-world implementation, you should use a dynamically sized structure because the number of file descriptors needed for a crypto operation in GPGME is not predictable.

@example
#include <assert.h>
#include <errno.h>
#include <stdlib.h>
#include <pthread.h>
#include <sys/types.h>
#include <gpgme.h>

/* The following structure holds the result of a crypto operation. */
struct op_result
@ {
    int done;
    gpgme_error_t err;
};

/* The following structure holds the data associated with one I/O callback. */
struct one_fd
@ {
    int fd;
    int dir;
    gpgme_io_cb_t fnc;
};
void *fnc_data;
void *loop;
@);

struct event_loop
{@
    pthread_mutex_t lock;
#define MAX_FDS 32
    /* Unused slots are marked with FD being -1. */
    struct one_fd fds[MAX_FDS];
@};
@end example

The following functions implement the I/O callback interface.

@example
gpgme_error_t
add_io_cb (void *data, int fd, int dir, gpgme_io_cb_t fnc, void *fnc_data,
    void **r_tag)
{@
    struct event_loop *loop = data;
    struct one_fd *fds = loop->fds;
    int i;

    pthread_mutex_lock (&loop->lock);
    for (i = 0; i < MAX_FDS; i++)
        {@
            if (fds[i].fd == -1)
                {@
                    fds[i].fd = fd;
                    fds[i].dir = dir;
                    fds[i].fnc = fnc;
                    fds[i].fnc_data = fnc_data;
                    fds[i].loop = loop;
                    break;
                @} 
        @} 
    pthread_mutex_unlock (&loop->lock);
    if (i == MAX_FDS)
        return gpg_error (GPG_ERR_GENERAL);
    *r_tag = &fds[i];
    return 0;
@}

void
remove_io_cb (void *tag)
{@
    struct one_fd *fd = tag;
}
struct event_loop *loop = fd->loop;

pthread_mutex_lock (&loop->lock);
fd->fd = -1;
pthread_mutex_unlock (&loop->lock);

do {

void
event_io_cb (void *data, gpgme_event_io_t type, void *type_data)
@
{
struct op_result *result = data;

/* We don't support list operations here. */
if (type == GPGME_EVENT_DONE)
@
{
    result->done = 1;
    result->err = *type_data;
}
}
@end example

The final missing piece is the event loop, which will be presented next. We only support waiting for the success of a single operation.

@example
int
do_select (struct event_loop *loop)
@
{
    fd_set rfds;
    fd_set wfds;
    int i, n;
    int any = 0;
    struct timeval tv;
    struct one_fd *fdlist = loop->fds;

    pthread_mutex_lock (&loop->lock);
    FD_ZERO (&rfds);
    FD_ZERO (&wfds);
    for (i = 0; i < MAX_FDS; i++)
        if (fdlist[i].fd != -1)
            FD_SET (fdlist[i].fd, fdlist[i].dir ? &rfds : &wfds);
    pthread_mutex_unlock (&loop->lock);

    tv.tv_sec = 0;
    tv.tv_usec = 1000;

    do
        @

n = select (FD_SETSIZE, &rfds, &wfds, NULL, &tv);
@
while (n < 0 && errno == EINTR);
@

if (n < 0)
  return n; /* Error or timeout. */
@

pthread_mutex_lock (&loop->lock);
for (i = 0; i < MAX_FDS && n; i++)
@
  if (fdlist[i].fd != -1)
    if (FD_ISSET (fdlist[i].fd, fdlist[i].dir ? &rfds : &wfds))
      assert (n);
      n--;
      any = 1;
      /* The I/O callback handler can register/remove callbacks, 
       * so we have to unlock the file descriptor list. */
      pthread_mutex_unlock (&loop->lock);
      (*fdlist[i].fnc) (fdlist[i].fnc_data, fdlist[i].fd);
      pthread_mutex_lock (&loop->lock);
  }
@
@
pthread_mutex_unlock (&loop->lock);
return any;
@

void
wait_for_op (struct event_loop *loop, struct op_result *result)
@
{
  int ret;
@
  do
    @
      ret = do_select (loop);
    @
    while (ret >= 0 && !result->done);
  @
@end example

The main function shows how to put it all together.
@
@example
int
main (int argc, char *argv[])
@
{
struct event_loop loop;
struct op_result result;
gpgme_ctx_t ctx;
gpgme_error_t err;
gpgme_data_t sig, text;
int i;
pthread_mutexattr_t attr;
struct gpgme_io_cbs io_cbs =
{
    add_io_cb,
    &loop,
    remove_io_cb,
    event_io_cb,
    &result
};

init_gpgme ();

/* Initialize the loop structure. */

/* The mutex must be recursive, since remove_io_CB (which acquires a
lock) can be called while holding a lock acquired in do_select. */
pthread_mutexattr_init (&attr);
pthread_mutexattr_settype (&attr, PTHREAD_MUTEX_RECURSIVE);
pthread_mutex_init (&loop.lock, &attr);
pthread_mutexattr_destroy (&attr);

for (i = 0; i < MAX_FDS; i++)
    loop.fds[i].fd = -1;

/* Initialize the result structure. */
result.done = 0;

err = gpgme_data_new_from_file (&sig, "signature", 1);
if (!err)
    err = gpgme_data_new_from_file (&text, "text", 1);
if (!err)
    err = gpgme_new (&ctx);
if (!err)
    {
        gpgme_set_io_cbs (ctx, &io_cbs);
        err = gpgme_op_verify_start (ctx, sig, text, NULL);
    }
if (err)
    {
        fprintf (stderr, "gpgme error: %s: %s\n",
                gpgme_strsource (err), gpgme_strerror (err));
        exit (1);
wait_for_op (&loop, &result);
if (!result.done)
@
    fprintf (stderr, "select err\n");
    exit (1);
@
if (!result.err)
@
    fprintf (stderr, "verification failed: %s: %s\n",
        gpgme_strsource (result.err), gpgme_strerror (result.err));
    exit (1);
@
/* Evaluate verify result. */
@dots{}
return 0;
@
@end example

@node I/O Callback Example GTK+
@subsubsection I/O Callback Example GTK+
@cindex GTK+, using @acronym{GPGME} with

The I/O callback interface can be used to integrate @acronym{GPGME} with the GTK+ event loop. The following code snippets shows how this can be done using the appropriate register and remove I/O callback functions. In this example, the private data of the register I/O callback function is unused. The event notifications is missing because it does not require any GTK+ specific setup.

@example
#include <gtk/gtk.h>

struct my_gpgme_io_cb
@
{
    gpgme_io_cb_t fnc;
    void *fnc_data;
    guint input_handler_id
@
};

void
my_gpgme_io_cb (gpointer data, gint source, GdkInputCondition condition)
@
{
    struct my_gpgme_io_cb *iocb = data;
    (*iocb->fnc) (iocb->data, source);
@
}
void
my_gpgme_remove_io_cb (void *data)
{  
    struct my_gpgme_io_cb *iocb = data;
    gtk_input_remove (data->input_handler_id);
}

void
my_gpgme_register_io_callback (void *data, int fd, int dir, gpgme_io_cb_t fnc,
    void *fnc_data, void **tag)
{  
    struct my_gpgme_io_cb *iocb = g_malloc (sizeof (struct my_gpgme_io_cb));
    iocb->fnc = fnc;
    iocb->data = fnc_data;
    iocb->input_handler_id = gtk_input_add_full (fd, dir
        ? GDK_INPUT_READ       
        : GDK_INPUT_WRITE,     
        my_gpgme_io_callback,  
        0, iocb, NULL);

    *tag = iocb;
    return 0;
}
@end example

@node I/O Callback Example GDK
@subsubsection I/O Callback Example GDK
@cindex GDK, using @acronym{GPGME} with

The I/O callback interface can also be used to integrate
@acronym{GPGME} with the GDK event loop. The following code snippets
shows how this can be done using the appropriate register and remove
I/O callback functions. In this example, the private data of the
register I/O callback function is unused. The event notifications is
missing because it does not require any GDK specific setup.

It is very similar to the GTK+ example in the previous section.

@example
#include <gdk/gdk.h>

struct my_gpgme_io_cb
{  
    gpgme_io_cb_t fnc;
    void *fnc_data;
    gint tag;
};
void
my_gpgme_io_cb (gpointer data, gint source, GdkInputCondition condition)
@{
  struct my_gpgme_io_cb *iocb = data;
  (*(iocb->fnc)) (iocb->data, source);
@ }

void
my_gpgme_remove_io_cb (void *data)
@{
  struct my_gpgme_io_cb *iocb = data;
  gdk_input_remove (data->tag);
@ }

void
my_gpgme_register_io_callback (void *data, int fd, int dir, gpgme_io_cb_t fnc,
                              void *fnc_data, void **tag)
@{
  struct my_gpgme_io_cb *iocb = g_malloc (sizeof (struct my_gpgme_io_cb));
  iocb->fnc = fnc;
  iocb->data = fnc_data;
  iocb->tag = gtk_input_add_full (fd, dir ? GDK_INPUT_READ : GDK_INPUT_WRITE,
                                   my_gpgme_io_callback, iocb, NULL);
  *tag = iocb;
  return 0;
@ }
@end example

@node I/O Callback Example Qt
@subsubsection I/O Callback Example Qt
@cindex Qt, using @acronym{GPGME} with

The I/O callback interface can also be used to integrate
@acronym{GPGME} with the Qt event loop. The following code snippets
show how this can be done using the appropriate register and remove
I/O callback functions. In this example, the private data of the
register I/O callback function is unused. The event notifications is
missing because it does not require any Qt specific setup.

@example
#include <qsocketnotifier.h>
#include <qapplication.h>

struct IOCB @{
  IOCB( GpgmeIOCb f, void * d, QSocketNotifier * n )
     : func( f ), data( d ), notifier( n ) @{@ }
}
GpgmeIOCb func;
void * data;
QSocketNotifier * notifier;
@ }

class MyApp : public QApplication @ {

    // ...

static void registerGpgmeIOCallback( void * data, int fd, int dir,
    GpgmeIOCb func, void * func_data,
    void ** tag ) @ {
    QSocketNotifier * n =
    new QSocketNotifier( fd, dir ? QSocketNotifier::Read
        : QSocketNotifier::Write );
    connect( n, SIGNAL(activated(int)),
        qApp, SLOT(slotGpgmeIOCallback(int)) );
    qApp->mIOCBs.push_back( IOCB( func, func_data, n ) );
    *tag = (void*)n;
@ }

static void removeGpgmeIOCallback( void * tag ) @ {
    if ( !tag ) return;
    QSocketNotifier * n = static_cast<QSocketNotifier*>( tag );
    for ( QValueList<IOCB>::iterator it = qApp->mIOCBs.begin() ;
        it != qApp->mIOCBs.end() ; ++it )
        if ( it->notifier == n ) @ {
            delete it->notifier;
            qApp->mIOCBs.erase( it );
            return;
        }
@ }

public slots:
void slotGpgmeIOCallback( int fd ) @ {
    for ( QValueList<IOCB>::const_iterator it = mIOCBs.begin() ;
        it != mIOCBs.end() ; ++it )
        if ( it->notifier && it->notifier->socket() == fd )
            (*(it->func)) ( it->func_data, fd );
@ }

    // ...

private:
    QValueList<IOCB> mIOCBs;
    // ...
@ ];
@end example
Sometimes you do not want to wait for an operation to finish. \acro{GPGME} provides two different functions to achieve that. The function \code{gpgme_cancel} takes effect immediately. When it returns, the operation is effectively canceled. However, it has some limitations and can not be used with synchronous operations. In contrast, the function \code{gpgme_cancel_async} can be used with any context and from any thread, but it is not guaranteed to take effect immediately. Instead, cancellation occurs at the next possible time (typically the next time I/O occurs in the target context).

\begin{verbatim}
@deftypefun gpgme_ctxt_t gpgme_cancel (@w{gpgme_ctxt_t @var{ctx}}) @since{0.4.5}
@end deftypefun
\end{verbatim}

The function \code{gpgme_cancel} attempts to cancel a pending operation in the context \var{ctx}. This only works if you use the global event loop or your own event loop.

If you use the global event loop, you must not call \code{gpgme_wait} during cancellation. After successful cancellation, you can call \code{gpgme_wait} (optionally waiting on \var{ctx}), and the context \var{ctx} will appear as if it had finished with the error code \code{GPG_ERR_CANCEL}.

If you use an external event loop, you must ensure that no I/O callbacks are invoked for this context (for example by halting the event loop). On successful cancellation, all registered I/O callbacks for this context will be unregistered, and a \code{GPGME_EVENT_DONE} event with the error code \code{GPG_ERR_CANCEL} will be signalled.

The function returns an error code if the cancellation failed (in this case the state of \var{ctx} is not modified).

\begin{verbatim}
@deftypefun gpgme_ctxt_t gpgme_cancel_async (@w{gpgme_ctxt_t @var{ctx}}) @since{1.1.7}
@end deftypefun
\end{verbatim}

The function \code{gpgme_cancel_async} attempts to cancel a pending operation in the context \var{ctx}. This can be called by any thread.
at any time after starting an operation on the context, but will not take effect immediately. The actual cancellation happens at the next time GPGME processes I/O in that context.

The function returns an error code if the cancellation failed (in this case the state of @var{ctx} is not modified).
@end deftypefun

@c **********************************************************
@c *******************  Appendices  *************************
@c **********************************************************
@include uiserver.texi

@node Debugging
@appendix How to solve problems
@cindex debug
@cindex GPGME_DEBUG
Everyone knows that software often does not do what it should do and thus there is a need to track down problems. This is in particular true for applications using a complex library like @acronym{GPGME} and of course also for the library itself. Here we give a few hints on how to solve such problems.

First of all you should make sure that the keys you want to use are installed in the GnuPG engine and are usable. Thus the first test is to run the desired operation using @command{gpg} or @command{gpgsm} on the command line. If you can't figure out why things don't work, you may use @acronym{GPGME}'s built in trace feature. This feature is either enabled using the environment variable @code{GPGME_DEBUG} or, if this is not possible, by calling the function @code{gpgme_set_global_flag}. The value is the trace level and an optional file name. If no file name is given the trace output is printed to @code{stderr}.

@noindent
For example
@smallexample
GPGME_DEBUG=9:/home/user/mygpgme.log
@end smallexample
@noindent
(Note that under Windows you use a semicolon in place of the colon to separate the fields.)

A trace level of 9 is pretty verbose and thus you may want to start off with a lower level. The exact definition of the trace levels and the output format may change with any release; you need to check the
source code for details. In any case the trace log should be helpful
to understand what is going on. Warning: The trace log may
reveal sensitive details like passphrases or other data you use in
your application. If you are asked to send a log file, make sure that
you run your tests only with play data.

@node Deprecated Functions
@appendix Deprecated Functions
@cindex deprecated

For backward compatibility @acronym{GPGME} has a number of functions,
data types and constants which are deprecated and should not be used
anymore. We document here those which are really old to help
understanding old code and to allow migration to their modern
counterparts.

@strong{Warning:} These interfaces will be removed in a future version
of @acronym{GPGME}.

@deftypefun void gpgme_key_release (@w{gpgme_key_t @var{key}})
The function @code{gpgme_key_release} is equivalent to
@code{gpgme_key_unref}.
@end deftypefun

@deftypefun void gpgme_trust_item_release (@w{gpgme_trust_item_t @var{item}})
The function @code{gpgme_trust_item_release} is an alias for
@code{gpgme_trust_item_unref}.
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_import_ext (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_data_t
@var{keydata}}, @w{int *@var{nr}})
@since{0.3.9}
The function @code{gpgme_op_import_ext} is equivalent to:
@example
    gpgme_error_t err = gpgme_op_import (ctx, keydata);
    if (!err)
    @{
        gpgme_import_result_t result = gpgme_op_import_result (ctx);
        *nr = result->considered;
    @}
@end example
@end deftypefun
The `gpgme_edit_cb_t` type is the type of functions which \acronym{GPGME} calls if a key edit operation is on-going. The status code \var{status} and the argument line \var{args} are passed through by \acronym{GPGME} from the crypto engine. The file descriptor \var{fd} is -1 for normal status messages. If \var{status} indicates a command rather than a status message, the response to the command should be written to \var{fd}. The \var{handle} is provided by the user at start of operation.

The function should return \code{GPG_ERR_FALSE} if it did not handle the status code, \code{0} for success, or any other error value.

Note: This function is deprecated, please use \code{gpgme_op_interact} instead.

The function \code{gpgme_op_edit} processes the key \var{KEY} interactively, using the edit callback function \var{FNC} with the handle \var{HANDLE}. The callback is invoked for every status and command request from the crypto engine. The output of the crypto engine is written to the data object \var{out}.

Note that the protocol between the callback function and the crypto engine is specific to the crypto engine and no further support in implementing this protocol correctly is provided by \acronym{GPGME}.

The function returns the error code \code{GPG_ERR_NO_ERROR} if the edit operation completes successfully, \code{GPG_ERR_INV_VALUE} if \var{ctx} or \var{key} is not a valid pointer, and any error returned by the crypto engine or the edit callback handler.

Note: This function is deprecated, please use
The function @code{gpgme_op_interact_start} initiates a
@code{gpgme_op_edit} operation. It can be completed by calling
@code{gpgme_wait} on the context. @xref{Waiting For Completion}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the
operation was started successfully, and @code{GPG_ERR_INV_VALUE} if
@var{ctx} or @var{key} is not a valid pointer.
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_card_edit (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_key_t @var{key}}, @w{gpgme_edit_cb_t @var{fnc}}, @w{void *@var{handle}}, @w{gpgme_data_t @var{out}})

Note: This function is deprecated, please use @code{gpgme_op_interact}
with the flag @code{GPGME_INTERACT_CARD} instead.

The function @code{gpgme_op_card_edit} is analogous to
@code{gpgme_op_edit}, but should be used to process the smart card corresponding to the key @var{key}.
@end deftypefun

@deftypefun gpgme_error_t gpgme_op_card_edit_start (@w{gpgme_ctx_t @var{ctx}}, @w{gpgme_key_t @var{key}}, @w{gpgme_edit_cb_t @var{fnc}}, @w{void *@var{handle}}, @w{gpgme_data_t @var{out}})

Note: This function is deprecated, please use @code{gpgme_op_interact_start}
with the flag @code{GPGME_INTERACT_CARD} instead.

The function @code{gpgme_op_card_edit_start} initiates a
@code{gpgme_op_card_edit} operation. It can be completed by calling
@code{gpgme_wait} on the context. @xref{Waiting For Completion}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the
operation was started successfully, and @code{GPG_ERR_INV_VALUE} if
@var{ctx} or @var{key} is not a valid pointer.
@end deftypefun

@deftypefun gpgme_error_t gpgme_data_new_with_read_cb (@w{gpgme_data_t *@var{dh}}, @w{int (*@var{readfunc})} (@w{void *@var{hook}}, @w{char *@var{buffer}}, @w{size_t @var{count}}, @w{size_t *@var{nread}}), @w{void *@var{hook_value}})

The function @code{gpgme_data_new_with_read_cb} creates a new
@code{gpgme_data_t} object and uses the callback function @var{readfunc}
to retrieve the data on demand. As the callback function can supply
the data in any way it wants, this is the most flexible data type
@acronym{GPGME} provides. However, it can not be used to write data.

The callback function receives @var{hook_value} as its first argument
whenever it is invoked. It should return up to @var{count} bytes in
@var{buffer}, and return the number of bytes actually read in
@var{buffer} and @var{nread}. It may return @code{0} in @var{nread} if no data is
currently available. To indicate @code{EOF} the function should
return with an error code of @code{-1} and set @var{nread} to
@code{0}. The callback function may support to reset its internal
read pointer if it is invoked with @var{buffer} and @var{nread} being
@code{NULL} and @var{count} being @code{0}.

The function returns the error code @code{GPG_ERR_NO_ERROR} if the
data object was successfully created, @code{GPG_ERR_INV_VALUE} if
@var{dh} or @var{readfunc} is not a valid pointer, and
@code{GPG_ERR_ENOMEM} if not enough memory is available.
@end deftypefun

@end deftypefun gpgme_error_t gpgme_data_rewind (@w{gpgme_data_t @var{dh}})
The function @code{gpgme_data_rewind} is equivalent to:

@example
return (gpgme_data_seek (dh, 0, SEEK_SET) == -1)
 ? gpgme_error_from_errno (errno) : 0;
@end example
@end deftypefun

@deftp {Data type} gpgme_attr_t
The @code{gpgme_attr_t} type is used to specify a key or trust item
attribute. The following attributes are defined:

@table @code
@item GPGME_ATTR_KEYID
This is the key ID of a sub key. It is representable as a string.
For trust items, the trust item refers to the key with this ID.

@item GPGME_ATTR_FPR
This is the fingerprint of a sub key. It is representable as a string.

@item GPGME_ATTR_ALGO
This is the crypto algorithm for which the sub key can be used. It
is representable as a string and as a number. The numbers correspond
to the @code{enum gcry_pk_algos} values in the gcrypt library.

@item GPGME_ATTR_LEN
This is the key length of a sub key. It is representable as a
number.

@item GPGME_ATTR_CREATED
This is the timestamp at creation time of a sub key. It is representable as a number.

@item GPGME_ATTR_EXPIRE
This is the expiration time of a sub key. It is representable as a number.

@item GPGME_ATTR_OTRUST
XXX FIXME (also for trust items)

@item GPGME_ATTR_USERID
This is a user ID. There can be more than one user IDs in a @var{gpgme_key_t} object. The first one (with index 0) is the primary user ID. The user ID is representable as a number.

For trust items, this is the user ID associated with this trust item.

@item GPGME_ATTR_NAME
This is the name belonging to a user ID. It is representable as a string.

@item GPGME_ATTR_EMAIL
This is the email address belonging to a user ID. It is representable as a string.

@item GPGME_ATTR_COMMENT
This is the comment belonging to a user ID. It is representable as a string.

@item GPGME_ATTR_VALIDITY
This is the validity belonging to a user ID. It is representable as a string and as a number. See below for a list of available validities.

For trust items, this is the validity that is associated with this trust item.

@item GPGME_ATTR_UID_REVOKED
This specifies if a user ID is revoked. It is representable as a number, and is @code{1} if the user ID is revoked, and @code{0} otherwise.

@item GPGME_ATTR_UID_INVALID
This specifies if a user ID is invalid. It is representable as a number, and is @code{1} if the user ID is invalid, and @code{0} otherwise.

@item GPGME_ATTR_LEVEL
This is the trust level of a trust item.
@item GPGME_ATTR_TYPE
This returns information about the type of key. For the string function this will either be "PGP" or "X.509". The integer function returns 0 for PGP and 1 for X.509. It is also used for the type of a trust item.

@item GPGME_ATTR_IS_SECRET
This specifies if the key is a secret key. It is representable as a number, and is @code{1} if the key is revoked, and @code{0} otherwise.

@item GPGME_ATTR_KEY_REVOKED
This specifies if a sub key is revoked. It is representable as a number, and is @code{1} if the key is revoked, and @code{0} otherwise.

@item GPGME_ATTR_KEY_INVALID
This specifies if a sub key is invalid. It is representable as a number, and is @code{1} if the key is invalid, and @code{0} otherwise.

@item GPGME_ATTR_KEY_EXPIRED
This specifies if a sub key is expired. It is representable as a number, and is @code{1} if the key is expired, and @code{0} otherwise.

@item GPGME_ATTR_KEY_DISABLED
This specifies if a sub key is disabled. It is representable as a number, and is @code{1} if the key is disabled, and @code{0} otherwise.

@item GPGME_ATTR_KEY_CAPS
This is a description of the capabilities of a sub key. It is representable as a string. The string contains the letter ``e'' if the key can be used for encryption, ``s'' if the key can be used for signatures, and ``c'' if the key can be used for certifications.

@item GPGME_ATTR_CAN_ENCRYPT
This specifies if a sub key can be used for encryption. It is representable as a number, and is @code{1} if the sub key can be used for encryption, and @code{0} otherwise.

@item GPGME_ATTR_CAN_SIGN
This specifies if a sub key can be used to create data signatures. It is representable as a number, and is @code{1} if the sub key can be used for signatures, and @code{0} otherwise.

@item GPGME_ATTR_CAN_CERTIFY
This specifies if a sub key can be used to create key certificates. It is representable as a number, and is @code{1} if the sub key can be used for certifications, and @code{0} otherwise.

@item GPGME_ATTR_SERIAL
The X.509 issuer serial attribute of the key. It is representable as
a string.

@item GPGME_ATTR_ISSUE
The X.509 issuer name attribute of the key. It is representable as a string.

@item GPGME_ATTR_CHAINID
The X.509 chain ID can be used to build the certification chain. It is representable as a string.
@end table
@end deftp

@end deftypefun

@end deftypefun {unsigned long} gpgme_key_get_ulong_attr (@w{gpgme_key_t @var{key}}, @w{gpgme_attr_t @var{what}}, @w{const void *@var{reserved}}, @w{int @var{idx}})
The function @code{gpgme_key_get_ulong_attr} returns the value of the number-representable attribute @var{what} of key @var{key}. If the attribute is an attribute of a sub key or an user ID, @var{idx} specifies the sub key or user ID of which the attribute value is returned. The argument @var{reserved} is reserved for later use and should be @code{NULL}.
@end deftypefun

The string returned is only valid as long as the key is valid.

The function returns @code{0} if an attribute can't be returned as a string, @var{key} is not a valid pointer, @var{idx} out of range, or @var{reserved} not @code{NULL}.
@end deftypefun

@end deftypefun {const char *} gpgme_key_get_string_attr (@w{gpgme_key_t @var{key}}, @w{gpgme_attr_t @var{what}}, @w{const void *@var{reserved}}, @w{int @var{idx}})
The function @code{gpgme_key_get_string_attr} returns the value of the string-representable attribute @var{what} of key @var{key}. If the attribute is an attribute of a sub key or an user ID, @var{idx} specifies the sub key or user ID of which the attribute value is returned. The argument @var{reserved} is reserved for later use and should be @code{NULL}.
@end deftypefun

The function returns @code{0} if an attribute can't be returned as a number, @var{key} is not a valid pointer, @var{idx} out of range, or @var{reserved} not @code{NULL}.
@end deftypefun

@c
@c Key Signatures
@c
The signatures on a key are only available if the key was retrieved via a listing operation with the @code{GPGME_KEYLIST_MODE_SIGS} mode.
enabled, because it is expensive to retrieve all signatures of a key.

So, before using the below interfaces to retrieve the signatures on a key, you have to make sure that the key was listed with signatures enabled. One convenient, but blocking, way to do this is to use the function @code{gpgme_get_key}.

@deftp {Data type} gpgme_attr_t
The @code{gpgme_attr_t} type is used to specify a key signature attribute. The following attributes are defined:

@table @code
@item GPGME_ATTR_KEYID
This is the key ID of the key which was used for the signature. It is representable as a string.

@item GPGME_ATTR_ALGO
This is the crypto algorithm used to create the signature. It is representable as a string and as a number. The numbers correspond to the @code{enum gcry_pk_algos} values in the gcrypt library.

@item GPGME_ATTR_CREATED
This is the timestamp at creation time of the signature. It is representable as a number.

@item GPGME_ATTR_EXPIRE
This is the expiration time of the signature. It is representable as a number.

@item GPGME_ATTR_USERID
This is the user ID associated with the signing key. The user ID is representable as a number.

@item GPGME_ATTR_NAME
This is the name belonging to a user ID. It is representable as a string.

@item GPGME_ATTR_EMAIL
This is the email address belonging to a user ID. It is representable as a string.

@item GPGME_ATTR_COMMENT
This is the comment belonging to a user ID. It is representable as a string.

@item GPGME_ATTR_KEY_REVOKED
This specifies if a key signature is a revocation signature. It is representable as a number, and is @code{1} if the key is revoked, and @code{0} otherwise.
@c @item GPGME_ATTR_KEY_EXPIRED
@c This specifies if a key signature is expired. It is representable as
@c a number, and is @code{1} if the key is revoked, and @code{0}
@c otherwise.
@c
@item GPGME_ATTR_SIG_CLASS
This specifies the signature class of a key signature. It is
representable as a number. The meaning is specific to the crypto
engine.

@item GPGME_ATTR_SIG_CLASS
This specifies the signature class of a key signature. It is
representable as a number. The meaning is specific to the crypto
engine.

@item GPGME_ATTR_SIG_STATUS
This is the same value as returned by @code{gpgme_get_sig_status}.
@end table
@end deftp

@deftypefun {const char *} gpgme_key_sig_get_string_attr (@w{gpgme_key_t @var{key}}, @w{int
@var{uid_idx}}, @w{gpgme_attr_t @var{what}}, @w{const void *@var{reserved}}, @w{int @var{idx}})
The function @code{gpgme_key_sig_get_string_attr} returns the value of
the string-representable attribute @var{what} of the signature
@var{idx} on the user ID @var{uid_idx} in the key @var{key}. The
argument @var{reserved} is reserved for later use and should be
@code{NULL}.

The string returned is only valid as long as the key is valid.

The function returns @code{0} if an attribute can't be returned as a
string, @var{key} is not a valid pointer, @var{uid_idx} or @var{idx}
out of range, or @var{reserved} not @code{NULL}.
@end deftypefun

@deftypefun {unsigned long} gpgme_key_sig_get_ulong_attr (@w{gpgme_key_t @var{key}}, @w{int
@var{uid_idx}}, @w{gpgme_attr_t @var{what}}, @w{const void *@var{reserved}}, @w{int @var{idx}})
The function @code{gpgme_key_sig_get_ulong_attr} returns the value of
the number-representable attribute @var{what} of the signature
@var{idx} on the user ID @var{uid_idx} in the key @var{key}. The
argument @var{reserved} is reserved for later use and should be
@code{NULL}.

The function returns @code{0} if an attribute can't be returned as a
string, @var{key} is not a valid pointer, @var{uid_idx} or @var{idx}
out of range, or @var{reserved} not @code{NULL}.
@end deftypefun
Trust items have attributes which can be queried using the interfaces below. The attribute identifiers are shared with those for key attributes. @xref[Information About Keys].

```
@deftypefun {const char *} gpgme_trust_item_get_string_attr (@w{gpgme_trust_item_t @var{item}}, @w{gpgme_attr_t @var{what}}, @w{const void *@var{reserved}}, @w{int @var{idx}})

The function @code{gpgme_trust_item_get_string_attr} returns the value of the string-representable attribute @var{what} of trust item @var{item}. The arguments @var{idx} and @var{reserved} are reserved for later use and should be @code{0} and @code{NULL} respectively.

The string returned is only valid as long as the key is valid.

The function returns @code{0} if an attribute can't be returned as a string, @var{key} is not a valid pointer, @var{idx} out of range, or @var{reserved} not @code{NULL}.
@end deftypefun
```

```
@deftypefun int gpgme_trust_item_get_int_attr (@w{gpgme_trust_item_t @var{item}}, @w{gpgme_attr_t @var{what}}, @w{const void *@var{reserved}}, @w{int @var{idx}})

The function @code{gpgme_trust_item_get_int_attr} returns the value of the number-representable attribute @var{what} of trust item @var{item}. If the attribute occurs more than once in the trust item, the index is specified by @var{idx}. However, currently no such attribute exists, so @var{idx} should be @code{0}. The argument @var{reserved} is reserved for later use and should be @code{NULL}.

The function returns @code{0} if the attribute can't be returned as a number, @var{key} is not a valid pointer, @var{idx} out of range, or @var{reserved} not @code{NULL}.
@end deftypefun
```

```
@deftp {Data type} {enum gpgme_sig_stat_t}
@tindex gpgme_sig_stat_t

The @code{gpgme_sig_stat_t} type holds the result of a signature check, or the combined result of all signatures. The following results are possible:

@table @code
@item GPGME_SIG_STAT_NONE
This status should not occur in normal operation.

@item GPGME_SIG_STAT_GOOD
This status indicates that the signature is valid. For the combined result this status means that all signatures are valid.

@item GPGME_SIG_STAT_GOOD_EXP
This status indicates that the signature is valid but expired. For the combined result this status means that all signatures are valid and expired.

@item GPGME_SIG_STAT_GOOD_EXPKEY
This status indicates that the signature is valid but the key used to verify the signature has expired. For the combined result this status means that all signatures are valid and all keys are expired.

@item GPGME_SIG_STAT_BAD
This status indicates that the signature is invalid. For the combined result this status means that all signatures are invalid.

@item GPGME_SIG_STAT_NOKEY
This status indicates that the signature could not be verified due to a missing key. For the combined result this status means that all signatures could not be checked due to missing keys.

@item GPGME_SIG_STAT_NOSIG
This status indicates that the signature data provided was not a real signature.

@item GPGME_SIG_STAT_ERROR
This status indicates that there was some other error which prevented the signature verification.

@item GPGME_SIG_STAT_DIFF
For the combined result this status means that at least two signatures have a different status. You can get each key's status with
@code{gpgme_get_sig_status}.
@end table
@end deftp

@deftypefun {const char *} gpgme_get_sig_status (@w{gpgme_ctx_t @var{ctx}}, @w{int @var{idx}}, @w{gpgme_sig_stat_t *@var{r_stat}}, @w{time_t *@var{r_created}})
The function @code{gpgme_get_sig_status} is equivalent to:
@example
gpgme_verify_result_t result;
gpgme_signature_t sig;
@end example
result = gpgme_op_verify_result (ctx);
sig = result->signatures;

while (sig && idx)
    @{
        sig = sig->next;
        idx--;
    @} 
if (!sig || idx)
    return NULL;

if (r_stat)
    @{
        switch (gpg_err_code (sig->status))
            @{
                case GPG_ERR_NO_ERROR:
                    *r_stat = GPGME_SIG_STAT_GOOD;
                    break;

                case GPG_ERR_BAD_SIGNATURE:
                    *r_stat = GPGME_SIG_STAT_BAD;
                    break;

                case GPG_ERR_NO_PUBKEY:
                    *r_stat = GPGME_SIG_STAT_NOKEY;
                    break;

                case GPG_ERR_NO_DATA:
                    *r_stat = GPGME_SIG_STAT_NOSIG;
                    break;

                case GPG_ERR_SIG_EXPIRED:
                    *r_stat = GPGME_SIG_STAT_GOOD_EXP;
                    break;

                case GPG_ERR_KEY_EXPIRED:
                    *r_stat = GPGME_SIG_STAT_GOOD_EXPKEY;
                    break;

                default:
                    *r_stat = GPGME_SIG_STAT_ERROR;
                    break;
            @} 
    @} 
if (r_created)
    @{
        *r_created = sig->timestamp;
    @} 
return sig->fpr;
The function `gpgme_get_sig_string_attr` is equivalent to:

```c
#define result gpgme_verify_result_t(result);
#define sig gpgme_signature_t(sig);

result = gpgme_op_verify_result(ctx);
sig = result->signatures;

while (sig && !idx)
    sig = sig->next;
    idx--;
if (!sig || !idx)
    return NULL;

switch (what)
    case GPGME_ATTR_FPR:
        return sig->fpr;

    case GPGME_ATTR_ERRTOK:
        if (whatidx == 1)
            return sig->wrong_key_usage ? "Wrong_Key_Usage" : "";
        else
            return "";
    default:
        break;
    }

return NULL;
@end example
@end deftypefun

The function `gpgme_get_sig_ulong_attr` is equivalent to:

```c
#define result gpgme_verify_result_t(result);
#define sig gpgme_signature_t(sig);

result = gpgme_op_verify_result(ctx);
sig = result->signatures;

while (sig && !idx)
    sig = sig->next;
    idx--;
if (!sig || !idx)
    return NULL;

switch (what)
    case GPGME_ATTR_FPR:
        return sig->fpr;

    case GPGME_ATTR_ERRTOK:
        if (whatidx == 1)
            return sig->wrong_key_usage ? "Wrong_Key_Usage" : "";
        else
            return "";
    default:
        break;
    }

return NULL;
@end example
@end deftypefun
result = gpgme_op_verify_result (ctx);
sig = result->signatures;

while (sig && idx)
@{
    sig = sig->next;
    idx--;
}@}
if (!sig || idx)
    return 0;

switch (what)
@{
case GPGME_ATTR_CREATED:
    return sig->timestamp;

case GPGME_ATTR_EXPIRE:
    return sig->exp_timestamp;

case GPGME_ATTR_VALIDITY:
    return (unsigned long) sig->validity;

case GPGME_ATTR_SIG_STATUS:
    switch (sig->status)
@{
case GPG_ERR_NO_ERROR:
    return GPGME_SIG_STAT_GOOD;

case GPG_ERR_BAD_SIGNATURE:
    return GPGME_SIG_STAT_BAD;

case GPG_ERR_NO_PUBKEY:
    return GPGME_SIG_STAT_NOKEY;

case GPG_ERR_NO_DATA:
    return GPGME_SIG_STAT_NOSIG;

case GPG_ERR_SIG_EXPIRED:
    return GPGME_SIG_STAT_GOOD_EXP;

case GPG_ERR_KEY_EXPIRED:
    return GPGME_SIG_STAT_GOOD_EXPKEY;

default:
    return GPGME_SIG_STAT_ERROR;
}@}

case GPGME_ATTR_SIG_SUMMARY:
return sig->summary;

default:
    break;
@end
return 0;
@end example
@end deftypefun

deftypefun {const char *} gpgme_get_sig_key (@w{gpgme_ctx_t @var{ctx}}, @w{int @var{idx}},
@w{gpgme_key_t *@var{r_key}})
The function @code{gpgme_get_sig_key} is equivalent to:

def example
    gpgme_verify_result_t result;
    gpgme_signature_t sig;

    result = gpgme_op_verify_result (ctx);
    sig = result->signatures;

    while (sig && idx)
        sig = sig->next;
        idx--;
    if (!sig || idx)
        return gpg_error (GPG_ERR_EOF);

    return gpgme_get_key (ctx, sig->fpr, r_key, 0);
def example
@end deftypefun

@include lesser.texi
@include gpl.texi

@node Concept Index
@unnumbered Concept Index

@printindex cp

@node Function and Data Index
@unnumbered Function and Data Index
@printindex fn

@bye
(21:protected-private-key(3:elg(1:p129|B36f|s7)+ZIJ/pvE';"tg?Nca"Gxvnyu&bB#h?7=89&oG
R<HO(1:gl:(1:y128:JW_U_UP][AQYMHAl][2e[._cMNDg}{QnWsK4pY{SbDCs(9:protected25:openpgp-s2k3-
sha1-aes-cbc(4:sha18:JcE7:6452224)v16:ii(Q*vK)192:FJA!O!ZAF
bi&JTs!lt
&9@V->x++?sedDz-W(yqf?u'e?s1saV8<T0:tC5%ZMh?$[v_e(1D)(12:protected-at15:20130812T105135)))
(private-key
(oid.1.2.840.113549.1.1.1
(n
#00e0ce96f90b6c9e02f3922beada93fe50a875ec6bca18b9a9cf2e84965caa2d1ff95a75f42465c6c0c19d276e4526ce
048868a7a914f4d343cc3a7d742911f6565506d5bb25ebac6a0e2d1f8caab0d4a29c2f37c950f363484bf269f78914
404d46ba7f9827e03a6e70b814938eebdc63e964247be75dc58b014b7ea251#)
(e #010001#)
(d
#046129F2489D71579BE0A75FE029BD6CDB574EBF57EA8A5B0FDA942CA8943B117D7BB9559ED296875E0F
9FC5FCC06A72F6D502464DABDED78EF6B71617BB83D5BDC543DC5D3FED932E59F5897E92E6F58A0F334
24106A3B6FA2CBF877510E4AC21C3EE47851E97D12996222AC3566D4CCB083D164074ABF7DE55FC244
6DA1781#)
(p
#00e861b7000e17e8afe6837e751235b6ca11d0ae47d8b851616c67ba64377213fe52d772f2035b3ca830af41d8a4120e
1c1c70d12cc22f00d2d31dd48a8d4241#)
(q
#00f7a7ca5367c661f8e62df340d005c10c88e5492348dd7bddd942e9a8f369f935a07785d2db805215ed786e4285df16
58eeed3ce84f4f69b81b50d358407b4ad361#)
(u
#304559a9ead56d2309d203811a641bb1a09626bc8eb36fffa23c968ec5bd891eebbafe73ae666e01ba7c8990bae06cc2
bge10b75e69fcaeb353a6473079d8e9b#)
) )
) # libgpgme.vers - List of symbols to export.
#
# This file is part of GPGME.
#
# GPGME is free software; you can redistribute it and/or modify
# it under the terms of the GNU Lesser general Public License as
# published by the Free Software Foundation; either version 2.1 of
# the License, or (at your option) any later version.
#
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# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
# GNU Lesser General Public License for more details.
#
# You should have received a copy of the GNU Lesser General Public
GPGME_1.1 {
  global:
    gpgme_set_engine_info;
    gpgme_ctx_get_engine_info;
    gpgme_ctx_set_engine_info;
    gpgme_data_set_file_name;
    gpgme_data_get_file_name;
    gpgme_data_identify;
    gpgme_sig_notation_clear;
    gpgme_sig_notation_add;
    gpgme_sig_notation_get;
    gpgme_free;
    gpgme_op_getauditlog_start;
    gpgme_op_getauditlog;
    gpgme_conf_release;
    gpgme_conf_arg_new;
    gpgme_conf_arg_release;
    gpgme_conf_opt_change;
    gpgme_op_conf_load;
    gpgme_op_conf_save;
    gpgme_op_conf_dir;
    gpgme_cancel_async;
    gpgme_op_assuan_result;
    gpgme_op_assuan_transact;
    gpgme_op_assuan_transact_start;
    gpgme_check_version_internal;
    gpgme_io_read;
    gpgme_io_write;
    gpgme_result_ref;
    gpgme_result_unref;
gpgme_op_import_keys;
gpgme_op_import_keys_start;
gpgme_op_export_keys;
gpgme_op_export_keys_start;
gpgme_op_assuan_transact_ext;
gpgme_wait_ext;
gpgme_op_vfs_mount_result;
gpgme_op_vfs_mount;
gpgme_op_vfs_create;
gpgme_key_from_uid;
gpgme_set_sub_protocol;
gpgme_get_sub_protocol;
gpgme_op_passwd_start;
gpgme_op_passwd;
gpgme_set_global_flag;
gpgme_io_writen;
gpgme_set_pinentry_mode;
gpgme_get_pinentry_mode;
gpgme_get_dirinfo;
gpgme_op_spawn_start;
gpgme_op_spawn;
gpgme_set_offline;
gpgme_get_offline;
gpgme_set_status_cb;
gpgme_get_status_cb;
gpgme_pubkey_algo_string;
gpgme_set_ctx_flag;
gpgme_get_ctx_flag;
gpgme_data_set_flag;
gpgme_op_createkey_start;
gpgme_op_createkey;
gpgme_op_create_subkey_start;
gpgme_op_create_subkey;
gpgme_op_add_uid_start;
gpgme_op_adduid;
gpgme_op_revuid_start;
gpgme_op_revuid;
gpgme_op_keysign_start;
gpgme_op_keysign;
gpgme_op_tofu_policy_start;
gpgme_op_tofu_policy;
gpgme_op_interact_start;
gpgme_op_interact;
gpgme_addrspec_from_uid;
gpgme_set_sender;
gpgme_get_sender;
gpgme_op_query_swdb;
gpgme_op_query_swdb_result;
gpgme_op_set_uid_flag_start;
gpgme_op_set_uid_flag;
gpgme_op_decrypt_ext;
gpgme_op_decrypt_ext_start;
gpgme_data_new_from_estream;

};

GPGME_1.0 {
  global:
    gpgme_check_version;
    gpgme_get_engine_info;
    gpgme_engine_check_version;
    gpgme_err_code_from_errno;
    gpgme_err_code_to_errno;
    gpgme_err_make_from_errno;
    gpgme_error_from_errno;
    gpgme_strerror;
    gpgme_strerror_r;
    gpgme_strsource;
    gpgme_data_get_encoding;
    gpgme_data_new;
    gpgme_data_new_from_cbs;
    gpgme_data_new_from_fd;
    gpgme_data_new_from_file;
}
gpgme_data_new_from_filepart;
gpgme_data_new_from_mem;
gpgme_data_new_from_stream;
gpgme_data_read;
gpgme_data_release;
gpgme_data_release_and_get_mem;
gpgme_data_seek;
gpgme_data_set_encoding;
gpgme_data_write;

gpgme_get_protocol_name;
gpgme_hash_algo_name;
gpgme_pubkey_algo_name;

gpgme_new;
gpgme_get_armor;
gpgme_get_include_certs;
gpgme_get_io_cbs;
gpgme_get_keylist_mode;
gpgme_get_passphrase_cb;
gpgme_get_progress_cb;
gpgme_get_protocol;
gpgme_get_textmode;
gpgme_release;
gpgme_set_armor;
gpgme_set_include_certs;
gpgme_set_io_cbs;
gpgme_set_keylist_mode;
gpgme_set_locale;
gpgme_set_passphrase_cb;
gpgme_set_progress_cb;
gpgme_set_protocol;
gpgme_set_textmode;
gpgme_signers_add;
gpgme_signers_clear;
gpgme_signers_count;
gpgme_signers_enum;

gpgme_key_ref;
gpgme_key_unref;
gpgme_key_release;

gpgme_trust_item_ref;
gpgme_trust_item_unref;

gpgme_cancel;
gpgme_op_card_edit;
gpgme_op_card_edit_start;
Decide on a default file format for documentation. The two main contenders being Org Mode, the default for the GnuPG Project and reStructuredText, the default for Python projects. A third option of DITA XML was considered due to a number of beneficial features it provides.
The decision was made to use Org Mode in order to fully integrate with the rest of the GPGME and GnuPG documentation. It is possible to produce reST versions via Pandoc and DITA XML can be reached through converting to either Markdown or XHTML first.

** TODO Documentation build systems

:PROPERTIES:
:CUSTOM_ID: todo-docs-build-systems
:END:

Though Org Mode is being used for the default documentation format, it still needs to end up as usable by end users. So the Org Mode files are used to produce the "source" files used by the two main contenders for documenting the bindings: Texinfo and ReStructuredText/Docutils.

*** TODO Texinfo documentation

:PROPERTIES:
:CUSTOM_ID: todo-docs-build-texinfo
:END:

Need to add all of Texinfo's ... special systems to make it do its things.

*** TODO ReStructuredText documentation

:PROPERTIES:
:CUSTOM_ID: todo-docs-build-docutils
:END:

Need to run Sphinx's quick start, add it to the requirements and tweak the index page for the rst files to point to the HOWTO and other files.

It might just be easier to do all that in Org Mode and convert the lot, then the Sphinx bits can be automated.

** STARTED Documentation HOWTO

:PROPERTIES:
:CUSTOM_ID: todo-docs-howto
:END:

- State "STARTED" from "TODO"  [2018-03-08 Thu 13:59] \n  Started yesterday.
  Write a HOWTO style guide for the current Python bindings.

*** DONE Start python bindings HOWTO
*** STARTED Include certain specific instructions in the HOWTO

Note: moved the S/MIME bits out to their own section of the TODO list and may be served better by separate HOWTO documentation anyway.

- State "STARTED" from "TODO" [2018-03-09 Fri 15:27]
  Some functions can be worked out from the handful of examples available, but many more can't and I've already begun receiving requests for certain functions to be explained.

**** DONE Standard scenarios

- State "DONE" from "STARTED" [2018-03-19 Mon 12:34]
  All four of those are done.
- State "STARTED" from "TODO" [2018-03-09 Fri 15:26]
  Began with the example code, now to add the text.
  What everyone expects: encryption, decryption, signing and verifying.

**** STARTED Key control

- State "STARTED" from "TODO" [2018-03-19 Mon 12:35]
  Generating keys and subkeys are done, but revocation is still to be done.
  Generating keys, adding subkeys, revoking subkeys (and keeping the cert key), adding and revoking UIDs, signing/certifying keys.

**** DONE More key control

CLOSED: [2018-03-19 Mon 12:36]
State "DONE" from "TODO" [2018-03-19 Mon 12:36] \ 
Selecting keys to encrypt to or manipulate in other ways (e.g. as with key control or the basics).

** TODO Documentation SWIG
:PROPERTIES:
:CUSTOM_ID: todo-docs-swig
:END:

Write documentation for the complete SWIG bindings demonstrating the correspondence with GPGME itself.

Note: it is likely that this will be more in the nature of something to be used in conjunction with the existing GPGME documentation which makes it easier for Python developers to use.

** TODO GUI examples
:PROPERTIES:
:CUSTOM_ID: todo-gui-examples
:END:

Create some examples of using Python bindings in a GUI application to either match or be similar to the old GTK2 examples available with PyME.

** TODO Replace SWIG
:PROPERTIES:
:CUSTOM_ID: todo-replace-swig
:END:

Selecting SWIG for this project in 2002 was understandable and effectively the only viable option. The options available now, however, are significantly improved and some of those would resolve a number of existing problems with using SWIG, particularly when running code on both POSIX compliant and Windows platforms.

The long term goal is to replace SWIG by reimplementing the Python bindings using a more suitable means of interfacing with the GPGME C source code.
** TODO Replacement for SWIG

Decide on a replacement for SWIG. Currently CFFI is looking like the most viable candidate, but some additional testing and checks are yet to be completed.

** TODO API for an API

A C API like GPGME is not what most modern developers think of when they hear the term API. Normally they think of something they can interact with like a RESTful web API. Though RESTful is unlikely given the nature of GPGME and the process of encryption, it may be possible to provide a more familiar interface which can be utilised by developers of other languages for which bindings are not available or for which it is too difficult to create proper bindings.

** TODO S/MIME

Eventually add some of this, but the OpenPGP details are far more important at the moment.

* Project Task Details

The old GUI examples were unable to be retained since they depended on GTK2 and Python 2's integration with GTK2.

Current GPGME examples so far only include command line tools or
basic Python code for use with either Python 2.7 or Python 3.4 and above.

Future GUI examples ought to utilise available GUI modules and libraries supported by Python 3. This may include Qt frameworks, Tkinter, GTK3 or something else entirely.

** Documentation  

`:PROPERTIES:  
:CUSTOM_ID: documentation  
:END:`

The legacy documentation which no longer applies to the Python bindings has been removed.

Current and future documentation will adhere to the GnuPG standard of using Org Mode and not use the reStructuredText (reST) format more commonly associated with Python documentation. The reasons for this are that this project is best served as shipping with the rest of GPGME and the documentation ought to match that. There are also aspects of Org Mode’s publishing features which are superior to the defaults of reST, including the capacity to generate fully validating strict XHTML output.

If reST files are required at a later point for future inclusion with other Python packages, then that format can be generated from the .org files with Pandoc before being leveraged by either Docutils, Sphinx or something else.

While there are some advanced typesetting features of reST which are not directly available to Org Mode, more often than not those features are best implemented with either HTML and CSS, with LaTeX to produce a PDF or via a number of XML solutions. Both reST and Org Mode have multiple paths by which to achieve all of these.

-----BEGIN PGP PRIVATE KEY BLOCK-----

8qD8PO6lSMCxH1cpwH8iK0uPaFFYsJkKXo7kWf PTATrV+REqF/o80dvYcdLr8sV21pvnCZz/HXLu1yQ18mC3XObKokbdgrTTK5XE BZknqeyaMMJauT18H4hYkSg62ITdO1cu/zWv/LFf7Xyn6+ua74ovXCJJO1s0N2c PShtr98qRzPMf2owgV3k7JnDnp4gGVDGHxSZ0uUwrgYAYZnA85Fc+c+3ZpQy870 +O4j3Mz4p7yD13AwP4buQLBshfcxekecQCqpiRjHbHLHf7MdEcGcXa1x36KcEkHdu+M yJ392eMgD+dKfRRcTyPhjZTxvbNELiY1CiABEBAAEAB/wLJ0gyMjs2FlT83wM 5Lzz2yQlwV43bbBAajdHTEsNS5zsm/oakFyjSokULK96Kv0R4e9eoIgMFyxFk HRkrgxTrbsNJ7f6QcKYHTPeIli318ykNL6fj0WJUcdPIENukXI5jbyNxk3/4D2y TTDySy6hjHTgVMH4KJKUSpgw0SIPnTk9RhuFGHAF+snR9atygDYctAaERMTtSg LCoS/AoX5GRMIqXT9QoQjwSQuZyF4s8HMCM8wdTFIE/E0L4VdHyp8sz2UszNIrT W/evmCA+KvnuKjRHRfhq4hHkEmW28+j4L6uAyagONP7BONs+S50o2zTT9+tV2R ILTZBADdgLuAgF6C5Lu9jCF6DFgaT7/uaFMyQNKoEGN1xOMHWTgLHe475V2e9gA
Maintenance Mode from 2019

* Maintainer from 2019 onward::
* Using the Python Bindings from 2019 and beyond::
* Documentation formats::

Documentation formats

* Cautionary Notes regarding Sphinx and EPUB::

```
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<thead>
<tr>
<th>Version:</th>
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<td>GPGME Version:</td>
<td>1.13.0</td>
</tr>
<tr>
<td>Author:</td>
<td>Ben McGinnes <a href="mailto:ben@gnupg.org">ben@gnupg.org</a></td>
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<td>Language:</td>
<td></td>
</tr>
</tbody>
</table>
```
From the beginning of 2019 the Python bindings to GPGME will enter maintenance mode, meaning that new features will not be added and only bug fixes and security fixes will be made. This also means that documentation beyond that existing at the end of 2018 will not be developed further except to correct errors.

Though use of these bindings appears to have been quite well received, there has been no indication of what demand there is, if any for either financial backing of the current Python bindings development or support contracts with g10code GmbH citing the necessity of including the bindings.

How does this affect the position of GnuPG Python Bindings Maintainer?

Well, I will remain as maintainer of the bindings; but without funding for that position, the amount of time I will be able to dedicate solely to this task will be limited and reduced to volunteered time. As with all volunteered time and effort in free software projects, this will be subject to numerous external imperatives.

For most, if not all, Python developers using these bindings; they will continue to just work the same as they always have. Expansions of GPGME itself are usually handled by SWIG with the existing code and thus bindings are generated properly when the bindings are installed alongside GPGME and when the latter is built from source.

In the rare circumstances where that is not enough to address some new addition to GPGME, then that is a bug and thus subject to the maintenance mode provisions (i.e. it will be fixed following a bug report being raised and your humble author will need to remember where the timesheet template was filed, depending on how many years off such
an event is).

All the GPGME functionality will continue to be accessible via the lower level, dynamically generated methods which match the GPGME C documentation. While the more intuitively Pythonic higher level layer already covers the vast majority of functionality people require with key generation, signatures, certifications (key signing), encryption, decryption, verification, validation, trust levels and so on.

Any wanted features lacking in the Python bindings are usually lacking because they are missing from GPGME itself (e.g. revoking keys via the API) and in such cases they are usually deliberately excluded. More discussion of these issues can be found in the archives of the \@uref{https://lists.gnupg.org/mailman/listinfo/gnupg-devel, gnupg-devel mailing list}.

Any features existing in the dynamically generated layer for which people want a specific, higher level function included to make it more Pythonic (e.g. to avoid needing to learn or memorise cryptographic mode values or GnuPG status code numbers), would be a feature request and \@emph{not} a bug.

It is still worthwhile requesting it, but the addition of such a feature would not be guaranteed and provided on a purely volunteer basis. Expediting such a request would require funding that request.

Those with a commercial interest in expediting such a feature request already know how to \@uref{https://gnupg.org/cgi-bin/procdonate.cgi?mode=preset, expedite it} (use the message field to state what feature is being requested).

\@node Documentation formats
\@section Documentation formats

The documentation has been written in Org mode for GNU Emacs, with both Texinfo and reStructuredText formats generated from that. The Texinfo files are intended for use with the rest of the GnuPG documentation; while the reStructuredText files are intended for use with Docutils and Sphinx, as with other Python projects.

\@menu
* Cautionary Notes regarding Sphinx and EPUB::
  \@end menu

\@node Cautionary Notes regarding Sphinx and EPUB
\@subsection Cautionary Notes regarding Sphinx and EPUB

Though Python's Docutils in conjunction with Sphinx is capable of generating some very useful HTML sites, as proven by \@uref{https://readthedocs.org/, Read the Docs} and
the @uref{https://docs.python.org/, Python documentation}, there are a number of output formats it does not handle well. At the top of the list of things it manages to break so atrociously as to be embarrassing is the @uref{http://idpf.org/epub, EPUB 3} format.

The automatically generated EPUB of the CPython documentation always contains hundreds of validation errors and even the modest amount of documentation here @uref{https://files.au.adversary.org.s3.amazonaws.com/crypto/gpgme-python/rst/epub/GPGMEPythonBindings.epub, produced a file} with approximately thirty validation errors. As the volume of documentation content increases, so does the induced errors. Whereas Texinfo doesn't produce EPUB output at all, nor does Org-mode.

Should there ever be genuine demand for this format, lodge a @uref{https://dev.gnupg.org/maniphest/task/edit/form/4/, feature request} case marked for @uref{https://dev.gnupg.org/p/BenM/, my} attention. The means of generating such files flawlessly is already available, but is not yet part of the GnuPG build system. Nor is it integrated with a means of converting Org mode input files to the relevant base format automatically, as can already be done when converting Org to reStructuredText or Org to Texinfo. As a certain amount of work would be required to get it done, there would need to be clear demand for that work to be done.

@bye

;;; gpgme.lisp

;;; Copyright (C) 2006 g10 Code GmbH

;;; This file is part of GPGME-CL.

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;;; under the terms of the GNU General Public License as published by
;;; the Free Software Foundation; either version 2 of the License, or
;;; (at your option) any later version.

;;; GPGME-CL is distributed in the hope that it will be useful, but
;;; WITHOUT ANY WARRANTY; without even the implied warranty of
;;; MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
;;; Lesser General Public License for more details.

;;; You should have received a copy of the GNU General Public License
;;; along with GPGME; if not, write to the Free Software Foundation,
;;; Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA.

;;; TODO

;;; Set up the library.

(in-package :gpgme)
(deftype byte-array ()
 'simple-array (unsigned-byte 8) (*)
)

(deftype character-array ()
 'simple-array character (*)
)

;;; Debugging.

(defvar *debug* nil "If debugging output should be given or not."
)

;;; Load the foreign library.

(define-foreign-library libgpgme
 :unix "libgpgme.so")
(t (:default "libgpgme"))

(use-foreign-library libgpgme)

;;; System dependencies.

; Access to ERRNO.
(defcfun ("strerror" c-strerror) :string
 (err :int))

(defun get-errno ()
 *errno*)

(defun set-errno (errno)
 (setf *errno* errno))

(define-condition system-error (error)
 ((errno :initarg :errno :reader system-error-errno))
 (:report (lambda (c stream)
 (format stream "System error: ~A: ~A"
 (system-error-errno c)
 (c-strerror (system-error-errno c)))))
 (:documentation "Signalled when an errno is encountered."))

; Needed to write passphrases.
(defcfun ("write" c-write) ssize-t
 (fd :int)
 (buffer :string) ; Actually :pointer, but we only need string.
 (size size-t))

(defun system-write (fd buffer size)
 (let ((res (c-write fd buffer size)))
  (when (< res 0) (error 'system-error :errno (get-errno))))
;;; C Interface Definitions

;;; Data Type Interface

;;; Some new data types used for easier translation.

;;; The number of include certs. Translates to NIL for default.
(defctype cert-int-t
  (:wrapper :int
    :from-c translate-cert-int-t-from-foreign
    :to-c translate-cert-int-t-to-foreign))

;;; A string that may be NIL to indicate a null pointer.
(defctype string-or-nil-t
  (:wrapper :string
    :to-c translate-string-or-nil-t-to-foreign))

;;; Some opaque data types used by GPGME.

(defctype gpgme-ctx-t
  (:wrapper :pointer
    :to-c translate-gpgme-ctx-t-to-foreign)
  "The GPGME context type.")

(defctype gpgme-data-t
  (:wrapper :pointer
    :to-c translate-gpgme-data-t-to-foreign)
  "The GPGME data object type.")

;;; Wrappers for the libgpg-error library.

(defctype gpgme-error-t
  (:wrapper gpg-error::gpg-error-t
    :from-c translate-gpgme-error-t-from-foreign
    :to-c translate-gpgme-error-t-to-foreign)
  "The GPGME error type.")

(defctype gpgme-error-no-signal-t
  (:wrapper gpg-error::gpg-error-t
    :from-c translate-gpgme-error-no-signal-t-from-foreign)
  "The GPGME error type (this version does not signal conditions in translation.")

(defctype gpgme-err-code-t gpg-error::gpg-err-code-t
  "The GPGME error code type.")
(defctype gpgme-err-source-t gpg-error::gpg-err-source-t
  "The GPGME error source type.")

(defun gpgme-err-make (source code)
  "Construct an error value from an error code and source."
  (gpg-err-make source code))

(defun gpgme-error (code)
  "Construct an error value from an error code."
  (gpgme-err-make :gpg-err-source-gpgme code))

(defun gpgme-err-code (err)
  "Retrieve an error code from the error value ERR."
  (gpg-err-code err))

(defun gpgme-err-source (err)
  "Retrieve an error source from the error value ERR."
  (gpg-err-source err))

(defun gpgme-strerror (err)
  "Return a string containing a description of the error code."
  (gpg-strerror err))

(defun gpgme-strsource (err)
  "Return a string containing a description of the error source."
  (gpg-strsource err))

(defun gpgme-err-code-from-errno (err)
  "Retrieve the error code for the system error. If the system error
  is not mapped, :gpg-err-unknown-errno is returned."
  (gpg-err-code-from-errno err))

(defun gpgme-err-code-to-errno (code)
  "Retrieve the system error for the error code. If this is not a
  system error, 0 is returned."
  (gpg-err-code-to-errno code))

(defun gpgme-err-make-from-errno (source err)
  (gpg-err-make-from-errno source err))

(defun gpgme-error-from-errno (err)
  (gpg-error-from-errno err))

;;;

(defcenum gpgme-data-encoding-t
  "The possible encoding mode of gpgme-data-t objects."
(none 0)
(:binary 1)
(:base64 2)
(:armor 3)
(:url 4)
(:urlesc 5)
(:url0 6)
(:mime 7))

;;

(defcenum gpgme-pubkey-algo-t
  "Public key algorithms from libgcrypt."
  (:rsa 1)
  (:rsa-e 2)
  (:rsa-s 3)
  (:elg-e 16)
  (:dsa 17)
  (:ecc 18)
  (:elg 20)
  (:eddsa 301)
  (:ecdh 302)
  (:ecdsa 303))

(defcenum gpgme-hash-algo-t
  "Hash algorithms from libgcrypt."
  (none 0)
  (:md5 1)
  (:sha1 2)
  (:rmd160 3)
  (:md2 5)
  (:tiger 6)
  (:ha1val 7)
  (:sha256 8)
  (:sha384 9)
  (:sha512 10)
  (:sha224 11)
  (:md4 301)
  (:crc32 302)
  (:crc32-rfc1510 303)
  (:crc24-rfc2440 304))

;;

(defcenum gpgme-sig-mode-t
  "The available signature modes."
  (none 0)
  (detach 1)
(defcenum gpgme-validity-t
  "The available validities for a trust item or key."
  (:unknown 0)
  (:undefined 1)
  (:never 2)
  (:marginal 3)
  (:full 4)
  (:ultimate 5))

(defcenum gpgme-protocol-t
  "The available protocols."
  (:openpgp 0)
  (:cms 1)
  (:gpgconf 2)
  (:assuan 3)
  (:g13 4)
  (:uiserver 5)
  (:spawn 6)
  (:default 254)
  (:unknown 255))

(defbitfield (gpgme-keylist-mode-t :unsigned-int)
  "The available keylist mode flags."
  (:local 1)
  (:extern 2)
  (:sigs 4)
  (:sig-notations)
  (:with-secret 16)
  (:with-tofu 32)
  (:ephemeral 128)
  (:validate 256))

(defbitfield (gpgme-sig-notation-flags-t :unsigned-int)
  "The available signature notation flags."
  (:human-readable 1)
  (:critical 2))

(defctype gpgme-sig-notation-t
(:wrapper :pointer
:from-c translate-gpgme-sig-notation-t-from-foreign)
"Signature notation pointer type.")

;; FIXME: Doesn't this depend on endianness?
(defun bitfield (gpgme-sig-notation-bitfield :unsigned-int)
 (:human-readable 1)
 (:critical 2))

(defun gpgme-sig-notation
 "Signature notations."
 (next gpgme-sig-notation-t)
 (name :pointer)
 (value :pointer)
 (name-len :int)
 (value-len :int)
 (flags gpgme-sig-notation-flags-t)
 (bitfield gpgme-sig-notation-bitfield))

(defun gpgme-status-code-t
 "The possible status codes for the edit operation."
 (:eof 0)
 (:enter 1)
 (:leave 2)
 (:abort 3)
 (:goodsig 4)
 (:badsig 5)
 (:errsig 6)
 (:badarmor 7)
 (:rsa-or-idea 8)
 (:keyexpired 9)
 (:keyrevoked 10)
 (:trust-undefined 11)
 (:trust-never 12)
 (:trust-marginal 13)
 (:trust-fully 14)
 (:trust-ultimate 15)
 (:shm-info 16)
 (:shm-get 17)
 (:shm-get-bool 18)
 (:shm-get-hidden 19)
 (:need-passphrase 20)
 (:validsig 21)
 (:sig-id 22)
 (:enc-to 23)
 (:nodata 24)
(:bad-passphrase 25)
(:no-pubkey 26)
(:no-seckey 27)
(:need-passphrase-sym 28)
(:decryption-failed 29)
(:decryption-okay 30)
(:missing-passphrase 31)
(:good-passphrase 32)
(:goodmdc 33)
(:badmdc 34)
(:errmdc 35)
(:imported 36)
(:import-ok 37)
(:import-problem 38)
(:import-res 39)
(:file-start 40)
(:file-done 41)
(:file-error 42)
(:begin-decryption 43)
(:end-decryption 44)
(:begin-encryption 45)
(:end-encryption 46)
(:delete-problem 47)
(:get-bool 48)
(:get-line 49)
(:get-hidden 50)
(:got-it 51)
(:progress 52)
(:sig-created 53)
(:session-key 54)
(:notation-name 55)
(:notation-data 56)
(:policy-url 57)
(:begin-stream 58)
(:end-stream 59)
(:key-created 60)
(:userid-hint 61)
(:unexpected 62)
(:inv-recp 63)
(:no-recp 64)
(:already-signed 65)
(:sigexpired 66)
(:expsig 67)
(:expkeysig 68)
(:truncated 69)
(:error 70)
(:newsig 71)
(:revkeysig 72)
(sig-subpacket 73)
(need-passphrase-pin 74)
(sc-op-failure 75)
(sc-op-success 76)
(cardctrl 77)
(backup-key-created 78)
(pka-trust-bad 79)
(pka-trust-good 80)
(plaintext 81)
(inv-sgnr 82)
(no-sgnr 83)
(success 84)
(decryption-info 85)
(plaintext-length 86)
(mountpoint 87)
(pinentry-launched 88)
(attribute 89)
(begin-signing 90)
(key-not-created 91)
(inquire-maxlen 92)
(failure 93)
(key-considered 94)
(tofu-user 95)
(tofu-stats 96)
(tofu-stats-long 97)
(notation-flags 98)
(decryption-compliance-mode 99)
(verification-compliance-mode 100))

;;;

(defctype gpgme-engine-info-t
  (:wrapper :pointer
    :from-c translate-gpgme-engine-info-t-to-foreign)
  "The engine information structure pointer type.")

(defcstruct gpgme-engine-info
  "Engine information."
  (next gpgme-engine-info-t)
  (protocol gpgme-protocol-t)
  (file-name :string)
  (version :string)
  (req-version :string)
  (home-dir :string))

;;;

(defctype gpgme-subkey-t

---
A subkey from a key.

;; FIXME: Doesn't this depend on endianness?
(defbitfield (gpgme-subkey-bitfield :unsigned-int)
  "The subkey bitfield."
  (:revoked 1)
  (:expired 2)
  (:disabled 4)
  (:invalid 8)
  (:can-encrypt 16)
  (:can-sign 32)
  (:can-certify 64)
  (:secret 128)
  (:can-authenticate 256)
  (:is-qualified 512)
  (:is-cardkey 1024)
  (:is-de-vs 2048))

(defcstruct gpgme-subkey
  "Subkey from a key."
  (next gpgme-subkey-t)
  (bitfield gpgme-subkey-bitfield)
  (pubkey-algo gpgme-pubkey-algo-t)
  (length :unsigned-int)
  (keyid :string)
  (-keyid :char :count 17)
  (fpr :string)
  (timestamp :long)
  (expires :long))

(defctype gpgme-key-sig-t
  (:wrapper :pointer
    :from-c translate-gpgme-key-sig-t-from-foreign)
  "A signature on a user ID.")

;; FIXME: Doesn't this depend on endianness?
(defbitfield (gpgme-key-sig-bitfield :unsigned-int)
  "The key signature bitfield."
  (:revoked 1)
  (:expired 2)
  (:invalid 4)
  (:exportable 16))

(defcstruct gpgme-key-sig
  "A signature on a user ID.")
(gpgme-user-id-t)
  (:wrapper :pointer
   :from-c translate-gpgme-user-id-t-from-foreign)
"A user ID from a key."

;; FIXME: Doesn't this depend on endianness?
(defbitfield (gpgme-user-id-bitfield :unsigned-int)
  "The user ID bitfield."
  (:revoked 1)
  (:invalid 2))

(defcstruct gpgme-user-id
  "A user ID from a key."
  (next gpgme-user-id-t)
  (bitfield gpgme-user-id-bitfield)
  (validity gpgme-validity-t)
  (uid :string)
  (name :string)
  (email :string)
  (comment :string)
  (signatures gpgme-key-sig-t)
  (-last-keysig gpgme-key-sig-t))

(defctype gpgme-key-t
  (:wrapper :pointer
   :from-c translate-gpgme-key-t-from-foreign
   :to-c translate-gpgme-key-t-to-foreign)
  "A key from the keyring."

;; FIXME: Doesn't this depend on endianness?
(defbitfield (gpgme-key-bitfield :unsigned-int)
"The key bitfield."
(revoked 1)
(expired 2)
(disabled 4)
(invalid 8)
(can-encrypt 16)
(can-sign 32)
(can-certify 64)
(secret 128)
(can-authenticate 256)
(is-qualified 512))

defcstruct gpgme-key
"A signature on a user ID."
(-refs :unsigned-int)
(bitfield gpgme-key-bitfield)
(protocol gpgme-protocol-t)
(issuer-serial :string)
(issuer-name :string)
(chain-id :string)
(owner-trust gpgme-validity-t)
(subkeys gpgme-subkey-t)
(uids gpgme-user-id-t)
(-last-subkey gpgme-subkey-t)
(-last-uid gpgme-user-id-t)
(keylist-mode gpgme-keylist-mode-t))

;;;

;;; There is no support in CFFI to define callback C types and have
;;; automatic type checking with the callback definition.

(defctype gpgme-passphrase-cb-t :pointer)

(defctype gpgme-progress-cb-t :pointer)

(defctype gpgme-edit-cb-t :pointer)

;;; Function Interface

;;; Context management functions.

(defcfun ("gpgme_new" c-gpgme-new) gpgme-error-t
  (ctx :pointer))
(defcfun "gpgme_release" c-gpgme-release :void
 (ctx gpgme-ctx-t))

(defcfun "gpgme_set_protocol" c-gpgme-set-protocol gpgme-error-t
 (ctx gpgme-ctx-t)
 (proto gpgme-protocol-t))

(defcfun "gpgme_get_protocol" c-gpgme-get-protocol gpgme-protocol-t
 (ctx gpgme-ctx-t))

(defcfun "gpgme_get_protocol_name" c-gpgme-get-protocol-name :string
 (proto gpgme-protocol-t))

(defcfun "gpgme_set_armor" c-gpgme-set-armor :void
 (ctx gpgme-ctx-t)
 (yes :boolean))

(defcfun "gpgme_get_armor" c-gpgme-get-armor :boolean
 (ctx gpgme-ctx-t))

(defcfun "gpgme_set_textmode" c-gpgme-set-textmode :void
 (ctx gpgme-ctx-t)
 (yes :boolean))

(defcfun "gpgme_get_textmode" c-gpgme-get-textmode :boolean
 (ctx gpgme-ctx-t))

(defconstant +include-certs-default+ -256)

(defcfun "gpgme_set_include_certs" c-gpgme-set-include-certs :void
 (ctx gpgme-ctx-t)
 (nr-of-certs cert-int-t))

(defcfun "gpgme_get_include_certs" c-gpgme-get-include-certs cert-int-t
 (ctx gpgme-ctx-t))

(defcfun "gpgme_set_keylist_mode" c-gpgme-set-keylist-mode gpgme-error-t
 (ctx gpgme-ctx-t)
 (mode gpgme-keylist-mode-t))

(defcfun "gpgme_get_keylist_mode" c-gpgme-get-keylist-mode
 gpgme-keylist-mode-t
 (ctx gpgme-ctx-t))

(defcfun "gpgme_set_passphrase_cb" c-gpgme-set-passphrase-cb :void
 (ctx gpgme-ctx-t)
 (cb gpgme-passphrase-cb-t)
 (hook-value :pointer))
(defcfun "gpgme_get_passphrase_cb" c-gpgme-get-passphrase-cb) :void
  (ctx gpgme-ctx-t)
  (cb-p :pointer)
  (hook-value-p :pointer))

(defun ("gpgme_set_progress_cb" c-gpgme-set-progress-cb) :void
  (ctx gpgme-ctx-t)
  (cb gpgme-progress-cb-t)
  (hook-value :pointer))

(defun ("gpgme_get_progress_cb" c-gpgme-get-progress-cb) :void
  (ctx gpgme-ctx-t)
  (cb-p :pointer)
  (hook-value-p :pointer))

(defun ("gpgme_set_locale" c-gpgme-set-locale) gpgme-error-t
  (ctx gpgme-ctx-t)
  (category :int)
  (value string-or-nil-t))

(defun ("gpgme_ctx_get_engine_info" c-gpgme-ctx-get-engine-info)
  gpgme-engine-info-t
  (ctx gpgme-ctx-t))

(defun ("gpgme_ctx_set_engine_info" c-gpgme-ctx-set-engine-info)
  gpgme-error-t
  (ctx gpgme-ctx-t)
  (proto gpgme-protocol-t)
  (file-name string-or-nil-t)
  (home-dir string-or-nil-t))

...;

(defun ("gpgme_pubkey_algo_name" c-gpgme-pubkey-algo-name) :string
  (algo gpgme-pubkey-algo-t))

(defun ("gpgme_hash_algo_name" c-gpgme-hash-algo-name) :string
  (algo gpgme-hash-algo-t))

...;

(defun ("gpgme_signers_clear" c-gpgme-signers-clear) :void
  (ctx gpgme-ctx-t))

(defun ("gpgme_signers_add" c-gpgme-signers-add) gpgme-error-t
  (ctx gpgme-ctx-t)
  (key gpgme-key-t))
(defcfun ("gpgme_signers_enum" c-gpgme-signers-enum) gpgme-key-t
  (ctx gpgme-ctx-t)
  (seq :int))

;;

(defcfun ("gpgme_sig_notation_clear" c-gpgme-sig-notation-clear) :void
  (ctx gpgme-ctx-t))

(defcfun ("gpgme_sig_notation_add" c-gpgme-sig-notation-add) gpgme-error-t
  (ctx gpgme-ctx-t)
  (name :string)
  (value string-or-nil-t)
  (flags gpgme-sig-notation-flags-t))

(defcfun ("gpgme_sig_notation_get" c-gpgme-sig-notation-get)
  gpgme-sig-notation-t
  (ctx gpgme-ctx-t))

;;; Run Control.

;;; There is no support in CFFI to define callback C types and have
;;; automatic type checking with the callback definition.

(defctype gpgme-io-cb-t :pointer)

(defctype gpgme-register-io-cb-t :pointer)

(defctype gpgme-remove-io-cb-t :pointer)

(defcenum gpgme-event-io-t
  "The possible events on I/O event callbacks."
  (:start 0)
  (:done 1)
  (:next-key 2)
  (:next-trustitem 3))

(defctype gpgme-event-io-cb-t :pointer)

(defcstruct gpgme-io-cbs
  "I/O callbacks."
  (add gpgme-register-io-cb-t)
  (add-priv :pointer)
  (remove gpgme-remove-io-cb-t)
  (event gpgme-event-io-cb-t)
  (event-priv :pointer))
(defctype gpgme-io-cbs-t :pointer)

(defcfun ("gpgme_set_io_cbs" c-gpgme-set-io-cbs) :void
  (ctx gpgme-ctx-t)
  (io-cbs gpgme-io-cbs-t))

(defcfun ("gpgme_get_io_cbs" c-gpgme-get-io-cbs) :void
  (ctx gpgme-ctx-t)
  (io-cbs gpgme-io-cbs-t))

(defcfun ("gpgme_wait" c-gpgme-wait) gpgme-ctx-t
  (ctx gpgme-ctx-t)
  (status-p :pointer)
  (hang :int))

;;; Functions to handle data objects.

;;; There is no support in CFFI to define callback C types and have
;;; automatic type checking with the callback definition.

(defctype gpgme-data-read-cb-t :pointer)
(defctype gpgme-data-write-cb-t :pointer)
(defctype gpgme-data-seek-cb-t :pointer)
(defctype gpgme-data-release-cb-t :pointer)

(defcstruct gpgme-data-cbs
  "Data callbacks."
  (read gpgme-data-read-cb-t)
  (write gpgme-data-write-cb-t)
  (seek gpgme-data-seek-cb-t)
  (release gpgme-data-release-cb-t))

(defctype gpgme-data-cbs-t :pointer
  "Data callbacks pointer.")

(defcfun ("gpgme_data_read" c-gpgme-data-read) ssize-t
  (dh gpgme-data-t)
  (buffer :pointer)
  (size size-t))

(defcfun ("gpgme_data_write" c-gpgme-data-write) ssize-t
  (dh gpgme-data-t)
  (buffer :pointer)
  (size size-t))

(defcfun ("gpgme_data_seek" c-gpgme-data-seek) off-t
  (dh gpgme-data-t)
  (offset off-t)
(whence :int))

(defcfun ("gpgme_data_new" c-gpgme-data-new) gpgme-error-t
  (dh-p :pointer))

(defcfun ("gpgme_data_release" c-gpgme-data-release) :void
  (dh gpgme-data-t))

(defcfun ("gpgme_data_new_from_mem" c-gpgme-data-new-from-mem) gpgme-error-t
  (dh-p :pointer)
  (buffer :pointer)
  (size size-t)
  (copy :int))

(defcfun ("gpgme_data_release_and_get_mem" c-gpgme-data-release-and-get-mem) :pointer
  (dh gpgme-data-t)
  (len-p :pointer))

(defcfun ("gpgme_data_new_from_cbs" c-gpgme-data-new-from-cbs) gpgme-error-t
  (dh-p :pointer)
  (cbs gpgme-data-cbs-t)
  (handle :pointer))

(defcfun ("gpgme_data_new_from_fd" c-gpgme-data-new-from-fd) gpgme-error-t
  (dh-p :pointer)
  (fd :int))

(defcfun ("gpgme_data_new_from_stream" c-gpgme-data-new-from-stream) gpgme-error-t
  (dh-p :pointer)
  (stream :pointer))

(defcfun ("gpgme_data_get_encoding" c-gpgme-data-get-encoding) gpgme-data-encoding-t
  (dh gpgme-data-t))

(defcfun ("gpgme_data_set_encoding" c-gpgme-data-set-encoding) gpgme-error-t
  (dh gpgme-data-t)
  (enc gpgme-data-encoding-t))

(defcfun ("gpgme_data_get_file_name" c-gpgme-data-get-file-name) :string
  (dh gpgme-data-t))

(defcfun ("gpgme_data_set_file_name" c-gpgme-data-set-file-name) gpgme-error-t
  (dh gpgme-data-t)
  (file-name string-or-nil-t))
(defcfun ("gpgme_data_new_from_file" c-gpgme-data-new-from-file) gpgme-error-t
  (dh-p :pointer)
  (fname :string)
  (copy :int))

(defcfun ("gpgme_data_new_from_filepart" c-gpgme-data-new-from-filepart) gpgme-error-t
  (dh-p :pointer)
  (fname :string)
  (fp :pointer)
  (offset off-t)
  (length size-t))

;;; Key and trust functions.

(defcfun ("gpgme_get_key" c-gpgme-get-key) gpgme-error-t
  (ctx gpgme-ctx-t)
  (fpr :string)
  (key-p :pointer)
  (secret :boolean))

(defcfun ("gpgme_key_ref" c-gpgme-key-ref) :void
  (key gpgme-key-t))

(defcfun ("gpgme_key_unref" c-gpgme-key-unref) :void
  (key gpgme-key-t))

;;; Crypto operations.

(defcfun ("gpgme_cancel" c-gpgme-cancel) gpgme-error-t
  (ctx gpgme-ctx-t))

;;;

(defctype gpgme-invalid-key-t
  (:wrapper :pointer
   :from-c translate-gpgme-invalid-key-t-from-foreign)
  "An invalid key structure.")

(defcstruct gpgme-invalid-key
  "An invalid key structure."
  (next gpgme-invalid-key-t)
  (fpr :string)
  (reason gpgme-error-no-signal-t))

;;; Encryption.
(defstruct gpgme-op-encrypt-result
  "Encryption result structure."
  (invalid-recipients gpgme-invalid-key-t))

(defctype gpgme-op-encrypt-result-t
  (:wrapper :pointer
   :from-c translate-gpgme-op-encrypt-result-t-from-foreign)
  "An encryption result structure.")

(defun ("gpgme_op_encrypt_result" c-gpgme-op-encrypt-result)
  gpgme-op-encrypt-result-t
  (ctx gpgme-ctx-t))

(defbitfield gpgme-encrypt-flags-t
  (:always-trust 1)
  (:no-encrypt-to 2)
  (:prepare 4)
  (:expect-sign 8)
  (:no-compress 16)
  (:symmetric 32)
  (:throw-keyids 64)
  (:wrap 128)
  (:want-address 256))

(defun ("gpgme_op_encrypt_start" c-gpgme-op-encrypt-start) gpgme-error-t
  (ctx gpgme-ctx-t)
  (recp :pointer) ; Key array.
  (flags gpgme-encrypt-flags-t)
  (plain gpgme-data-t)
  (cipher gpgme-data-t))

(defun ("gpgme_op_encrypt" c-gpgme-op-encrypt) gpgme-error-t
  (ctx gpgme-ctx-t)
  (recp :pointer) ; Key array.
  (flags gpgme-encrypt-flags-t)
  (plain gpgme-data-t)
  (cipher gpgme-data-t))

(defun ("gpgme_op_encrypt_sign_start" c-gpgme-op-encrypt-sign-start) gpgme-error-t
  (ctx gpgme-ctx-t)
  (recp :pointer) ; Key array.
  (flags gpgme-encrypt-flags-t)
  (plain gpgme-data-t)
  (cipher gpgme-data-t))

(defun ("gpgme_op_encrypt_sign" c-gpgme-op-encrypt-sign) gpgme-error-t
  (ctx gpgme-ctx-t))
(recp :pointer) ; Key array.
(flags gpgme-encrypt-flags-t)
(plain gpgme-data-t)
(cipher gpgme-data-t))

;;; Decryption.

(defctype gpgme-recipient-t
  (:wrapper :pointer
   :from-c translate-gpgme-recipient-t-from-foreign)
  "A recipient structure.")

(defcstruct gpgme-recipient
  "Recipient structure."
  (next gpgme-recipient-t)
  (keyid :string)
  (-keyid :char :count 17)
  (pubkey-algo gpgme-pubkey-algo-t)
  (status gpgme-error-no-signal-t))

(defbitfield gpgme-op-decrypt-result-bitfield
  "Decryption result structure bitfield."
  (:wrong-key-usage 1)
  (:is-de-vs 2)
  (:is-mine 4))

(defcstruct gpgme-op-decrypt-result
  "Decryption result structure."
  (unsupported-algorithm :string)
  (bitfield gpgme-op-decrypt-result-bitfield)
  (recipients gpgme-recipient-t)
  (file-name :string))

(defctype gpgme-op-decrypt-result-t
  (:wrapper :pointer
   :from-c translate-gpgme-op-decrypt-result-t-from-foreign)
  "A decryption result structure.")

(defun ("gpgme_op_decrypt_result" c-gpgme-op-decrypt-result)
  gpgme-op-decrypt-result-t
  (ctx gpgme-ctx-t))

(defun ("gpgme_op_decrypt_start" c-gpgme-op-decrypt-start) gpgme-error-t
  (ctx gpgme-ctx-t)
  (cipher gpgme-data-t)
  (plain gpgme-data-t))

(defun ("gpgme_op_decrypt" c-gpgme-op-decrypt) gpgme-error-t
  (ctx gpgme-ctx-t)
  (cipher gpgme-data-t)
  (plain gpgme-data-t))
(defcfun ("gpgme_op_decrypt_verify_start" c-gpgme-op-decrypt-verify-start) gpgme-error-t (ctx gpgme-ctx-t) (cipher gpgme-data-t) (plain gpgme-data-t))

(defcfun ("gpgme_op_decrypt_verify" c-gpgme-op-decrypt-verify) gpgme-error-t (ctx gpgme-ctx-t) (cipher gpgme-data-t) (plain gpgme-data-t))

;;; Signing.

(defctype gpgme-new-signature-t
  (:wrapper :pointer
    :from-c translate-gpgme-new-signature-t-from-foreign)
  "A new signature structure.")

(defcstruct gpgme-new-signature
  "New signature structure."

(defcstruct gpgme-op-sign-result
  "Signing result structure."
  (invalid-signers gpgme-invalid-key-t) (signatures gpgme-new-signature-t))

(defctype gpgme-op-sign-result-t
  (:wrapper :pointer
    :from-c translate-gpgme-op-sign-result-t-from-foreign)
  "A signing result structure.")

(defcfun ("gpgme_op_sign_result" c-gpgme-op-sign-result) gpgme-op-sign-result-t (ctx gpgme-ctx-t))
(defcfun ("gpgme_op_sign_start" c-gpgme-op-sign-start) gpgme-error-t
  (ctx gpgme-ctx-t)
  (plain gpgme-data-t)
  (sig gpgme-data-t)
  (mode gpgme-sig-mode-t))

(defcfun ("gpgme_op_sign" c-gpgme-op-sign) gpgme-error-t
  (ctx gpgme-ctx-t)
  (plain gpgme-data-t)
  (sig gpgme-data-t)
  (mode gpgme-sig-mode-t))

;;; Verify.

(defbitfield (gpgme-sigsum-t :unsigned-int)
  "Flags used for the summary field in a gpgme-signature-t."
  (:valid #x0001)
  (:green #x0002)
  (:red #x0004)
  (:key-revoked #x0010)
  (:key-expired #x0020)
  (:sig-expired #x0040)
  (:key-missing #x0080)
  (:crl-missing #x0100)
  (:crl-too-old #x0200)
  (:bad-policy #x0400)
  (:sys-error #x0800)
  (:tofu-conflict #x1000))

(defctype gpgme-signature-t
  (:wrapper :pointer
    :from-c translate-gpgme-signature-t-from-foreign)
  "A signature structure.")

;;; FIXME: Doesn't this depend on endianness?
(defbitfield (gpgme-signature-bitfield :unsigned-int)
  "The signature bitfield."
  (:wrong-key-usage 1)
  (:pka-trust 2)
  (:chain-model 4)
  (:is-de-vs 8))

(defcstruct gpgme-signature
  "Signature structure."
  (next gpgme-signature-t)
  (summary gpgme-sigsum-t)
  (fpr :string)
  (status gpgme-error-no-signal-t)
(notations gpgme-sig-notation-t)
(timestamp :unsigned-long)
(exp-timestamp :unsigned-long)
(bitfield gpgme-signature-bitfield)
(validity gpgme-validity-t)
(validity-reason gpgme-error-no-signal-t)
(pubkey-algo gpgme-pubkey-algo-t)
(hash-algo gpgme-hash-algo-t)

(defcstruct gpgme-op-verify-result
   "Verify result structure."
   (signatures gpgme-signature-t)
   (file-name :string))

(defctype gpgme-op-verify-result-t
   (:wrapper :pointer
            :from-c translate-gpgme-op-verify-result-t-from-foreign)
   "A verify result structure.")

(defcfun ("gpgme_op_verify_result" c-gpgme-op-verify-result)
         gpgme-op-verify-result-t
         (ctx gpgme-ctx-t))

(defcfun ("gpgme_op_verify_start" c-gpgme-op-verify-start) gpgme-error-t
         (ctx gpgme-ctx-t)
         (sig gpgme-data-t)
         (signed-text gpgme-data-t)
         (plaintext gpgme-data-t))

(defcfun ("gpgme_op_verify" c-gpgme-op-verify) gpgme-error-t
         (ctx gpgme-ctx-t)
         (sig gpgme-data-t)
         (signed-text gpgme-data-t)
         (plaintext gpgme-data-t))

;;; Import.

(defvar (gpgme-import-flags-t :unsigned-int)
   "Flags used for the import status field."
   (:new #x0001)
   (:uid #x0002)
   (:sig #x0004)
   (:subkey #x0008)
   (:secret #x0010))

(defctype gpgme-import-status-t
   (:wrapper :pointer
             :from-c translate-gpgme-import-status-t-from-foreign)
"An import status structure.")

(defstruct gpgme-import-status
  "New import status structure."
  (next gpgme-import-status-t)
  (fpr :string)
  (result gpgme-error-no-signal-t)
  (status :unsigned-int))

(defstruct gpgme-op-import-result
  "Import result structure."
  (considered :int)
  (no-user-id :int)
  (imported :int)
  (imported-rsa :int)
  (unchanged :int)
  (new-user-ids :int)
  (new-sub-keys :int)
  (new-signatures :int)
  (new-revocations :int)
  (secret-read :int)
  (secret-imported :int)
  (secret-unchanged :int)
  (skipped-new-keys :int)
  (not-imported :int)
  (imports gpgme-import-status-t))

(defctype gpgme-op-import-result-t
  (:wrapper :pointer
    :from-c translate-gpgme-op-import-result-t-from-foreign)
  "An import status result structure.")

(defcfun ("gpgme_op_import_result" c-gpgme-op-import-result)
  gpgme-op-import-result-t
  (ctx gpgme-ctx-t))

(defcfun ("gpgme_op_import_start" c-gpgme-op-import-start) gpgme-error-t
  (ctx gpgme-ctx-t)
  (keydata gpgme-data-t))

(defcfun ("gpgme_op_import" c-gpgme-op-import) gpgme-error-t
  (ctx gpgme-ctx-t)
  (keydata gpgme-data-t))

;;; Export.

(defcfun ("gpgme_op_export_start" c-gpgme-op-export-start) gpgme-error-t
  (ctx gpgme-ctx-t))
;;; Extended export interfaces require array handling.

;;; Key generation.

(defun ("gpgme_op_export" c-gpgme-op-export) gpgme-error-t
  (ctx gpgme-ctx-t)
  (pattern :string)
  (reserved :unsigned-int)
  (keydata gpgme-data-t))

(defcstruct gpgme-op-genkey-result
  "Key generation result structure."
  (bitfield gpgme-genkey-flags-t)
  (fpr :string))

(defctype gpgme-op-genkey-result-t :pointer
  "A key generation result structure.")

(defun ("gpgme_op_genkey_result" c-gpgme-op-genkey-result)
  gpgme-op-genkey-result-t
  (ctx gpgme-ctx-t))

(defun ("gpgme_op_genkey_start" c-gpgme-op-genkey-start) gpgme-error-t
  (ctx gpgme-ctx-t)
  (parms :string)
  (pubkey gpgme-data-t)
  (seckey gpgme-data-t))

(defun ("gpgme_op_genkey" c-gpgme-op-genkey) gpgme-error-t
  (ctx gpgme-ctx-t)
  (parms :string)
  (pubkey gpgme-data-t)
  (seckey gpgme-data-t))

;;; Key deletion.

(defun ("gpgme_op_delete_start" c-gpgme-op-delete-start) gpgme-error-t
  (ctx gpgme-ctx-t)
(key gpgme-key-t)
(allow-secret :int))

(defcfun ("gpgme_op_delete" c-gpgme-op-delete) gpgme-error-t
(ctx gpgme-ctx-t)
(key gpgme-key-t)
(allow-secret :int))

;;; FIXME: Add edit interfaces.

;;; Keylist interface.

(defbitfield (gpgme-keylist-flags-t :unsigned-int)
"Flags used for the key listing result bitfield."
(:truncated #x0001))

(defcstruct gpgme-op-keylist-result
"Key listing result structure."
(bitfield gpgme-keylist-flags-t))

(defctype gpgme-op-keylist-result-t :pointer
"A key listing result structure.")

(defcfun ("gpgme_op_keylist_result" c-gpgme-op-keylist-result)
gpgme-op-keylist-result-t
(ctx gpgme-ctx-t))

(defcfun ("gpgme_op_keylist_start" c-gpgme-op-keylist-start) gpgme-error-t
(ctx gpgme-ctx-t)
(pattern :string)
(secret_only :boolean))

;;; FIXME: Extended keylisting requires array handling.

(defcfun ("gpgme_op_keylist_next" c-gpgme-op-keylist-next) gpgme-error-t
(ctx gpgme-ctx-t)
(r-key :pointer))

(defcfun ("gpgme_op_keylist_end" c-gpgme-op-keylist-end) gpgme-error-t
(ctx gpgme-ctx-t))

;;; Various functions.

(defcfun ("gpgme_check_version" c-gpgme-check-version) :string
(req-version string-or-nil-t))

(defcfun ("gpgme_get_engine_info" c-gpgme-get-engine-info) gpgme-error-t
(engine-info-p :pointer))
(defcfun ("gpgme_set_engine_info" c-gpgme-set-engine-info) gpgme-error-t
  (proto gpgme-protocol-t)
  (file-name string-or-nil-t)
  (home-dir string-or-nil-t))

(defcfun ("gpgme_engine_check_version" c-gpgme-engine-check-version) gpgme-error-t
  (proto gpgme-protocol-t))

;;
;;  L I S P   I N T E R F A C E
;;
;;
;;
;;; Lisp type translators.
;;
;;
;;; Both directions.

;;; cert-int-t is a helper type that takes care of representing the
;;; default number of certs as NIL.

(defun translate-cert-int-t-from-foreign (value)
  (cond
   ((eql value +include-certs-default+) nil)
   (t value)))

(defun translate-cert-int-t-to-foreign (value)
  (cond
   (value value)
   (t +include-certs-default+)))

;;; string-or-nil-t translates a null pointer to NIL and vice versa.
;;; Translation from foreign null pointer already works as expected.

(defun translate-string-or-nil-t-to-foreign (value)
  (cond
   (value value)
   (t (null-pointer)))))

;;; Output only.

;;; These type translators only convert from foreign type, because we
;;; never use these types in the other direction.

;;; Convert gpgme-engine-info-t linked lists into a list of property
;;; lists.  Note that this converter will automatically be invoked
;;; recursively.

;;;

;;; FIXME: Should we use a hash table (or struct, or clos) instead of
;;; property list, as recommended by the Lisp FAQ?

(defun translate-gpgme-engine-info-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        ((next protocol file-name version req-version home-dir)
         value (:struct gpgme-engine-info))
        append (list protocol (list
                               :file-name file-name
                               :version version
                               :req-version req-version
                               :home-dir home-dir)) next))))

(defun translate-gpgme-invalid-key-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        ((next fpr reason)
         value (:struct gpgme-invalid-key))
        append (list (list :fpr fpr
                           :reason reason)) next))))

(defun translate-gpgme-op-encrypt-result-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        ((invalid-recipients)
         value (:struct gpgme-op-encrypt-result))
        list :encrypt
        (list :invalid-recipients invalid-recipients))))

(defun translate-gpgme-recipient-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        ((next keyid pubkey-algo status)
         value (:struct gpgme-recipient))
        append (list (list :keyid keyid
                           :pubkey-algo pubkey-algo
                           :status status))
        next))))
(defun translate-gpgme-op-decrypt-result-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        (unsupported-algorithm bitfield recipients file-name)
        value (:struct gpgme-op-decrypt-result))
     (list :decrypt (list :unsupported-algorithm unsupported-algorithm
                           :bitfield bitfield
                           :recipients recipients
                           :file-name file-name))))

(defun translate-gpgme-new-signature-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        (next type pubkey-algo hash-algo timestamp fpr sig-class)
        value (:struct gpgme-new-signature))
     (append (list (list :type type
                          :pubkey-algo pubkey-algo
                          :hash-algo hash-algo
                          :timestamp timestamp
                          :fpr fpr
                          :sig-class sig-class))
            next))))

(defun translate-gpgme-op-sign-result-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        (invalid-signers signatures)
        value (:struct gpgme-op-sign-result))
     (list :sign (list :invalid-signers invalid-signers
                      :signatures signatures))))

(defun translate-gpgme-signature-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        (next summary fpr status notations timestamp exp-timestamp bitfield validity validity-reason pubkey-algo hash-algo)
        value (:struct gpgme-signature))
     (append (list (list :summary summary
                           :fpr fpr
                           :status status
                           :notations notations
                           :timestamp timestamp
                           :exp-timestamp exp-timestamp
                           :pubkey-algo pubkey-algo
                           :hash-algo hash-algo
                           :validity validity
                           :validity-reason validity-reason))
            next))))
(defun translate-gpgme-op-verify-result-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        ((signatures file-name)
         value (:struct gpgme-op-verify-result))
       (list :verify (list :signatures signatures
                          :file-name file-name))))))

(defun translate-gpgme-import-status-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        ((next fpr result status)
         value (:struct gpgme-import-status))
       (append (list (list :fpr fpr
                            :result result
                            :status status))
               next))))))

(defun translate-gpgme-op-import-result-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
        (considered no-user-id imported imported-rsa unchanged
                    new-user-ids new-sub-keys new-signatures
                    new-revocations secret-read secret-imported
                    secret-unchanged skipped-new-keys not-imported
                    imports)
        value (:struct gpgme-op-import-result))
        (list :verify (list :considered considered
                           :no-user-id no-user-id
                           :imported imported
                           :imported-rsa imported-rsa
                           :unchanged unchanged
                           :new-user-ids new-user-ids
                           :new-sub-keys new-sub-keys
                           :new-signatures new-signatures
                           :new-revocations new-revocations
                           :secret-read secret-read
                           :secret-imported secret-imported
                           :secret-unchanged secret-unchanged
                           next))))))
;;; Error handling.

;;; Use gpgme-error-no-signal-t to suppress automatic error handling
;;; at translation time.
;;;
;;; FIXME: Part of this probably should be in gpg-error!

(define-condition gpgme-error (error)
  ((value :initarg :gpgme-error :reader gpgme-error-value))
  (:report (lambda (c stream)
             (format stream "GPGME returned error: ~A (~A)"
                     (gpgme-strerror (gpgme-error-value c))
                     (gpgme-strsource (gpgme-error-value c))))
  (:documentation "Signalled when a GPGME function returns an error.")))

(defun translate-gpgme-error-t-from-foreign (value)
  "Raise a GPGME-ERROR if VALUE is non-zero."
  (when (not (eql (gpgme-err-code value) :gpg-err-no-error))
    (error 'gpgme-error :gpgme-error value))
  (gpg-err-canonicalize value))

(defun translate-gpgme-error-t-to-foreign (value)
  "Canonicalize the error value."
  (if (eql (gpgme-err-code value) :gpg-err-no-error)
      0
      (gpg-err-as-value value)))

(defun translate-gpgme-error-no-signal-t-from-foreign (value)
  "Canonicalize the error value."
  (gpg-err-canonicalize value))

;;; *INTERNAL* Lispy Function Interface that is still close to the C
;;; interface.

;;; Passphrase callback management.

;;; Maybe: Instead, use subclassing, and provide a customizable
;;; default implementation for ease-of-use.

(defvar *passphrase-handles* (make-hash-table)
  "Hash table with GPGME context address as key and the corresponding
  passphrase callback object as value.")
(defcallback passphrase-cb gpgme-error-t ((handle :pointer)
 (uid-hint :string)
 (passphrase-info :string)
 (prev-was-bad :boolean)
 (fd :int))
(handler-case
  (let* ((passphrase-cb
         (gethash (pointer-address handle) *passphrase-handles*))
         (passphrase
         (cond
          ((functionp passphrase-cb)
           (concatenate 'string
             (funcall passphrase-cb uid-hint passphrase-info
              prev-was-bad)
             '#(\Newline)))
          (t (concatenate 'string passphrase-cb '#(\Newline))))))
         (passphrase-len (length passphrase))
    ;; FIXME: Could be more robust.
    (res (system-write fd passphrase passphrase-len)))
  (cond
   ((< res passphrase-len) ; FIXME: Blech. A weak attempt to be robust.
    (gpgme-error :gpg-err-inval))
   (t (gpgme-error (err) (gpgme-error-value err)))
   (system-error (err) (gpgme-error-from-errno (system-error-errno err)))
    ;; FIXME: The original error gets lost here.
    (condition (err) (progn
      (when *debug*
        (format t "DEBUG: passphrase-cb: Unexpressable: ~A~%" err))
      (gpgme-error :gpg-err-general))))))

;; CTX is a C-pointer to the context.
defun gpgme-set-passphrase-cb (ctx cb)
"Set the passphrase callback for CTX."
(let ((handle (pointer-address ctx)))
  (cond
   (cb (setf (gethash handle *passphrase-handles*) cb)
    (c-gpgme-set-passphrase-cb ctx (callback passphrase-cb) ctx))
   (t (c-gpgme-set-passphrase-cb ctx (null-pointer) (null-pointer))
    (remhash handle *passphrase-handles*))))))

;;; Progress callback management.

;;; Maybe: Instead, use subclassing, and provide a customizable
;;; default implementation for ease-of-use.

(defvar *progress-handles* (make-hash-table)
"Hash table with GPGME context address as key and the corresponding progress callback object as value."

(defcallback progress-cb :void ((handle :pointer) (what :string) (type :int) (current :int) (total :int)) (handler-case (let* ((progress-cb (gethash (pointer-address handle) *progress-handles*))) (funcall progress-cb what type current total))) ;; FIXME: The original error gets lost here. (condition (err) (when *debug* (format t "DEBUG: progress-cb: Unexpressable: ~A~%" err))))

;;; CTX is a C-pointer to the context.
(defun gpgme-set-progress-cb (ctx cb) "Set the progress callback for CTX." (let ((handle (pointer-address ctx))) (cond ((cb (setf (gethash handle *progress-handles*) cb) (c-gpgme-set-progress-cb ctx (callback progress-cb) ctx))) (t (c-gpgme-set-progress-cb ctx (null-pointer) (null-pointer)) (remhash handle *progress-handles*))))

;;; Context management.

(defun gpgme-release (ctx)
  "Release a GPGME context."
  (when *debug* (format t "DEBUG: gpgme-release: ~A~%" ctx))
  (c-gpgme-release ctx))

(defun gpgme-set-protocol (ctx proto)
  "Set the protocol to be used by CTX to PROTO."
  (c-gpgme-set-protocol ctx proto))

(defun gpgme-get-protocol (ctx)
  "Get the protocol used with CTX."
  (c-gpgme-get-protocol ctx))

;;; FIXME: How to do pretty printing?

(defun gpgme-set-armor (ctx armor)
  "If ARMOR is true, enable armor mode in CTX, disable it otherwise."
  (c-gpgme-set-armor ctx armor))

(defun gpgme-armor-p (ctx)
  "Return true if armor mode is set for CTX."
  (c-gpgme-get-armor ctx))

(defun gpgme-set-textmode (ctx textmode)
  "If TEXTMODE is true, enable text mode mode in CTX, disable it otherwise."
  (c-gpgme-set-textmode ctx textmode))

(defun gpgme-textmode-p (ctx)
  "Return true if text mode mode is set for CTX."
  (c-gpgme-get-textmode ctx))

(defun gpgme-set-include-certs (ctx &optional certs)
  "Include up to CERTS certificates in an S/MIME message."
  (c-gpgme-set-include-certs ctx certs))

(defun gpgme-get-include-certs (ctx)
  "Return the number of certs to include in an S/MIME message,
   or NIL if the default is used."
  (c-gpgme-get-include-certs ctx))

(defun gpgme-get-keylist-mode (ctx)
  "Get the keylist mode in CTX."
  (c-gpgme-get-keylist-mode ctx))

(defun gpgme-set-keylist-mode (ctx mode)
  "Set the keylist mode in CTX."
(c-gpgme-set-keylist-mode ctx mode))

;;; FIXME: How to handle locale?  cffi-grovel?

(defun gpgme-get-engine-info (&optional ctx)
  "Retrieve the engine info for CTX, or the default if CTX is omitted."
  (cond
   (ctx (c-gpgme-ctx-get-engine-info ctx))
   (t (with-foreign-object (info-p 'gpgme-engine-info-t)
     (c-gpgme-get-engine-info info-p)
     (mem-ref info-p 'gpgme-engine-info-t)))))

(defun gpgme-set-engine-info (ctx proto &key file-name home-dir)
  "Set the engine info for CTX, or the default if CTX is NIL."
  (cond
   (ctx (c-gpgme-ctx-set-engine-info ctx proto file-name home-dir))
   (t (c-gpgme-set-engine-info proto file-name home-dir)))))

;;; FIXME: How to do pretty printing?

;;; gpgme_pubkey_algo_name, gpgme_hash_algo_name

(defun gpgme-set-signers (ctx keys)
  "Set the signers for the context CTX."
  (c-gpgme-signers-clear ctx)
  (dolist (key keys) (c-gpgme-signers-add ctx key)))

;;;

(defun gpgme-set-sig-notation (ctx notations)
  "Set the sig notation for the context CTX."
  (c-gpgme-sig-notation-clear ctx)
  (dolist (notation notations)
    (c-gpgme-sig-notation-add
     ctx (first notation) (second notation) (third notation))))

(defun gpgme-get-sig-notation (ctx)
  "Get the signature notation data for the context CTX."
  (c-gpgme-sig-notation-get ctx))

;;; FIXME: Add I/O callback interface, for integration with clg.

;;; FIXME: Add gpgme_wait?

;;; Streams

;;;
GPGME uses standard streams. You can define your own streams, or
use the existing file or string streams.

A stream-spec is either a stream, or a list with a stream as its
first argument followed by keyword parameters: encoding,
file-name.

FIXME: Eventually, we should provide a class that can be mixed
into stream classes and which provides accessors for encoding and
file-names. This interface should be provided in addition to the
above sleazy interface, because the sleazy interface is easier to
use (less typing), and is quite sufficient in a number of cases.

For best results, streams with element type (unsigned-byte 8)
should be used. Character streams may work if armor mode is used.

Do we need to provide access to GPGME data objects through streams
as well? It seems to me that specific optimizations, like
directly writing to file descriptors, is better done by extending
the sleazy syntax (stream-spec) instead of customized streams.
Customized streams do buffering, and this may mess up things. Mmh.

(defvar *data-handles* (make-hash-table)
"Hash table with GPGME data user callback handle address as key
and the corresponding stream as value.")

The release callback removes the stream from the *data-handles*
hash and releases the CBS structure that is used as the key in
that hash. It is implicitly invoked (through GPGME) by
gpgme-data-release.

(defcallback data-release-cb :void ((handle :pointer))
(unwind-protect (remhash (pointer-address handle) *data-handles*)
  (when (not (null-pointer-p handle)) (foreign-free handle))))

(defcallback data-read-cb ssize-t ((handle :pointer) (buffer :pointer)
  (size size-t))
  (when *debug* (format t "DEBUG: gpgme-data-read-cb: want ~A~%" size))
  (let ((stream (gethash (pointer-address handle) *data-handles*))
    (cond
      (stream
        (let* ((stream-type (stream-element-type stream))
          (seq (make-array size :element-type stream-type))
          (read (read-sequence seq stream)))
          (cond
            ((equal stream-type '(unsigned-byte 8))
             (dotimes (i read)
              (setf (mem-aref buffer :unsigned-char i)
                (aref (the byte-array seq) i)))))
    )))
    )
((eql stream-type 'character)
  (dotimes (i read)
    (setf (mem-aref buffer :unsigned-char i)
      (char-code (aref (the character-array seq) i))))
  (t
   (dotimes (i read)
     (setf (mem-aref buffer :unsigned-char i)
       (coerce (aref seq i) '(unsigned-byte 8))))))
  (when *debug* (format t "DEBUG: gpgme-data-read-cb: read ~A~%" read))
  (t
   (set-errno +ebadf+)
   -1))))
)

(defun data-write-cb (ssize (handle :pointer) (buffer :pointer)
  (size size-t))
  (when *debug* (format t "DEBUG: gpgme-data-write-cb: want ~A~%" size))
  (let ((stream (gethash (pointer-address handle) *data-handles*)))
    (cond
      ((stream)
        (let* ((stream-type (stream-element-type stream))
               (seq (make-array size :element-type stream-type)))
          (cond
            ((equal stream-type '(unsigned-byte 8))
              (dotimes (i size)
                (setf (aref (the byte-array seq) i)
                  (mem-aref buffer :unsigned-char i))))
            ((eql stream-type 'character)
              (dotimes (i size)
                (setf (aref (the character-array seq) i)
                  (code-char (mem-aref buffer :unsigned-char i))))
              (t
               (dotimes (i size)
                (setf (aref seq i)
                  (coerce (mem-aref buffer :unsigned-char i) stream-type))))
              (write-sequence seq stream)
              size))
            (t
             (set-errno +ebadf+)
             -1))))

;; This little helper macro allows us to swallow the cbs structure by
;; simply setting it to a null pointer, but still protect against
;; conditions.
(defmacro with-cbs-swallowed ((cbs) &body body)
  `(let ((cbs (foreign-alloc '(:struct gpgme-data-cbs))))
    (unwind-protect (progn ,@body)
      (when (not (null-pointer-p ,cbs)) (foreign-free ,cbs))))
)
(defun gpgme-data-new (stream &key encoding file-name)
"Allocate a new GPGME data object for STREAM."
(with-foreign-object (dh-p 'gpgme-data-t)
  ;; We allocate one CBS structure for each stream we wrap in a
  ;; data object. Although we could also share all these
  ;; structures, as they contain the very same callbacks, we need a
  ;; unique C pointer as handle anyway to look up the stream in the
  ;; callback. This is a convenient one to use.
  (with-cbs-swallowed (cbs)
    (setf (foreign-slot-value cbs '(:struct gpgme-data-cbs) 'read)
          (callback data-read-cb))
    (setf (foreign-slot-value cbs '(:struct gpgme-data-cbs) 'write)
          (callback data-write-cb))
    (setf (foreign-slot-value cbs '(:struct gpgme-data-cbs) 'seek)
          (null-pointer))
    (setf (foreign-slot-value cbs '(:struct gpgme-data-cbs) 'release)
          (callback data-release-cb))
    (c-gpgme-data-new-from-cbs dh-p cbs cbs)
    (let ((dh (mem-ref dh-p 'gpgme-data-t)))
      (when encoding (gpgme-data-set-encoding dh encoding))
      (when file-name (gpgme-data-set-file-name dh file-name)))
  ;; Install the stream into the hash table and swallow the cbs
  ;; structure while protecting against any errors.
  (unwind-protect
      (progn
        (setf (gethash (pointer-address cbs) *data-handles*) stream)
        (setf cbs (null-pointer)))
    (when (not (null-pointer-p cbs)) (c-gpgme-data-release dh)))
    (when *debug* (format t "DEBUG: gpgme-data-new: ~A~\n" dh))
  ))
)
;;; This function releases a GPGME data object. It implicitly
;;; invokes the data-release-cb function to clean up associated junk.
(defun gpgme-data-release (dh)
"Release a GPGME data object."
  (when *debug* (format t "DEBUG: gpgme-data-release: ~A~\n" dh))
  (c-gpgme-data-release dh))

(defvar gpgme-data-new
  (defmethod initialize-instance :after ((data data) &key streamspec
                                         &allow-other-keys)
    (let ((c-data (if (listp streamspec)
                     (apply '#gpgme-data-new streamspec)
                     (gpgme-data-new streamspec))))
      (c-data) ; The C data object pointer
      (:documentation "The GPGME data type.")))
(cleanup t)
(unwind-protect
  (progn
    (setf (slot-value data 'c-data) c-data)
    (finalize data (lambda () (gpgme-data-release c-data)))
    (setf cleanup nil)
    (if cleanup (gpgme-data-release c-data))))

(defun translate-gpgme-data-t-to-foreign (value)
  ;; Allow a pointer to be passed directly for the finalizer to work.
  (cond
    ((null value) (null-pointer))
    ((pointerp value) value)
    (t (slot-value value 'c-data))))

(defmacro with-gpgme-data ((dh streamspec) &body body)
  `(let ((,dh (make-instance 'data :streamspec ,streamspec)))
     ,@body))

(defun gpgme-data-get-encoding (dh)
  "Get the encoding associated with the data object DH."
  (c-gpgme-data-get-encoding dh))

(defun gpgme-data-set-encoding (dh encoding)
  "Set the encoding associated with the data object DH to ENCODING."
  (c-gpgme-data-set-encoding dh encoding))

(defun gpgme-data-get-file-name (dh)
  "Get the file name associated with the data object DH."
  (c-gpgme-data-get-file-name dh))

(defun gpgme-data-set-file-name (dh file-name)
  "Set the file name associated with the data object DH to FILE-NAME."
  (c-gpgme-data-set-file-name dh file-name))

;;; FIXME: Add key accessor interfaces.

(defun gpgme-get-key (ctx fpr &optional secret)
  "Get the key with the fingerprint FPR from the context CTX."
  (with-foreign-object (key-p 'gpgme-key-t)
    (c-gpgme-get-key ctx fpr key-p secret)
    (mem-ref key-p 'gpgme-key-t)))

(defun gpgme-key-ref (key)
  "Acquire an additional reference to the key KEY."
  (when *debug* (format t "DEBUG: gpgme-key-ref: ~A~" key))
  (c-gpgme-key-ref key))
(defun gpgme-key-unref (key)
  "Release a reference to the key KEY."
  (when *debug* (format t "DEBUG: gpgme-key-unref: ~A~%" key))
  (c-gpgme-key-unref key))

;;; FIXME: We REALLY need pretty printing for keys and all the other
;;; big structs.

;;; Various interfaces.

(defun gpgme-check-version (&optional req-version)
  (c-gpgme-check-version req-version))

;;;
;;; The *EXPORTED* CLOS interface.

;;;

;;; The context type.

;;; We wrap the C context pointer into a class object to be able to
;;; stick a finalizer on it.

(defclass context ()
  (c-ctx ; The C context object pointer.
         signers ; The list of signers.
         sig-notation) ; The list of signers.
  (:documentation "The GPGME context type."))

(defun translate-gpgme-ctx-t-to-foreign (value)
  ;; Allow a pointer to be passed directly for the finalizer to work.
  (if (pointerp value) value (slot-value value 'c-ctx)))

(defmacro context (&rest rest)
  "Create a new GPGME context."
  `(make-instance 'context ,@rest))

;;; The context type: Accessor functions.
;;; The context type: Accessor functions: Protocol.

(defun protocol (ctx)
  (documentation "Get the protocol of CONTEXT.")
)

(defun (setf protocol) (protocol ctx)
  (documentation "Set the protocol of CONTEXT to PROTOCOL.")
)

;;; FIXME: Adjust translator to reject invalid protocols. Currently,
;;; specifying an invalid protocol throws a "NIL is not 32 signed int"
;;; error. This is suboptimal.
(defun (setf protocol) (protocol ctx)
  (gpgme-set-protocol ctx protocol)
)

;;; The context type: Accessor functions: Armor.
;;; FIXME: Is it good style to make foop setf-able? Or should it be
;;; foo/foop for set/get?
(defun armorp (ctx)
  (documentation "Get the armor flag of CONTEXT.")
)

(defun (setf armorp) (armor ctx)
  (documentation "Set the armor flag of CONTEXT to ARMOR.")
)

(defun (setf armorp) (armor (ctx context))
  (gpgme-set-armor ctx armor)
)

;;; The context type: Accessor functions: Textmode.
;;; FIXME: Is it good style to make foop setf-able? Or should it be
;;; foo/foop for set/get?
(defun textmodep (ctx)
  (documentation "Get the text mode flag of CONTEXT.")
)

(defun (setf textmodep) (textmode ctx)
  (documentation "Set the text mode flag of CONTEXT to TEXTMODE.")
)

(defun (setf textmodep) (textmode (ctx context))
  (gpgme-set-textmode ctx textmode)
;;; The context type: Accessor functions: Include Certs.

(defun include-certs (ctx)
  (documentation "Get the number of included certificates in an
                 S/MIME message, or NIL if the default is used.")
)

(defmethod include-certs ((ctx context))
  (gpgme-get-include-certs ctx))

(defun (setf include-certs) (certs ctx)
  (documentation "Return the number of certificates to include in an
                 S/MIME message, or NIL if the default is used.")
)

(defmethod (setf include-certs) (certs (ctx context))
  (gpgme-set-include-certs ctx certs))

;;; The context type: Accessor functions: Engine info.

(defun engine-info (ctx)
  (documentation "Retrieve the engine info for CTX.")
)

(defmethod engine-info ((ctx context))
  (gpgme-get-engine-info ctx))

(defun (setf engine-info) (info ctx)
  (documentation "Set the engine info for CTX.")
)

(defmethod (setf engine-info) (info (ctx context))
  (dolist (proto '(:openpgp :cms))
    (let ((pinfo (getf info proto)))
      (when pinfo
        (gpgme-set-engine-info ctx proto :file-name (getf pinfo :file-name)
                             :home-dir (getf pinfo :home-dir))))))

;;; The context type: Accessor functions: Keylist mode.

(defun keylist-mode (ctx)
  (documentation "Get the keylist mode of CTX.")
)

(defmethod keylist-mode ((ctx context))
  (gpgme-get-keylist-mode ctx))

(defun (setf keylist-mode) (mode ctx)
  (documentation "Set the keylist mode of CTX to MODE.")
)

(defmethod (setf keylist-mode) (mode (ctx context))
  (gpgme-set-keylist-mode ctx mode))
;;; The context type: Accessor functions: Signers.

(defun signers (ctx)
  (:documentation "Get the signers of CTX.\n")
)

(defun method signers ((ctx context))
  (slot-value ctx 'signers))

(defun (setf signers) (signers ctx)
  (:documentation "Set the signers of CTX to SIGNERS.\n")
)

(defun method (setf keylist-mode) (signers (ctx context))
  (gpgme-set-signers ctx signers)
  (setf (slot-value ctx 'signers) signers))

;;; The context type: Accessor functions: Sig notations.

(defun sig-notations (ctx)
  (:documentation "Get the signature notations of CTX.\n")
)

(defun method sig-notations ((ctx context))
  (slot-value ctx 'signers))

(defun (setf sig-notations) (notations ctx)
  (:documentation "Set the signature notations of CTX to NOTATIONS.\n")
)

(defun method (setf sig-notations) (notations (ctx context))
  (gpgme-set-signers ctx notations)
  (setf (slot-value ctx 'notations) notations))

;;; The context type: Support macros.

(defun with-context ((ctx &rest rest) &body body)
  `let ((,ctx (make-instance 'context ,@rest)))
       ,@body))

;;; The key type.

(defun class key ()
  (c-key) ; The C key object pointer.
  (:documentation "The GPGME key type.\n"))

;;; In the initializer, we swallow the c-key argument.
(defun method initialize-instance :after ((key key) &key c-key
                                     &allow-other-keys)
  (setf (slot-value key 'c-key) c-key)
  (finalise key (lambda () (gpgme-key-unref c-key)))))
(defun translate-gpgme-key-t-from-foreign (value)
  (when *debug* (format t "DEBUG: import key: ~A~%" value))
  (make-instance 'key :c-key value))

(defun translate-gpgme-key-t-to-foreign (value)
  ;; Allow a pointer to be passed directly for the finalizer to work.
  (if (pointerp value) value (slot-value value 'c-key)))

(defun translate-gpgme-sig-notation-t-from-foreign (value)
  (cond
    ((null-pointer-p value) nil)
    (t (with-foreign-slots
        ((next name value name-len value-len flags bitfield)
         value (:struct gpgme-sig-notation))
        (append (list (list
                         :name name
                         :value value
                         :name-len name-len
                         :value-len value-len
                         :flags flags
                         :bitfield bitfield))
                next)))))

(defun translate-gpgme-subkey-t-from-foreign (value)
  (cond
    ((null-pointer-p value) nil)
    (t (with-foreign-slots
        ((next bitfield pubkey-algo length keyid fpr timestamp expires)
         value (:struct gpgme-subkey))
        (append (list (list
                         :bitfield bitfield
                         :pubkey-algo pubkey-algo
                         :length length
                         :keyid keyid
                         :fpr fpr
                         :timestamp timestamp
                         :expires expires))
                next)))))

;;; The key type: Accessor functions.

;;; FIXME: The bitfield and flags contain redundant information at
;;; this point. FIXME: Deal nicer with zero-length name (policy url)
;;; and zero length value (omit?) and human-readable (convert to string).
;;; FIXME: Turn binary data into sequence or vector or what it should be.
;;; FIXME: Turn the whole thing into a hash?
(defun translate-gpgme-sig-notation-t-from-foreign (value)
  (cond
    ((null-pointer-p value) nil)
    (t (with-foreign-slots
        (:struct gpgme-sig-notation))
        (append (list (list
                         :name name
                         :value value
                         :name-len name-len
                         :value-len value-len
                         :flags flags
                         :bitfield bitfield))
                next)))))

;;;FIXME: Deal nicer with timestamps. bitfield field name?
(defun translate-gpgme-subkey-t-from-foreign (value)
  (cond
    ((null-pointer-p value) nil)
    (t (with-foreign-slots
        (:struct gpgme-subkey))
        (append (list (list
                         :bitfield bitfield
                         :pubkey-algo pubkey-algo
                         :length length
                         :keyid keyid
                         :fpr fpr
                         :timestamp timestamp
                         :expires expires))
                next)))))
(defun translate-gpgme-key-sig-t-from-foreign (value)
  (cond
   ((null-pointer-p value) nil)
   (t (with-foreign-slots
       ((next bitfield pubkey-algo keyid timestamp expires status
         uid name email comment sig-class)
        value (:struct gpgme-key-sig))
       (append (list (list
         :bitfield bitfield
         :pubkey-algo pubkey-algo
         :keyid keyid
         :timestamp timestamp
         :expires expires
         :status status
         :uid uid
         :name name
         :email email
         :comment comment
         :sig-class sig-class))
       next)))))

(defun key-data (key)
  (with-slots (c-key) key
    (with-foreign-slots
      ((bitfield protocol issuer-serial issuer-name chain-id
        owner-trust subkeys uids keylist-mode)
       c-key (:struct gpgme-key))
      (list

```
(:bitfield bitfield
:protocol protocol
:issuer-serial issuer-serial
:issuer-name issuer-name
:chain-id chain-id
:owner-trust owner-trust
:subkeys subkeys
:uids uids
:keylist-mode keylist-mode))
)

(defun fpr (key)
  (:documentation "Get the primary fingerprint of the key.")
)

(defun fpr ((key key))
  (getf (car (getf (key-data key) :subkeys)) :fpr))

;;;; The context type: Crypto-Operations.

(defun get-key (ctx fpr &optional secret)
  (:documentation "Get the (secret) key FPR from CTX.")
)

(defun get-key ((ctx context) fpr &optional secret)
  (gpgme-get-key ctx fpr secret))

;;;; Encrypt.

(defun op-encrypt (ctx recp plain cipher &key always-trust sign)
  (:documentation "Encrypt.")
)

(defun op-encrypt ((ctx context) recp plain cipher
  &key always-trust sign)
  (with-foreign-object (c-recp :pointer (+ 1 (length recp)))
    (dotimes (i (length recp))
      (setf (mem-aref c-recp 'gpgme-key-t i) (elt recp i)))
    (setf (mem-aref c-recp :pointer (length recp)) (null-pointer))
    (with-gpgme-data (in plain)
      (with-gpgme-data (out cipher)
        (let ((flags))
          (if always-trust (push :always-trust flags))
          (cond
            (sign
              (c-gpgme-op-encrypt-sign ctx c-recp flags in out)
              (append (c-gpgme-op-encrypt-result ctx)
              (c-gpgme-op-sign-result ctx))))
          (t


;;; Decrypt.

(defun op-decrypt (ctx cipher plain &key verify)
  (:documentation "Decrypt."

(defmethod op-decrypt ((ctx context) cipher plain &key verify)
  (with-gpgme-data (in cipher)
    (with-gpgme-data (out plain)
      (cond
        (verify
          (c-gpgme-op-decrypt-verify ctx in out)
          (append (c-gpgme-op-decrypt-result ctx))
          (c-gpgme-op-sign-result ctx))
        (t
          (c-gpgme-op-decrypt ctx in out)
          (c-gpgme-op-decrypt-result ctx)))))

;;; Signing.

(defun op-sign (ctx plain sig &optional mode)
  (:documentation "Sign."

(defmethod op-sign ((ctx context) plain sig &optional (mode :none))
  (with-gpgme-data (in plain)
    (with-gpgme-data (out sig)
      (c-gpgme-op-sign ctx in out mode)
      (c-gpgme-op-sign-result ctx)))

;;; Verify.

(defun op-verify (ctx sig text &key detached)
  (:documentation "Verify."

(defmethod op-verify ((ctx context) sig text &key detached)
  (with-gpgme-data (in sig)
    (with-gpgme-data (on text)
      (c-gpgme-op-verify ctx in (if detached on nil)
        (if detached nil on)
        (c-gpgme-op-verify-result ctx))))

;;; Import.

(defun op-import (ctx keydata)
  (:documentation "Import.")

(found in library pgme)
(defmethod op-import ((ctx context) keydata)
  (with-gpgme-data (in keydata)
    (c-gpgme-op-import ctx in)
    (c-gpgme-op-import-result ctx)))

;;; Export.

(defun gpgme-op-export (ctx pattern keydata)
  "Export public key data matching PATTERN to the stream KEYDATA."
  (c-gpgme-op-export ctx pattern 0 dh))

;;; Key generation.

;;; Initialization

(defparameter *version* (check-version)
  "The version number of GPGME used.")

(21:protected-private-key(3:elg(1:p193:5*n^F'Q'R0_6<yymec\=c7S8u[5
ZF'xf5y9F@T=KhZdU0(k5nZEI/R]njVITPU$W<xs-Yx)(1:g1):(1:y192:O9GNR[?]Y_W[FD*zuRmk%R\)>>e9pe
 eU)uS%VJ5F)yH*O
]]7[@wJmQP^jurxV2H2j[G(q_"8(9:protected25:openpgp-s2k3-sha1-aes-cbc((4:sha18:o"%7:5242880)16:Hs*]u
)256:Gzk3%\kb2=ooO@.,_eBB13F|OQP3eD%n,;~L-6UH^=64i);l
e+sG'(mIH_2sn_BBO7hRcZUt(p6,[S]37C3m8EY9=gQ)(12:protected-at15:20101008T070148)))
00~0
*H
0k10UDE10U
Dsseldorf10U

g10 Code Gmbh10UAegypten Project10Utest cert 10
011203093638Z
021203093638Z0k10UDE10U
Dsseldorf10U

g10 Code Gmbh10UAegypten Project10Utest cert 100
*H
0l+Pu\v-ZTS'e'nE&h4<]BePm[%j-7PcHKI@FKy~npcd$[ ]K-Q00U37Tq8_cK40U#037Tq8_cK4om0k10UDE10U
Dsseldorf10U
g10 Code GmbH10UAegypten Project10Utest cert 10U00
*H
l8gd Z
wYL,]\j
pk2p[Li:Rl]\#h$O\3:e\A\&P\$Oc-.TS-A>:fQY<
-----BEGIN PGP PUBLIC KEY BLOCK-----

mQENBFsMHecBCAcqJgqa+CENywpPCK+MpowAV6uFvDyO2Lm0s6+XiDWRBU/Zjtz
8zdYNKSlbJkWn4ujV5aiAy7AtmeEoszfzYlecKut1wIDScHmplW8qmEFDVl9g26MeAV
rTno9D5KodHlvEls8wurqB8six0WLBHh6J1Dtt8Hqglnv+3vaQRgqFbe62ZYPwHHx
Zf0u3iFKln2WE/NekRkvyFio3ApGvRh5lYW6JmmugBlo7s5xosKJ09dkPGEIEtt
aF1RkcMj8sWG9vHAXcjlGgFfXSN9YLppyDxpuZGmn4+gjLB2a3rbQCDZVfNcyG4O
ybklP8jw6Udm89bK2ucYFjdmYn/nQxRxeNABEAAG011Rc3QgTm9QcmlS2S5V
JDxub2jvZHIAZXhbXBzjS5venc+iQFOBBMBCAA4FiEE4Fmb4HzTma4TECXTZou
EzBBU9EFAIsMHEcCGwMFCwkIBw1GFQoJCAscCBYCAwECHgECF4AACgkQgTZouEzBB
U9F+qwv/SJh4uRnTWgyJ71FBxQDYCBq3jbi6e7hMrKpBpYjdnPMAMb2p0PjbjgW
0pp4kDPZans3UDHbama1u/SF4/yisJkK94Bk5x5YilGnUeTjgDFe6lHfQ1
zVWZC/NF3tpgbzi1xQXTNt34sN+9dbV/QFDLW0PocN7C0jR/hgkJbMEH2PezWhShj
mLy/L1UYYAoxYvpXjct5AJKjw07Rm5ibzjCphE+FUMRg8E0mJcgsoedJ5qspU
k2DpN3+YoZCTNRgAHElylqQbM6p0V6v2c+UcT1QhbW4xSI38/keEG8Q5t5r1Uy
FcWAY5n51aNzImxse3LtqEon3rKikbKDBQrDh3nAQgAqfAjSjcngrEtRm+ZYOwN0
QFv2FfuEm6nhju7Me7S2NzGv1LnhjTNshEa91ABEdjZirE2Tqx4CXwDwedK4
u1ToFvencAmq2047Sh+eTysfp6WPftPBWf6ctKH3lFXjgoyDBULbV413XU/D9C
Mt7nsKDPYHvnrge/qWPYVcb+c0osSwNImMcwQsdTQ3vBq7MeNS9ZeBcXi+XCjhn
kjNum2Aqp jqHQDQV7871yQ83iL.vZSSfkLb0/SNNU+bGaw2G3lcyKdflFrzEWWZT
oChH3814L7vnAe4z4PfHwW8X0dka2aLgxe6UszDH9L3eGhtLjPhsianG+gZKkm
+QARQABAQIE2BBgBCAAgFeEIEE4Fmb4HzTma4TECXTZouEZBBU9EFAIsMHEcCGwwA
CgkQTZouEzBBU9H5TGqAolWvsez/WW8N2mZEnX0LOFNb+1SIL4X93jnwNdoVI
v19bpb4SRIHF/H9kCGI7jK96gvyQk3uez/95D2AIrfW5KydOouFIsKgHdv8aY
BrcHLlv11yK+0iTDDoXyA7g7n5162lXkaxSO9h2sz2Gv20RkAXCwk69JWw0BRR
XllpFzh2YFe2Zhh/tlM1W65h3w0gtgazZBBbpZTOOW4vzgyhYN+OM5ObqfIK1Bu3U
caDF1d46Z7mpSSY++zYzkIz4bgmvM5VFxdIKgbLx9uVeTvOupvbAW0TNulYGUBQE
nm+0Z03rW18664e4s3S0he8zCqo1iiImpba6F1Oaw==
y6DD
-----END PGP PUBLIC KEY BLOCK-----
from __future__ import absolute_import
import cython
import gpg
c = gpg.Context()
seckeys = c.keylist(pattern=None, secret=True)
pubkeys = c.keylist(pattern=None, secret=False)
seclist = list(seckeys)
secnum = len(seclist)
publist = list(pubkeys)
pubnum = len(publist)

if cython.compiled is True:
    cc = "Powered by Cython compiled C code."
else:
    cc = "Powered by Python."

print(""
    Number of secret keys:  {0}
    Number of public keys:  {1}
"").format(secnum, pubnum, cc)

This is gpgme.info, produced by makeinfo version 6.3 from gpgme.texi.


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INFO-DIR-SECTION GNU Libraries
START-INFO-DIR-ENTRY
* GPGME: (gpgme).        Adding support for cryptography to your program.
END-INFO-DIR-ENTRY

This file documents the GPGME library.

This is Edition 1.12.1-beta100, last updated 3 December 2018, of The


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Indirect:
gpgme.info-1: 1689
gpgme.info-2: 301885

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The GPGME Python bindings passed through many hands and numerous phases before, after a fifteen year journey, coming full circle to return to the source. This is a short explanation of that journey.

** In the beginning

In 2002 John Goerzen released PyME; Python bindings for the GPGME module which utilised the current release of Python of the time and SWIG. Shortly after creating it and ensuring it worked he stopped supporting it, though he left his work available on his Gopher site.

** Keeping the flame alive

A couple of years later the project was picked up by Igor Belyi and actively developed and maintained by him from 2004 to 2008. Igor’s whereabouts at the time of this document's creation are unknown, but the current authors do hope he is well. We’re assuming (or hoping) that life did what life does and made continuing untenable.

** Passing the torch
In 2014 Martin Albrecht wanted to patch a bug in the PyME code and discovered the absence of Igor. Following a discussion on the PyME mailing list he became the new maintainer for PyME, releasing version 0.9.0 in May of that year. He remains the maintainer of the original PyME release in Python 2.6 and 2.7 (available via PyPI).

** Coming full circle

In 2015 Ben McGinnes approached Martin about a Python 3 version, while investigating how complex a task this would be the task ended up being completed. A subsequent discussion with Werner Koch led to the decision to fold the Python 3 port back into the original GPGME release in the languages subdirectory for non-C bindings under the module name of =pyme3=.

In 2016 this PyME module was integrated back into the GPGME project by Justus Winter. During the course of this work Justus adjusted the port to restore limited support for Python 2, but not as many minor point releases as the original PyME package supports. During the course of this integration the package was renamed to more accurately reflect its status as a component of GPGME. The =pyme3= module was renamed to =gpg= and adopted by the upstream GnuPG team.

In 2017 Justus departed G10code and the GnuPG team. Following this Ben returned to maintain of gpgme Python bindings and continue building them from that point.

* Relics of the past

There are a few things, in addition to code specific factors, such as SWIG itself, which are worth noting here.

** The Annoyances of Git

As anyone who has ever worked with git knows, submodules are horrible way to deal with pretty much anything. In the interests
Instead the files were added to a subdirectory of the `lang/` directory, along with a copy of the entire git log up to that point as a separate file within the `lang/python/docs/` directory.[fn:2] As the log for PyME is nearly 100KB and the log for GPGME is approximately 1MB, this would cause considerable bloat, as well as some confusion, should the two be merged.

Hence the unfortunate, but necessary, step to simply move the files. A regular repository version has been maintained should it be possible to implement this better in the future.

** The Perils of PyPI

The early port of the Python 2 `pyme` module as `pyme3` was never added to PyPI while the focus remained on development and testing during 2015 and early 2016. Later in 2016, however, when Justus completed his major integration work and subsequently renamed the module from `pyme3` to `gpg`, some prior releases were also provided through PyPI.

Since these bindings require a matching release of the GPGME libraries in order to function, it was determined that there was little benefit in also providing a copy through PyPI since anyone obtaining the GPGME source code would obtain the Python bindings source code at the same time. Whereas there was the potential to sew confusion amongst Python users installing the module from PyPI, only to discover that without the relevant C files, header files or SWIG compiled binaries, the Python module did them little good.

There are only two files on PyPI which might turn up in a search for this module or a sample of its content:

1. gpg (1.8.0) - Python bindings for GPGME GnuPG cryptography library
2. pyme (0.9.0) - Python support for GPGME GnuPG cryptography library

*** GPG 180 - Python bindings for GPGME GnuPG cryptography library

This is the most recent version to reach PyPI and is the version
of the official Python bindings which shipped with GPGME 1.8.0. If you have GPGME 1.8.0 installed and /only/ 1.8.0 installed, then it is probably safe to use this copy from PyPI.

As there have been a lot of changes since the release of GPGME 1.8.0, the GnuPG Project recommends not using this version of the module and instead installing the current version of GPGME along with the Python bindings included with that package.

*** PyME 090 - Python support for GPGME GnuPG cryptography library
:PROPERTIES:
:CUSTOM_ID: pypi-gpgme-90
:END:

This is the last release of the PyME bindings maintained by Martin Albrecht and is only compatible with Python 2, it will not work with Python 3. This is the version of the software from which the port from Python 2 to Python 3 code was made in 2015.

Users of the more recent Python bindings will recognise numerous points of similarity, but also significant differences. It is likely that the more recent official bindings will feel "more pythonic."

For those using Python 2, there is essentially no harm in using this module, but it may lack a number of more recent features added to GPGME.

* Footnotes

[fn:1] In all likelihood this would have been Python 2.2 or possibly Python 2.3.

[fn:2] The entire PyME git log and other preceding VCS logs are located in the =gpgme/lang/python/docs/old-commits.log= file.

2011-12-02  Werner Koch  <wk@g10code.com>

NB: ChangeLog files are no longer manually maintained. Starting on December 1st, 2011 we put change information only in the GIT commit log, and generate a top-level ChangeLog file from logs at "make dist". See doc/HACKING for details.

2008-11-08  Moritz  <moritz@gnu.org>

* gpgme.lisp (size-t): Wrong call to defctype: function accepts optional, not keyword argument.
(ssize-t): Likewise.
(off-t): Likewise.
(gpgme-data-t, gpgme-ctx-t): Likewise.
(gpgme-error-t): Likewise.
(gpgme-error-no-signal-t): Likewise.
(gpgme-err-code-t): Likewise.
(gpgme-err-source-t): Likewise.
(gpgme-sig-notation-t, gpgme-engine-info-t): Likewise.
(gpgme-subkey-t): Likewise.
(gpgme-key-sig-t): Likewise.
(gpgme-user-id-t): Likewise.
(gpgme-key-t): Likewise.
(gpgme-data-cbs-t): Likewise.
(gpgme-invalid-key-t): Likewise.
(gpgme-op-encrypt-result-t): Likewise.
(gpgme-recipient-t): Likewise.
(gpgme-op-decrypt-result-t): Likewise.
(gpgme-new-signature-t): Likewise.
(gpgme-op-sign-result-t): Likewise.
(gpgme-signature-t): Likewise.
(gpgme-op-verify-result-t): Likewise.
(gpgme-import-status-t): Likewise.
(gpgme-op-import-result-t): Likewise.
(gpgme-op-genkey-result-t): Likewise.
(gpgme-op-keylist-result-t): Likewise.

2006-07-06 Marcus Brinkmann <marcus@g10code.de>

* Initial release.

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implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

# HACKING

#+TITLE: Hacking notes for GPGME
#+STARTUP: showall

* How to contribute
** No more ChangeLog files

Do not modify any of the ChangeLog files in GPGME. Starting
on December 1st, 2011 we put change information only in the GIT
commit log, and generate a top-level ChangeLog file from logs at "make dist" time. As such, there are strict requirements on the form of the commit log messages. The old ChangeLog files have all be renamed to ChangeLog-2011

** Commit log requirements

Your commit log should always start with a one-line summary, the second line should be blank, and the remaining lines are usually ChangeLog-style entries for all affected files. However, it's fine -- even recommended -- to write a few lines of prose describing the change, when the summary and ChangeLog entries don't give enough of the big picture. Omit the leading TABs that you're used to seeing in a "real" ChangeLog file, but keep the maximum line length at 72 or smaller, so that the generated ChangeLog lines, each with its leading TAB, will not exceed 80 columns. If you want to add text which shall not be copied to the ChangeLog, separate it by a line consisting of two dashes at the begin of a line.

Note that ./autogen.sh installs a git hook to do some basic syntax checking on the commit log message.

Typo fixes and documentation updates don't need a ChangeLog entry; thus you would use a commit message like

```
#+begin_example
Fix typo in a comment

--
#+end_example
```

The marker line here is important; without it the first line would appear in the ChangeLog.

If you exceptionally need to have longer lines in a commit log you may do this after this scissor line:
```
#+begin_example
# ------------------------ >8 ------------------------
#+end_example
```

(hash, blank, 24 dashes, blank, scissor, blank, 24 dashes).
Note that such a comment will be removed if the git commit option =--cleanup-scissor= is used.

** License policy

GPGME is currently licensed under the LGPLv2.1+ with tools and the manual being under the GPLv3+. We may eventually update to a newer
version of the licenses or a combination of them. It is thus
important, that all contributed code allows for an update of the
license; for example we can't accept code under the LGPLv2(only).

If you want to contribute code or documentation to GPGME you are
asked to assert that the contribution is in accordance to the "GPGME
Developer's Certificate of Origin" as found in the file "DCO".
Except for a slight wording change, this DCO is identical to the one
used by the Linux kernel. Please take these simple steps:

- Decide which mail address you want to use. Please have your real
  name in the address and not a pseudonym. Anonymous contributions
can only be done if you find a proxy who certifies for you.

- If your employer or school might claim ownership of code written
  by you; you need to talk to them to make sure that you have the
  right to contribute under the DCO.

- Send an OpenPGP signed mail to the gnupg-devel@gnupg.org public
  mailing list from your mail address. Include a copy of the DCO as
  found in the official master branch. Insert your name and email
  address into the DCO in the same way you want to use it later.
  Example:

  Signed-off-by: Joe R. Hacker <joe@example.org>

  If you need it, you may perform simple transformations on the mail
  address: Replacing "@" by " at " or "." by " dot ".)

- That's it. From now on you only need to add a "Signed-off-by:" line with your name and mail address to the GIT commit message.
  It is recommended to send the patches using a PGP/MIME signed
  mail.

** Coding standards

Please follow the GNU coding standards. If you are in doubt consult
the existing code as an example. Do no re-indent code without a
need. If you really need to do it, use a separate commit for such a
change.

- C99 syntax should not be used; stick to C90.
- Please do not use C++ //= style comments.
- Try to fit lines into 80 columns.
- Ignore signed/unsigned pointer mismatches
- No arithmetic on void pointers; cast to char* first.

** Commit log keywords
- GnuPG-bug-id :: Values are comma or space delimited bug numbers from bug.gnupg.org pertaining to this commit.
- Debian-bug-id :: Same as above but from the Debian bug tracker.
- CVE-id :: CVE id number pertaining to this commit.
- Regression-due-to :: Commit id of the regression fixed by this commit.
- Fixes-commit :: Commit id this commit fixes.
- Reported-by :: Value is a name or mail address of a bug reporte.
- Suggested-by :: Value is a name or mail address of someone who suggested this change.
- Co-authored-by :: Name or mail address of a co-author
- Some-comments-by :: Name or mail address of the author of additional comments (commit log or code).
- Proofread-by :: Sometimes used by translation commits.
- Signed-off-by :: Name or mail address of the developer

* Debug hints

- Use gpgme-tool for manual tests.
- The envvar GPGME_DEBUG enables debugging; see debug.[ch] for details.

2011-12-02 Werner Koch <wk@g10code.com>

NB: ChangeLog files are no longer manually maintained. Starting on December 1st, 2011 we put change information only in the GIT commit log, and generate a top-level ChangeLog file from logs at "make dist". See doc/HACKING for details.

2011-04-06 Werner Koch <wk@g10code.com>

* gpg-error.m4: Update from current libgpg-error repo.

2010-05-07 Werner Koch <wk@g10code.com>

* libassuan.m4: Update from libassuan svn.

2009-11-10 Marcus Brinkmann <marcus@g10code.de>

* libassuan.m4: Fix LIBASSUAN_VERSION.

2006-06-08 Marcus Brinkmann <marcus@g10code.de>

* pth.m4: Add --all to pth-config invocation.

2006-02-22 Marcus Brinkmann <marcus@g10code.de>

* pth.m4: Fix code generation (required for Max OS X). Submitted by Emanuele Giaquinta <exg@gentoo.org>.
2005-11-17 Marcus Brinkmann <marcus@g10code.de>

* glib-2.0.m4: New file.

2004-12-28 Werner Koch <wk@g10code.com>

* pth.m4: Changed quoting for use with automake 1.9.

2004-09-14 Marcus Brinkmann <marcus@g10code.de>

* pth.m4: Disable _ac_pth_line, and don't fail if Pth is not found.

* gpg-error.m4: New file.
* pth.m4: New file.


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This file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. Configuration files may go here. Note that config.h.in is auto-generated so that this file is not in git.

GPGME Developer's Certificate of Origin. Version 1.0
=====================================================================
By making a contribution to the GPGME project, I certify that:

(a) The contribution was created in whole or in part by me and I have the right to submit it under the free software license indicated in the file; or

(b) The contribution is based upon previous work that, to the best of my knowledge, is covered under an appropriate free software license and I have the right under that license to submit that work with modifications, whether created in whole
or in part by me, under the same free software license
(unless I am permitted to submit under a different license),
as indicated in the file; or

(c) The contribution was provided directly to me by some other
person who certified (a), (b) or (c) and I have not modified
it.

(d) I understand and agree that this project and the contribution
are public and that a record of the contribution (including
all personal information I submit with it, including my
sign-off) is maintained indefinitely and may be redistributed
consistent with this project or the free software license(s)
involved.

Signed-off-by: [Your name and mail address]
\input texinfo @c -*- texinfo -*-
@c %**start of header
@setfilename gpgme-python-howto.info
@settitle GNU Privacy Guard (GnuPG) Made Easy Python Bindings HOWTO (English)
@documentencoding utf-8
@documentlanguage en
@c %**end of header

@finalout
@titlepage
@title GNU Privacy Guard (GnuPG) Made Easy Python Bindings HOWTO (English)
@author Ben McGinnes
@end titlepage

@contents

@ifnottex
@node Top
@top GNU Privacy Guard (GnuPG) Made Easy Python Bindings HOWTO (English)
@end ifnottex

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Keyserver access for Python

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@end detailmenu
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@node Introduction
@chapter Introduction

@multitable {aaaaaaaaaaaaaaa} {aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa}
@item Version:
This document provides basic instruction in how to use the GPGME Python bindings to programmatically leverage the GPGME library.

Though the GPGME Python bindings themselves provide support for both Python 2 and 3, the focus is unequivocally on Python 3 and specifically from Python 3.4 and above. As a consequence all the examples and instructions in this guide use Python 3 code.

Much of it will work with Python 2, but much of it also deals with Python 3 byte literals, particularly when reading and writing data. Developers concentrating on Python 2.7, and possibly even 2.6, will need to make the appropriate modifications to support the older string and unicode types as opposed to bytes.

There are multiple reasons for concentrating on Python 3; some of which relate to the immediate integration of these bindings, some of which relate to longer term plans for both GPGME and the python bindings and some of which relate to the impending EOL period for Python 2.7. Essentially, though, there is little value in tying the bindings to a version of the language which is a dead end and the advantages offered by Python 3 over Python 2 make handling the data types with which GPGME deals considerably easier.
All of the examples found in this document can be found as Python 3 scripts in the @samp{lang/python/examples/howto} directory.

@node Unofficial Drafts
@section Unofficial Drafts

In addition to shipping with each release of GPGME, there is a section on locations to read or download @ref{Draft Editions of this HOWTO, , draft editions} of this document from at the end of it. These are unofficial versions produced in between major releases.

@node What's New
@section What's New

Full details of what is new are now available in the @uref{what-is-new.org, What's New} file and archives of the preceding @emph{What's New} sections are available in the @uref{what-was-new, What Was New} file.

@menu
* New in GPGME 1130::
* New in GPGME 1120::
@end menu

@node New in GPGME 1130
@subsection New in GPGME 1130

See the @uref{what-is-new#new-stuff-1-13-0, What's New} document for what is new in version 1.13.0.

@node New in GPGME 1120
@subsection New in GPGME 1120

See the @uref{what-was-new#new-stuff-1-12-0, What Was New} document for what was new in version 1.12.0.

@node GPGME Concepts
@chapter GPGME Concepts

@menu
* A C API::
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* Difference between the Python bindings and other GnuPG Python packages::
@end menu

@node A C API
@section A C API

Unlike many modern APIs with which programmers will be more familiar with these days, the GPGME API is a C API. The API is intended for
use by C coders who would be able to access its features by including the \@samp{gpgme.h} header file with their own C source code and then access its functions just as they would any other C headers.

This is a very effective method of gaining complete access to the API and in the most efficient manner possible. It does, however, have the drawback that it cannot be directly used by other languages without some means of providing an interface to those languages. This is where the need for bindings in various languages stems.

@node Python bindings
@section Python bindings

The Python bindings for GPGME provide a higher level means of accessing the complete feature set of GPGME itself. It also provides a more pythonic means of calling these API functions.

The bindings are generated dynamically with SWIG and the copy of \@samp{gpgme.h} generated when GPGME is compiled.

This means that a version of the Python bindings is fundamentally tied to the exact same version of GPGME used to generate that copy of \@samp{gpgme.h}.

@node Difference between the Python bindings and other GnuPG Python packages
@section Difference between the Python bindings and other GnuPG Python packages

There have been numerous attempts to add GnuPG support to Python over the years. Some of the most well known are listed here, along with what differentiates them.

@menu
* The python-gnupg package maintained by Vinay Sajip::
* The gnupg package created and maintained by Isis Lovecruft::
* The PyME package maintained by Martin Albrecht::
@end menu

@node The python-gnupg package maintained by Vinay Sajip
@section The python-gnupg package maintained by Vinay Sajip

This is arguably the most popular means of integrating GPG with Python. The package utilises the \@samp{subprocess} module to implement wrappers for the \@samp{gpg} and \@samp{gpg2} executables normally invoked on the command line (\@samp{gpg.exe} and \@samp{gpg2.exe} on Windows).

The popularity of this package stemmed from its ease of use and capability in providing the most commonly required features.
Unfortunately it has been beset by a number of security issues in the past; most of which stemmed from using unsafe methods of accessing the command line via the `subprocess` calls. While some effort has been made over the last two to three years (as of 2018) to mitigate this, particularly by no longer providing shell access through those subprocess calls, the wrapper is still somewhat limited in the scope of its GnuPG features coverage.

The python-gnupg package is available under the MIT license.

In 2015 Isis Lovecruft from the Tor Project forked and then re-implemented the python-gnupg package as just gnupg. This new package also relied on subprocess to call the `gpg` or `gpg2` binaries, but did so somewhat more securely.

The naming and version numbering selected for this package, however, resulted in conflicts with the original python-gnupg and since its functions were called in a different manner to python-gnupg, the release of this package also resulted in a great deal of consternation when people installed what they thought was an upgrade that subsequently broke the code relying on it.

The gnupg package is available under the GNU General Public License version 3.0 (or any later version).

This package is the origin of these bindings, though they are somewhat different now. For details of when and how the PyME package was folded back into GPGME itself see the `short-history.org` document.

The PyME package was first released in 2002 and was also the first attempt to implement a low level binding to GPGME. In doing so it provided access to considerably more functionality than either the `python-gnupg` or `gnupg` packages.

The PyME package is only available for Python 2.6 and 2.7.

Porting the PyME package to Python 3.4 in 2015 is what resulted in it being folded into the GPGME project and the current bindings are the end result of that effort.

The PyME package is available under the same dual licensing as GPGME.
itself: the GNU General Public License version 2.0 (or any later
version) and the GNU Lesser General Public License version 2.1 (or any
later version).

@section No PyPI
Most third-party Python packages and modules are available and
distributed through the Python Package Installer, known as PyPI.

Due to the nature of what these bindings are and how they work, it is
infeasible to install the GPGME Python bindings in the same way.

This is because the bindings use SWIG to dynamically generate C
bindings against @samp{gpgme.h} and @samp{gpgme.h} is generated from
@samp{gpgme.h.in} at compile time when GPGME is built from source. Thus to
include a package in PyPI which actually built correctly would require
either statically built libraries for every architecture bundled with
it or a full implementation of C for each architecture.

See the additional notes regarding @ref{CFFI is the Best and GPGME should use it instead of SWIG, CFFI and
SWIG} at the end of this
section for further details.

@section Requirements
The GPGME Python bindings only have three requirements:

- A suitable version of Python 2 or Python 3. With Python 2 that
  means CPython 2.7 and with Python 3 that means CPython 3.4 or
  higher.
- GPGME itself. Which also means that all of GPGME's dependencies
must be installed too.
@end enumerate

@menu
* Recommended Additions::
@end menu

@node Recommended Additions
@subsection Recommended Additions

Though none of the following are absolute requirements, they are all recommended for use with the Python bindings. In some cases these recommendations refer to which version(s) of CPython to use the bindings with, while others refer to third party modules which provide a significant advantage in some way.

@enumerate
@item
If possible, use Python 3 instead of 2.
@end item
@item
Favour a more recent version of Python since even 3.4 is due to reach EOL soon. In production systems and services, Python 3.6 should be robust enough to be relied on.
@end item
@item
If possible add the following Python modules which are not part of the standard library: @uref{http://docs.python-requests.org/en/latest/index.html, Requests}, @uref{https://cython.org/, Cython}, @uref{https://pendulum.eustace.io/, Pendulum} and @uref{https://github.com/Selfnet/hkp4py, hkp4py}.
@end item

Chances are quite high that at least the first one and maybe two of those will already be installed.

Note that, as with Cython, some of advanced use case scenarios will bring with them additional requirements. Most of these will be fairly well known and commonly installed ones, however, which are in many cases likely to have already been installed on many systems or be familiar to Python programmers.

@section Installation

Installing the Python bindings is effectively achieved by compiling and installing GPGME itself.

Once SWIG is installed with Python and all the dependencies for GPGME are installed you only need to confirm that the version(s) of Python you want the bindings installed for are in your @samp{$PATH}.
By default GPGME will attempt to install the bindings for the most recent or highest version number of Python 2 and Python 3 it detects in @samp{$PATH$}. It specifically checks for the @samp{python} and @samp{python3} executables first and then checks for specific version numbers.

For Python 2 it checks for these executables in this order: @samp{python}, @samp{python2} and @samp{python2.7}.

For Python 3 it checks for these executables in this order: @samp{python3}, @samp{python3.7}, @samp{python3.6}, @samp{python3.5} and @samp{python3.4}.

With no issues reported specific to Python 3.7, the release of Python 3.7.1 at around the same time as GPGME 1.12.0 and the testing with Python 3.7.1rc1, there is no reason to delay moving 3.7 ahead of 3.6 now. Production environments with more conservative requirements will always enforce their own policies anyway and installation to each supported minor release is quite possible too.

On systems where @samp{python} is actually @samp{python3} and not @samp{python2} it may be possible that @samp{python2} may be overlooked, but there have been no reports of that actually occurring as yet.

In the three months or so since the release of Python 3.7.0 there has been extensive testing and work with these bindings with no issues specifically relating to the new version of Python or any of the new features of either the language or the bindings. This has also been the case with Python 3.7.1rc1. With that in mind and given the release of Python 3.7.1 is scheduled for around the same time as GPGME 1.12.0, the order of preferred Python versions has been changed to move Python 3.7 ahead of Python 3.6.

See the GPGME @samp{README} file for details of how to install GPGME from source.

There are a few known issues with the current build process and the Python bindings. For the most part these are easily addressed should they be encountered.
Occasionally when installing GPGME with the Python bindings included it may be observed that the `make` portion of that process induces a large very number of warnings and, eventually errors which end that part of the build process. Yet following that with `make check` and `make install` appears to work seamlessly.

The cause of this is related to the way SWIG needs to be called to dynamically generate the C bindings for GPGME in the first place. So the entire process will always produce `lang/python/python2-gpg/` and `lang/python/python3-gpg/` directories. These should contain the build output generated during compilation, including the complete bindings and module installed into `site-packages`.

Occasionally the errors in the early part or some other conflict (e.g. not installing as `root` or `emph[su]`) may result in nothing being installed to the relevant `site-packages` directory and the build directory missing a lot of expected files. Even when this occurs, the solution is actually quite simple and will always work.

That solution is simply to run the following commands as either the `root` user or prepended with `sudo -H` [Yes, even if you use virtualenv with everything you do in Python. If you want to install this module as just your user account then you will need to manually configure, compile and install the `entire` GnuPG stack as that user as well. This includes libraries which are not often installed that way. It can be done and there are circumstances under which it is worthwhile, but generally only on POSIX systems which utilise single user mode (some even require it).] in the `lang/python/` directory:

```
/example
/path/to/pythonX.Y setup.py build
/path/to/pythonX.Y setup.py build
/path/to/pythonX.Y setup.py install
@end example
```
Yes, the build command does need to be run twice. Yes, you still need to run the potentially failing or incomplete steps during the \texttt{configure}, \texttt{make} and \texttt{make install} steps with installing GPGME. This is because those steps generate a lot of essential files needed, both by and in order to create, the bindings (including both the \texttt{setup.py} and \texttt{gpgme.h} files).

\begin{enumerate}
\item \textbf{IMPORTANT} Note

If specifying a selected number of languages to create bindings for, try to leave Python last. Currently the majority of the other language bindings are also preceding Python of either version when listed alphabetically (not counting the Qt bindings).

If Python is set to precede one of the other languages then it is possible that the errors described here may interrupt the build process before generating bindings for those other languages. In these cases it may be preferable to configure all preferred language bindings separately with alternative \texttt{configure} steps for GPGME using the \texttt{configure\,\,\,-enable-languages=\$LANGUAGE} option.

Alternatively \texttt{make} (or \texttt{gmake}, depending on your platform) may be run with the the \texttt{configure\,\,\,-k} option, which tells make to keep going even if errors are encountered. In that case the failure of one language's set of bindings to build should not hamper another language's bindings to build.
\end{enumerate}

\section*{Reinstalling Responsibly}

Regardless of whether you're installing for one version of Python or several, there will come a point where reinstallation is required. With most Python module installations, the installed files go into the relevant site-packages directory and are then forgotten about. Then the module is upgraded, the new files are copied over the old and that's the end of the matter.

While the same is true of these bindings, there have been intermittent issues observed on some platforms which have benefited significantly from removing all the previous installations of the bindings before installing the updated versions.

Removing the previous version(s) is simply a matter of changing to the
relevant @samp{site-packages} directory for the version of Python in question and removing the @samp{gpg/} directory and any accompanying egg-info files for that module.

In most cases this will require root or administration privileges on the system, but the same is true of installing the module in the first place.

@node Multiple installations
@subsection Multiple installations

For a variety of reasons it may be either necessary or just preferable to install the bindings to alternative installed Python versions which meet the requirements of these bindings.

On POSIX systems this will generally be most simply achieved by running the manual installation commands (build, build, install) as described in the previous section for each Python installation the bindings need to be installed to.

As per the SWIG documentation: the compilers, libraries and runtime used to build GPGME and the Python Bindings @strong{must} match those used to compile Python itself, including the version number(s) (at least going by major version numbers and probably minor numbers too).

On most POSIX systems, including OS X, this will very likely be the case in most, if not all, cases.

Note that from GPGME @uref{https://dev.gnupg.org/rMff6ff616aea6f59b7f2ce1176492850ecdf3851e, 1.12.1} the default installation installs to each version of Python it can find first. That is that it will currently install for the first copies of Python versions 2.7, 3.4, 3.5, 3.6, 3.7 and 3.8 (dev branch) that it finds. Usually this will be in the same prefix as GPGME itself, but is dictated by the @samp{$PATH} when the installation is performed. The above instructions can still be performed on other python installations which the installer does not find, including alternative prefixes.

@node Won't Work With Windows
@subsection Won't Work With Windows

There are semi-regular reports of Windows users having considerable difficulty in installing and using the Python bindings at all. Very often, possibly even always, these reports come from Cygwin users and/or MinGW users and/or Msys2 users. Though not all of them have been confirmed, it appears that these reports have also come from people who installed Python using the Windows installer files from the @uref{https://python.org, Python website} (i.e. mostly MSI installers, sometimes self-extracting
The Windows versions of Python are not built using Cygwin, MinGW or Msys2; they're built using Microsoft Visual Studio. Furthermore the version used is considerably more advanced than the version which MinGW obtained a small number of files from many years ago in order to be able to compile anything at all. Not only that, but there are changes to the version of Visual Studio between some micro releases, though that is particularly the case with Python 2.7, since it has been kept around far longer than it should have been.

There are two theoretical solutions to this issue:

@enumerate
@item
Compile and install the GnuPG stack, including GPGME and the Python bindings using the same version of Microsoft Visual Studio used by the Python Foundation to compile the version of Python installed.

If there are multiple versions of Python then this will need to be done with each different version of Visual Studio used for those versions of Python.

@item
Compile and install Python using the same tools used by choice, such as MinGW or Msys2.
@end enumerate

Do not use the official Windows installer for Python unless following the first method.

In this type of situation it may even be for the best to accept that there are less limitations on permissive software than free software and simply opt to use a recent version of the Community Edition of Microsoft Visual Studio to compile and build all of it, no matter what.

Investigations into the extent or the limitations of this issue are ongoing.

The following table lists the version of Microsoft Visual Studio which needs to be used when compiling GPGME and the Python bindings with each version of the CPython binary released: [https://www.python.org/downloads/windows/](https://www.python.org/downloads/windows/) for Windows:

@multitable {aaaaaaa} {aaaaabcdefghijklmnopqrstuvwxyz} {aaaaaa}
@item CPython
@tab Microsoft product name
It is important to note that MingW and Msys2 ship with the Visual C runtime from Microsoft Visual Studio 2005 and are thus incompatible with all the versions of CPython which can be used with the GPGME Python bindings.

It is also important to note that from CPython 3.5 onwards, the Python Foundation has adopted the reworking of the Visual C runtime which was performed for Visual Studio 2015 and aimed at resolving many of these kinds of issues. Much greater detail on these issues and the correct file(s) to link to are available from Matthew Brett's invaluable page, [Using Microsoft Visual C with Python](https://matthew-brett.github.io/pydagogue/python_msvc.html). It is also worth reading the Microsoft Developer Network blog post on [the universal CRT](http://blogs.msdn.com/b/vcblog/archive/2015/03/03/introducing-the-universal-crt.aspx) and Steve Dower's blog posts on Python extensions ([part 1](http://stevedower.id.au/blog/building-for-python-3-5-part-two, part 1) and [part 2](http://stevedower.id.au/blog/building-for-python-3-5-part-two, part 2)).

The second of those two posts by Steve Dower contains the details of specific configuration options required for compiling anything to be used with official CPython releases. In addition to those configuration and compiler settings to use, the versions of Visual Studio prior to Visual Studio 2015 did not support 64-bit systems by default. So compiling a 64-bit version of these bindings for a 64-bit version of CPython 2.7 or 3.4 requires additional work.

In addition to the blog posts, the [Windows Compilers](https://wiki.python.org/moin/WindowsCompilers) wiki page on the CPython wiki is another essential reference on the relevant versions of Visual Studio to use and the degree of compatibility with CPython releases.
Eventually someone will ask why there isn't an installable binary for Windows, which the GPGME of the licenses do not preclude as long as the source code is available in conjunction with such a release.

The sheer number of versions of Visual Studio in conjunction with differing configuration options depending on the target Windows version and whether the architecture is 64-bit or 32-bit makes it difficult to provide a correct binary installer for Windows users. At the bare minimum doing so would require the GnuPG project compile ten different versions of the bindings with each release; both 32-bit and 64-bit versions for CPython 2.7 and 3.4, with 64-bit versions for both x86-64 (i.e. Intel and AMD) and ARM architectures for CPython 3.5, 3.6, 3.7 and later releases. That's the bare minimum, it'd probably be higher.

Additionally, with only a binary installation used in conjunction with the CPython installer from `python.org` the advanced options available which utilise Cython will not be able to be used at all. Cython depends on being able to compile the C code it generates and that too would need to utilise a matching runtime to both the installed version of CPython and these bindings in order to work with the bindings.

Considering all of that, what do we recommend?

- Use a recent version of CPython; at least 3.5, but ideally 3.6 or later.
- Use Visual Studio 2015 or the standalone build tools for Visual Studio 2017 (or later).
- Compile both CPython and GPGME with these bindings using the tools selected in step 2.
- Ignore MingW, Msys2 and the official CPython binary installers.
- Be thankful the answer to this question wasn't simply to say something like, install Linux or install FreeBSD (or even Apple's OS X).

@cnode CFFI is the Best and GPGME should use it instead of SWIG
@subsection CFFI is the Best and GPGME should use it instead of SWIG

There are many reasons for favouring @uref{https://cffi.readthedocs.io/en/latest/overview.html, CFFI} and proponents of it are quite happy to repeat these things as if all it would take to switch from SWIG to CFFI is repeating that list as if it were a new concept.

The fact is that there are things which Python's CFFI implementation cannot handle in the GPGME C code. Beyond that there are features of SWIG which are simply not available with CFFI at all. SWIG generates the bindings to Python using the @samp{gpgme.h} file, but that file is not a single version shipped with each release, it too is generated when GPGME is compiled.

CFFI is currently unable to adapt to such a potentially mutable codebase. If there were some means of applying SWIG's dynamic code generation to produce the Python/CFFI API modes of accessing the GPGME libraries (or the source source code directly), but such a thing does not exist yet either and it currently appears that work is needed in at least one of CFFI's dependencies before any of this can be addressed.

So if you're a massive fan of CFFI; that's great, but if you want this project to switch to CFFI then rather than just insisting that it should, I'd suggest you volunteer to bring CFFI up to the level this project needs.

If you're actually seriously considering doing so, then I'd suggest taking the @samp{gpgme-tool.c} file in the GPGME @samp{src/} directory and getting that to work with any of the CFFI API methods (not the ABI methods, they'll work with pretty much anything). When you start running into trouble with "ifdefs" then you'll know what sort of things are lacking. That doesn't even take into account the amount of work saved via SWIG's code generation techniques either.

@node Virtualised Environments

@subsection Virtualised Environments

It is fairly common practice amongst Python developers to, as much as possible, use packages like virtualenv to keep various things that are to be installed from interfering with each other. Given how much of the GPGME bindings is often at odds with the usual pythonic way of doing things, it stands to reason that this would be called into question too.

As it happens the answer as to whether or not the bindings can be used with virtualenv, the answer is both yes and no.
In general we recommend installing to the relevant path and matching prefix of GPGME itself. Which means that when GPGME, and ideally the rest of the GnuPG stack, is installed to a prefix like @samp{/usr/local} or @samp{/opt/local} then the bindings would need to be installed to the main Python installation and not a virtualised abstraction. Attempts to separate the two in the past have been known to cause weird and intermittent errors ranging from minor annoyances to complete failures in the build process.

As a consequence we only recommend building with and installing to the main Python installations within the same prefix as GPGME is installed to or which are found by GPGME’s configuration stage immediately prior to running the make commands. Which is exactly what the compiling and installing process of GPGME does by default.

Once that is done, however, it appears that a copy of the compiled module may be installed into a virtualenv of the same major and minor version matching the build. Alternatively it is possible to utilise a @samp{sites.pth} file in the @samp{site-packages/} directory of a virtualenv installation, which links back to the system installations corresponding directory in order to import anything installed system wide. This may or may not be appropriate on a case by case basis.

Though extensive testing of either of these options is not yet complete, preliminary testing of them indicates that both are viable as long as the main installation is complete. Which means that certain other options normally restricted to virtual environments are also available, including integration with pythonic test suites (e.g. @uref{https://docs.pytest.org/en/latest/index.html, pytest}) and other large projects.

That said, it is worth reiterating the warning regarding non-standard installations. If one were to attempt to install the bindings only to a virtual environment without somehow also including the full GnuPG stack (or enough of it as to include GPGME) then it is highly likely that errors would be encountered at some point and more than a little likely that the build process itself would break.

If a degree of separation from the main operating system is still required in spite of these warnings, then consider other forms of virtualisation. Either a virtual machine (e.g. @uref{https://www.virtualbox.org/, VirtualBox}), a hardware emulation layer (e.g. @uref{https://www.qemu.org/, QEMU}) or an application container (e.g. @uref{https://www.docker.com/why-docker, Docker}).

Finally it should be noted that the limited tests conducted thus far have been using the @samp{virtualenv} command in a new directory to create the virtual python environment. As opposed to the standard @samp{python3 -m venv} and it is possible that this will make a difference depending on the system and version of Python in use. Another option is to run...
the command `@samp{python3 -m virtualenv /path/to/install/virtual/thingy}` instead.

@node Post installation
@subsection Post installation

Following installation it is recommended to move the `@samp{post_installer.py}` script from the `@samp{lang/python/examples/howto/}` directory to the `@samp{lang/python/}` directory and run it. This will fix or restore files needed by Sphinx which may be removed during a distribution build for release. It will also generate reST files from Org mode files with Pandoc and generate Texinfo files from Org mode files with GNU Emacs and Org mode (in batch mode). Additionally it will fix the UTF-8 declaration line in the Texinfo files (Emacs expects "UTF-8" to be "utf-8").

@node Fundamentals
@chapter Fundamentals

Before we can get to the fun stuff, there are a few matters regarding GPGME's design which hold true whether you're dealing with the C code directly or these Python bindings.

@menu
* No REST::
* Context::
@end menu

@node No REST
@section No REST

The first part of which is or will be fairly blatantly obvious upon viewing the first example, but it's worth reiterating anyway. That being that this API is `@emph{@strong{not}}` a REST API. Nor indeed could it ever be one.

Most, if not all, Python programmers (and not just Python programmers) know how easy it is to work with a RESTful API. In fact they've become so popular that many other APIs attempt to emulate REST-like behaviour as much as they are able. Right down to the use of JSON formatted output to facilitate the use of their API without having to retrain developers.

This API does not do that. It would not be able to do that and also provide access to the entire C API on which it's built. It does, however, provide a very pythonic interface on top of the direct bindings and it's this pythonic layer that this HOWTO deals with.
One of the reasons which prevents this API from being RESTful is that most operations require more than one instruction to the API to perform the task. Sure, there are certain functions which can be performed simultaneously, particularly if the result known or strongly anticipated (e.g. selecting and encrypting to a key known to be in the public keybox).

There are many more, however, which cannot be manipulated so readily: they must be performed in a specific sequence and the result of one operation has a direct bearing on the outcome of subsequent operations. Not merely by generating an error either.

When dealing with this type of persistent state on the web, full of both the RESTful and REST-like, it's most commonly referred to as a session. In GPGME, however, it is called a context and every operation type has one.

Selecting keys to encrypt to or to sign with will be a common occurrence when working with GPGMe and the means available for doing so are quite simple.

They do depend on utilising a Context; however once the data is recorded in another variable, that Context does not need to be the same one which subsequent operations are performed.

The easiest way to select a specific key is by searching for that key's key ID or fingerprint, preferably the full fingerprint without any spaces in it. A long key ID will probably be okay, but is not advised and short key IDs are already a problem with some being generated to match specific patterns. It does not matter whether the pattern is upper or lower case.
So this is the best method:

@example
import gpg

k = gpg.Context().keylist(pattern="258E88DCBD3CD44D8E7AB43F6ECB6AF0DEADBEEF")
keys = list(k)
@end example

This is passable and very likely to be common:

@example
import gpg

k = gpg.Context().keylist(pattern="0x6ECB6AF0DEADBEEF")
keys = list(k)
@end example

And this is a really bad idea:

@example
import gpg

k = gpg.Context().keylist(pattern="0xDEADBEEF")
keys = list(k)
@end example

Alternatively it may be that the intention is to create a list of keys which all match a particular search string. For instance all the addresses at a particular domain, like this:

@example
import gpg

ncsc = gpg.Context().keylist(pattern="ncsc.mil")
nsa = list(ncsc)
@end example

* Counting keys::
@end menu

@node Counting keys
@subsection Counting keys

Counting the number of keys in your public keybox (@samp{pubring.kbx}), the format which has superseded the old keyring format (@samp{pubring.gpg} and @samp{secring.gpg}), or the number of secret keys is a very simple task.
```python
import gpg

c = gpg.Context()
seckeys = c.keylist(pattern=None, secret=True)
pubkeys = c.keylist(pattern=None, secret=False)

seclist = list(seckeys)
secnum = len(seclist)

publist = list(pubkeys)
pubnum = len(publist)

print("Number of secret keys: \{0\}
Number of public keys: \{1\}
".format(secnum, pubnum))
```
key = gpg.Context().get_key(fingerprint)
@end example

Whereas this example demonstrates selecting the author's current key with the @samp{secret} key word argument set to @samp{True}:

@example
import gpg

fingerprint = "DB4724E6FA4286C92B4E55C4321E4E2373590E5D"
key = gpg.Context().get_key(fingerprint, secret=True)
@end example

It is, of course, quite possible to select expired, disabled and revoked keys with this function, but only to effectively display information about those keys.

It is also possible to use both unicode or string literals and byte literals with the fingerprint when getting a key in this way.

@node Importing keys
@section Importing keys

Importing keys is possible with the @samp{key_import()} method and takes one argument which is a bytes literal object containing either the binary or ASCII armoured key data for one or more keys.

The following example retrieves one or more keys from the SKS keyservers via the web using the requests module. Since requests returns the content as a bytes literal object, we can then use that directly to import the resulting data into our keybox.

@example
import gpg
import os.path
import requests
c = gpg.Context()
url = "https://sks-keyservers.net/pks/lookup"
pattern = input("Enter the pattern to search for key or user IDs: ")
payload = @{$op": "get", "search": pattern@}

r = requests.get(url, verify=True, params=payload)
result = c.key_import(r.content)
if result is not None and hasattr(result, "considered") is False:
    print(result)
elif result is not None and hasattr(result, "considered") is True:

```
num_keys = len(result.imports)
new_revs = result.new_revocations
new_sigs = result.new_signatures
new_subs = result.new_sub_keys
new_uids = result.new_user_ids
new_scrt = result.secret_imported
nochange = result.unchanged
print(""
The total number of keys considered for import was:  @0@

    Number of keys revoked:  @1@
    Number of new signatures:  @2@
        Number of new subkeys:  @3@
        Number of new user IDs:  @4@
    Number of new secret keys:  @5@
    Number of unchanged keys:  @6@

The key IDs for all considered keys were:
***.format(num_keys, new_revs, new_sigs, new_subs, new_uids, new_scrt,
           nochange))
for i in range(num_keys):
    print("@0@"n".format(result.imports[i].fpr))
else:
    pass
@end example

NOTE: When searching for a key ID of any length or a fingerprint
(without spaces), the SKS servers require the the leading @samp{0x} indicative
of hexadecimal be included. Also note that the old short key IDs (e.g. @samp{0xDEADBEEF})
should no longer be used due to the relative ease by which such key IDs can be reproduced,
as demonstrated by the Evil32 Project in 2014 (which was subsequently exploited in 2016).

Testing for whether a string in any given search is or may be a hexadecimal value
which may be missing the leading @samp{0x} is a simple matter of using a try/except statement
which attempts to convert the string as hex to an integer and then back to hex; then using that to search with. Raising a ValueError simply results in treating the
string as a string. This is the method and logic utilised in the @samp{import-keys-hkp.py} script (see below).

@menu
* Working with ProtonMail::
* Importing with HKP for Python::
* Importing from ProtonMail with HKP for Python::
@end menu
Here is a variation on the example above which checks the constrained ProtonMail keyserver for ProtonMail public keys.

```python
import gpg
import requests
import sys

print("This script searches the ProtonMail key server for the specified key and imports it."
"
")

c = gpg.Context(armor=True)
url = "https://api.protonmail.ch/pks/lookup"
ksearch = []

if len(sys.argv) >= 2:
    keyterm = sys.argv[1]
else:
    keyterm = input("Enter the key ID, UID or search string: ")

if keyterm.count("@@") == 2 and keyterm.startswith("@@") is True:
    ksearch.append(keyterm[1:])
    ksearch.append(keyterm[1:])
    ksearch.append(keyterm[1:])
elif keyterm.count("@@") == 1 and keyterm.startswith("@@") is True:
    ksearch.append("@{0@}@@protonmail.com".format(keyterm[1:]))
    ksearch.append("@{0@}@@protonmail.ch".format(keyterm[1:]))
    ksearch.append("@{0@}@@pm.me".format(keyterm[1:]))
elif keyterm.count("@@") == 0:
    ksearch.append("@{0@}@@protonmail.com".format(keyterm))
    ksearch.append("@{0@}@@protonmail.ch".format(keyterm))
    ksearch.append("@{0@}@@pm.me".format(keyterm))
elif keyterm.count("@@") == 2 and keyterm.startswith("@@") is False:
    uidlist = keyterm.split("@@")
    for uid in uidlist:
        ksearch.append("@{0@}@@protonmail.com".format(uid))
        ksearch.append("@{0@}@@protonmail.ch".format(uid))
        ksearch.append("@{0@}@@pm.me".format(uid))
elif keyterm.count("@@") > 2:
    uidlist = keyterm.split("@@")
    for uid in uidlist:
        ksearch.append("@{0@}@@protonmail.com".format(uid))
        ksearch.append("@{0@}@@protonmail.ch".format(uid))
```

---

**Open Source Used In BGP TE Controller Version 4.3.0 16928**
ksearch.append("@{0}@pm.me".format(uid))

else:
    ksearch.append(keyterm)

for k in ksearch:
    payload = @{"op": "get", "search": k@}
    try:
        r = requests.get(url, verify=True, params=payload)
        if r.ok is True:
            result = c.key_import(r.content)
        elif r.ok is False:
            result = r.content
        except Exception as e:
            result = None

if result is not None and hasattr(result, "considered") is False:
    print("@{0}@ for @{1}@".format(result.decode(), k))
elif result is not None and hasattr(result, "considered") is True:
    num_keys = len(result.imports)
    new_revs = result.new_revocations
    new_sigs = result.new_signatures
    new_subs = result.new_sub_keys
    new_uids = result.new_user_ids
    new_scrt = result.secret_imported
    nochange = result.unchanged
    print(""")
    The total number of keys considered for import was:  @{0@}

    With UIDs wholly or partially matching the following string:

        @{1@}

        Number of keys revoked:  @{2@}
    Number of new signatures:  @{3@}
    Number of new subkeys:  @{4@}
    Number of new user IDs:  @{5@}
    Number of new secret keys:  @{6@}
    Number of unchanged keys:  @{7@}

    The key IDs for all considered keys were:
    ***.format(num_keys, k, new_revs, new_sigs, new_subs, new_uids, new_scrt,
    nochange))
    for i in range(num_keys):
        print(result.imports[i].fpr)
        print("")
    elif result is None:
        print(e)
@end example
Both the above example, @uref{../examples/howto/pmkey-import.py, pmkey-import.py}, and a version which prompts for an alternative GnuPG home directory, @uref{../examples/howto/pmkey-import-alt.py, pmkey-import-alt.py}, are available with the other examples and are executable scripts.

Note that while the ProtonMail servers are based on the SKS servers, their server is related more to their API and is not feature complete by comparison to the servers in the SKS pool. One notable difference being that the ProtonMail server does not permit non ProtonMail users to update their own keys, which could be a vector for attacking ProtonMail users who may not receive a key's revocation if it had been compromised.

@node Importing with HKP for Python
@subsection Importing with HKP for Python

Performing the same tasks with the @uref{https://github.com/Selfnet/hkp4py, hkp4py module} (available via PyPI) is not too much different, but does provide a number of options of benefit to end users. Not least of which being the ability to perform some checks on a key before importing it or not. For instance it may be the policy of a site or project to only import keys which have not been revoked. The hkp4py module permits such checks prior to the importing of the keys found.

@example
import gpg
import hkp4py
import sys


c = gpg.Context()
server = hkp4py.KeyServer("hkps://hkps.pool.sks-keyservers.net")
results = []
keys = []

if len(sys.argv) > 2:
    pattern = " ".join(sys.argv[1:])
elif len(sys.argv) == 2:
    pattern = sys.argv[1]
else:
    pattern = input("Enter the pattern to search for keys or user IDs: ")

if pattern is not None:
    try:
        key = server.search(hex(int(pattern, 16)))
        keyed = True

    except:
        keyed = False
except ValueError as ve:
    key = server.search(pattern)
    keyed = False

if key is not None:
    keys.append(key[0])
if keyed is True:
    try:
        fob = server.search(pattern)
    except:
        fob = None
    if fob is not None:
        keys.append(fob[0])
else:
    pass
else:
    pass

for logrus in pattern.split():
    try:
        key = server.search(hex(int(logrus, 16)))
    except ValueError as ve:
        key = server.search(logrus)
    hexed = False

if key is not None:
    keys.append(key[0])
if hexed is True:
    try:
        fob = server.search(logrus)
    except:
        fob = None
    if fob is not None:
        keys.append(fob[0])
else:
    pass
else:
    pass

if len(keys) > 0:
    for key in keys:
        import_result = c.key_import(key.key_blob)
        results.append(import_result)

for result in results:
    if result is not None and hasattr(result, "considered") is False:
print(result)
elif result is not None and hasattr(result, "considered") is True:
    num_keys = len(result.imports)
    new_revs = result.new_revocations
    new_sigs = result.new_signatures
    new_subs = result.new_sub_keys
    new_uids = result.new_user_ids
    new_scrt = result.secret_imported
    nochange = result.unchanged
    print"
The total number of keys considered for import was: @0@

    Number of keys revoked: @1@
Number of new signatures: @2@
    Number of new subkeys: @3@
Number of new user IDs: @4@
Number of new secret keys: @5@
Number of unchanged keys: @6@

The key IDs for all considered keys were:
===.format(num_keys, new_revs, new_sigs, new_subs, new_uids, new_scrt,
    nochange))
    for i in range(num_keys):
        print(result.imports[i].fpr)
        print"
else:
    pass
@end example

Since the hkp4py module handles multiple keys just as effectively as
one (@samp{keys} is a list of responses per matching key), the example
above is able to do a little bit more with the returned data before
anything is actually imported.

@node Importing from ProtonMail with HKP for Python
@subsection Importing from ProtonMail with HKP for Python

Though this can provide certain benefits even when working with
ProtonMail, the scope is somewhat constrained there due to the
limitations of the ProtonMail keyserver.

For instance, searching the SKS keyserver pool for the term "gnupg"
produces hundreds of results from any time the word appears in any
part of a user ID. Performing the same search on the ProtonMail
keyserver returns zero results, even though there are at least two
test accounts which include it as part of the username.

The cause of this discrepancy is the deliberate configuration of that
server by ProtonMail to require an exact match of the full email address of the ProtonMail user whose key is being requested. Presumably this is intended to reduce breaches of privacy of their users as an email address must already be known before a key for that address can be obtained.

@enumerate
@item
Import from ProtonMail via HKP for Python Example no. 1

The following script is available with the rest of the examples under the somewhat less than original name, `pmkey-import-hkp.py`.

@example
import gpg
import hkp4py
import os.path
import sys

print(""
This script searches the ProtonMail key server for the specified key and imports it.

Usage:  pmkey-import-hkp.py [search strings]
"")

c = gpg.Context(armor=True)
service = hkp4py.KeyServer("hkps://api.protonmail.ch")
keyterms = []
ksearch = []
allkeys = []
results = []
paradox = []
homeless = None

if len(sys.argv) > 2:
    keyterms = sys.argv[1:]
elif len(sys.argv) == 2:
    keyterm = sys.argv[1]
    keyterms.append(keyterm)
else:
    key_term = input("Enter the key ID, UID or search string: ")
    keyterms = key_term.split()

for keyterm in keyterms:
    if keyterm.count("@@") == 2 and keyterm.startswith("@@") is True:
        ksearch.append(keyterm[1:])
ksearch.append(keyterm[1:])
ksearch.append(keyterm[1:])
elif keyterm.count('@@') == 1 and keyterm.startswith('@@') is True:
ksearch.append('@{0}@protonmail.com'.format(keyterm[1:]))
ksearch.append('@{0}@protonmail.ch'.format(keyterm[1:]))
ksearch.append('@{0}@pm.me'.format(keyterm[1:]))
elif keyterm.count('@@') == 0:
ksearch.append('@{0}@protonmail.com'.format(keyterm))
ksearch.append('@{0}@protonmail.ch'.format(keyterm))
ksearch.append('@{0}@pm.me'.format(keyterm))
elif keyterm.count('@@') == 2 and keyterm.startswith('@@') is False:
    uidlist = keyterm.split('@@')
    for uid in uidlist:
        ksearch.append('@{0}@protonmail.com'.format(uid))
        ksearch.append('@{0}@protonmail.ch'.format(uid))
        ksearch.append('@{0}@pm.me'.format(uid))
elif keyterm.count('@@') > 2:
    uidlist = keyterm.split('@@')
    for uid in uidlist:
        ksearch.append('@{0}@protonmail.com'.format(uid))
        ksearch.append('@{0}@protonmail.ch'.format(uid))
        ksearch.append('@{0}@pm.me'.format(uid))
else:
    ksearch.append(keyterm)

for k in ksearch:
    print("Checking for key for: @{0}@".format(k))
    try:
        keys = server.search(k)
        if isinstance(keys, list) is True:
            for key in keys:
                allkeys.append(key)
        try:
            import_result = c.key_import(key.key_blob)
        except Exception as e:
            import_result = c.key_import(key.key)
    else:
        paradox.append(keys)
        import_result = None
        except Exception as e:
            import_result = None
    results.append(import_result)
    for result in results:
        if result is not None and hasattr(result, "considered") is False:
            print("@{0} for @[{1}]".format(result.decode(), k))
        elif result is not None and hasattr(result, "considered") is True:
            num_keys = len(result.imports)
new_revs = result.new_revocations
new_sigs = result.new_signatures
new_subs = result.new_sub_keys
new_uids = result.new_user_ids
new_scrt = result.secret_imported
nochange = result.unchanged

print("The total number of keys considered for import was: @0@")

With UIDs wholly or partially matching the following string:

@1@

Number of keys revoked: @2@
Number of new signatures: @3@
  Number of new subkeys: @4@
  Number of new user IDs: @5@
  Number of new secret keys: @6@
  Number of unchanged keys: @7@

The key IDs for all considered keys were:

***format(num_keys, k, new_revs, new_sigs, new_subs, new_uids, new_scrt, nochange))
  for i in range(num_keys):
    print(result.imports[i].fpr)
  print("")
elif result is None:
  pass
@end example

@item
Import from ProtonMail via HKP for Python Example no. 2

Like its counterpart above, this script can also be found with the rest of the examples, by the name pmkey-import-hkp-alt.py.

With this script a modicum of effort has been made to treat anything passed as a @samp{homedir} which either does not exist or which is not a directory, as also being a possible user ID to check for. It’s not guaranteed to pick up on all such cases, but it should cover most of them.

@example
import gpg
import hkp4py
import os.path
import sys
print("\n\nThis script searches the ProtonMail key server for the specified key and imports it. Optionally enables specifying a different GnuPG home directory.

Usage: pmkey-import-hkp.py [homedir] [search string]
       or: pmkey-import-hkp.py [search string]

\n")

c = gpg.Context(armor=True)
server = hkp4py.KeyServer("hkps://api.protonmail.ch")
keyterms = []
ksearch = []
allkeys = []
results = []
paradox = []
homeless = None

if len(sys.argv) > 3:
    homedir = sys.argv[1]
    keyterms = sys.argv[2:]
elif len(sys.argv) == 3:
    homedir = sys.argv[1]
    keyterm = sys.argv[2]
    keyterms.append(keyterm)
elif len(sys.argv) == 2:
    homedir = ""
    keyterm = sys.argv[1]
    keyterms.append(keyterm)
else:
    keyterm = input("Enter the key ID, UID or search string: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")
    keyterms.append(keyterm)

if len(homedir) == 0:
    homedir = None
    homeless = False

if homedir is not None:
    if homedir.startswith("~"): 
        if os.path.exists(os.path.expanduser(homedir)) is True:
            if os.path.isdir(os.path.expanduser(homedir)) is True:
                c.home_dir = os.path.realpath(os.path.expanduser(homedir))
            else:
                homeless = True
        else:
            homeless = True
    else:
        homeless = True
    elif os.path.exists(os.path.realpath(homedir)) is True:
if os.path.isdir(os.path.realpath(homedir)) is True:
    c.home_dir = os.path.realpath(homedir)
else:
    homeless = True
def homelessness(homedir):
    if homeless is True:
        homeless = True
    pass

for keyterm in keyterms:
    if keyterm.count("@@") == 2 and keyterm.startswith("@@") is True:
        ksearch.append(keyterm[1:])
        ksearch.append(keyterm[1:])
        ksearch.append(keyterm[1:])
    elif keyterm.count("@@") == 1 and keyterm.startswith("@@") is True:
        ksearch.append("@{0}@@@protonmail.com".format(keyterm[1:]))
        ksearch.append("@{0}@@@protonmail.ch".format(keyterm[1:]))
        ksearch.append("@{0}@@@pm.me".format(keyterm[1:]))
    elif keyterm.count("@@") == 0:
        ksearch.append("@{0}@@@protonmail.com".format(keyterm))
        ksearch.append("@{0}@@@protonmail.ch".format(keyterm))
        ksearch.append("@{0}@@@pm.me".format(keyterm))
    elif keyterm.count("@@") > 2:
        uidlist = keyterm.split("@@")
        for uid in uidlist:
            ksearch.append("@{0}@@@protonmail.com".format(uid))
            ksearch.append("@{0}@@@protonmail.ch".format(uid))
            ksearch.append("@{0}@@@pm.me".format(uid))
    else:
        ksearch.append(keyterm)

for k in ksearch:
    print("Checking for key for: @{0}".format(k))
    try:
        keys = server.search(k)
        if isinstance(keys, list) is True:
for key in keys:
    allkeys.append(key)

try:
    import_result = c.key_import(key.key_blob)
except Exception as e:
    import_result = c.key_import(key.key)
else:
    paradox.append(keys)
import_result = None
except Exception as e:
    import_result = None
results.append(import_result)

for result in results:
    if result is not None and hasattr(result, "considered") is False:
        print("@{0@} for @{1@}".format(result.decode(), k))
    elif result is not None and hasattr(result, "considered") is True:
        num_keys = len(result.imports)
        new_revs = result.new_revocations
        new_sigs = result.new_signatures
        new_subs = result.new_sub_keys
        new_uids = result.new_user_ids
        new_scrt = result.secret_imported
        nochange = result.unchanged
        print("The total number of keys considered for import was: @{0@}"

With UIDs wholly or partially matching the following string:

    @{1@}

    Number of keys revoked: @{2@}
    Number of new signatures: @{3@}
    Number of new subkeys: @{4@}
    Number of new user IDs: @{5@}
    Number of new secret keys: @{6@}
    Number of unchanged keys: @{7@}

The key IDs for all considered keys were:
    @{8@}
    for i in range(num_keys):
        print(result.imports[i].fpr)
    print("")
    elif result is None:
        pass
@end example
@end enumerate
Exporting keys remains a reasonably simple task, but has been separated into three different functions for the OpenPGP cryptographic engine. Two of those functions are for exporting public keys and the third is for exporting secret keys.

There are two methods of exporting public keys, both of which are very similar to the other. The default method, `key_export()`, will export a public key or keys matching a specified pattern as normal. The alternative, the `key_export_minimal()` method, will do the same thing except producing a minimised output with extra signatures and third party signatures or certifications removed.

```python
import gpg
import os.path
import sys

print("This script exports one or more public keys.
")

c = gpg.Context(armor=True)

if len(sys.argv) >= 4:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = sys.argv[3]
elif len(sys.argv) == 3:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = input("Enter the GPG configuration directory path (optional): ")
elif len(sys.argv) == 2:
    keyfile = sys.argv[1]
    logrus = input("Enter the UID matching the key(s) to export: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")
```
else:
    keyfile = input("Enter the path and filename to save the secret key to: ")
logrus = input("Enter the UID matching the key(s) to export: ")
homedir = input("Enter the GPG configuration directory path (optional): ")

if homedir.startswith("~"):  
    if os.path.exists(os.path.expanduser(homedir)) is True:
        c.home_dir = os.path.expanduser(homedir)
    else:
        pass
elif os.path.exists(homedir) is True:
    c.home_dir = homedir
else:
    pass

try:
    result = c.key_export(pattern=logrus)
except:
    result = c.key_export(pattern=None)

if result is not None:
    with open(keyfile, "wb") as f:
        f.write(result)
else:
    pass
@end example

It should be noted that the result will only return @samp{None} when a
search pattern has been entered, but has not matched any keys. When
the search pattern itself is set to @samp{None} this triggers the exporting
of the entire public keybox.

@example
import gpg
import os.path
import sys

print("This script exports one or more public keys in minimised form.
")

c = gpg.Context(armor=True)

if len(sys.argv) >= 4:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = sys.argv[3]
    elif len(sys.argv) == 3:
keyfile = sys.argv[1]
logrus = sys.argv[2]
homedir = input("Enter the GPG configuration directory path (optional): ")
elif len(sys.argv) == 2:
    keyfile = sys.argv[1]
logrus = input("Enter the UID matching the key(s) to export: ")
homedir = input("Enter the GPG configuration directory path (optional): ")
else:
    keyfile = input("Enter the path and filename to save the secret key to: ")
logrus = input("Enter the UID matching the key(s) to export: ")
homedir = input("Enter the GPG configuration directory path (optional): ")

if homedir.startswith("~"):
    if os.path.exists(os.path.expanduser(homedir)) is True:
        c.home_dir = os.path.expanduser(homedir)
    else:
        pass
elif os.path.exists(homedir) is True:
    c.home_dir = homedir
else:
    pass

try:
    result = c.key_export_minimal(pattern=logrus)
except:
    result = c.key_export_minimal(pattern=None)

if result is not None:
    with open(keyfile, "wb") as f:
        f.write(result)
else:
    pass
@end example

@node Exporting secret keys
@subsection Exporting secret keys

Exporting secret keys is, functionally, very similar to exporting
public keys; save for the invocation of @samp{pinentry} via @samp{gpg-agent} in
order to securely enter the key's passphrase and authorise the export.

The following example exports the secret key to a file which is then
set with the same permissions as the output files created by the
command line secret key export options.

@example
import gpg
import os
import os.path
import sys

print("This script exports one or more secret keys.

The gpg-agent and pinentry are invoked to authorise the export.
")

c = gpg.Context(armor=True)

if len(sys.argv) >= 4:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = sys.argv[3]
elif len(sys.argv) == 3:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = input("Enter the GPG configuration directory path (optional): ")
elif len(sys.argv) == 2:
    keyfile = sys.argv[1]
    logrus = input("Enter the UID matching the secret key(s) to export: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")
else:
    keyfile = input("Enter the path and filename to save the secret key to: ")
    logrus = input("Enter the UID matching the secret key(s) to export: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")

if len(homedir) == 0:
    homedir = None
elif homedir.startswith("~"):  
    userdir = os.path.expanduser(homedir)
    if os.path.exists(userdir) is True:
        homedir = os.path.realpath(userdir)
    else:
        homedir = None
else:
    homedir = os.path.realpath(homedir)

if os.path.exists(homedir) is False:
    homedir = None
else:
    if os.path.isdir(homedir) is False:
        homedir = None
    else:
        pass

if homedir is not None:
c.home_dir = homedir
else:
  pass

try:
  result = c.key_export_secret(pattern=logrus)
except:
  result = c.key_export_secret(pattern=None)

if result is not None:
  with open(keyfile, "wb") as f:
    f.write(result)
    os.chmod(keyfile, 0o600)
else:
  pass
@end example

Alternatively the approach of the following script can be used. This longer example saves the exported secret key(s) in files in the GnuPG home directory, in addition to setting the file permissions as only readable and writable by the user. It also exports the secret key(s) twice in order to output both GPG binary (@samp{.gpg}) and ASCII armoured (@samp{.asc}) files.

@example
import gpg
import os
import os.path
import subprocess
import sys

print("This script exports one or more secret keys as both ASCII armored and binary file formats, saved in files within the user's GPG home directory.

The gpg-agent and pinentry are invoked to authorise the export.

if sys.platform == "win32":
  gpgconfcmd = "gpgconf.exe --list-dirs homedir"
else:
  gpgconfcmd = "gpgconf --list-dirs homedir"

a = gpg.Context(armor=True)
b = gpg.Context()
c = gpg.Context()

if len(sys.argv) >= 4:
keyfile = sys.argv[1]
logrus = sys.argv[2]
homedir = sys.argv[3]
elif len(sys.argv) == 3:
    keyfile = sys.argv[1]
    logrus = sys.argv[2]
    homedir = input("Enter the GPG configuration directory path (optional): ")
elif len(sys.argv) == 2:
    keyfile = sys.argv[1]
    logrus = input("Enter the UID matching the secret key(s) to export: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")
else:
    keyfile = input("Enter the filename to save the secret key to: ")
    logrus = input("Enter the UID matching the secret key(s) to export: ")
    homedir = input("Enter the GPG configuration directory path (optional): ")

if len(homedir) == 0:
    homedir = None
elif homedir.startswith("~"):
    userdir = os.path.expanduser(homedir)
    if os.path.exists(userdir) is True:
        homedir = os.path.realpath(userdir)
    else:
        homedir = None
else:
    homedir = os.path.realpath(homedir)

if os.path.exists(homedir) is False:
    homedir = None
else:
    if os.path.isdir(homedir) is False:
        homedir = None
    else:
        pass

if homedir is not None:
    c.home_dir = homedir
else:
    pass

if c.home_dir is not None:
    if c.home_dir.endswith("/"):
        gpgfile = "@{0}@{1}.gpg".format(c.home_dir, keyfile)
        ascfie = "@{0}@{1}.asc".format(c.home_dir, keyfile)
    else:
        gpgfile = "@{0}@{1}.gpg".format(c.home_dir, keyfile)
        ascfie = "@{0}@{1}.asc".format(c.home_dir, keyfile)
else:
    pass
if os.path.exists(os.environ['GNUPGHOME']) is True:
    hd = os.environ['GNUPGHOME']
else:
    try:
        hd = subprocess.getoutput(gpgconfcmd)
    except:
        process = subprocess.Popen(gpgconfcmd.split(),
                                   stdout=subprocess.PIPE)
        procom = process.communicate()
        if sys.version_info[0] == 2:
            hd = procom[0].strip()
        else:
            hd = procom[0].decode().strip()

    gpgfile = '@{0@}/@{1@}.gpg'.format(hd, keyfile)
    ascfile = '@{0@}/@{1@}.asc'.format(hd, keyfile)

    try:
        a_result = a.key_export_secret(pattern=logrus)
        b_result = b.key_export_secret(pattern=logrus)
    except:
        a_result = a.key_export_secret(pattern=None)
        b_result = b.key_export_secret(pattern=None)

    if a_result is not None:
        with open(ascfile, "wb") as f:
            f.write(a_result)
        os.chmod(ascfile, 0o600)
    else:
        pass

    if b_result is not None:
        with open(gpgfile, "wb") as f:
            f.write(b_result)
        os.chmod(gpgfile, 0o600)
    else:
        pass

@example

node Sending public keys to the SKS Keyservers
subsection Sending public keys to the SKS Keyservers

As with the previous section on importing keys, the @samp{hkp4py} module adds another option with exporting keys in order to send them to the public keyservers.

The following example demonstrates how this may be done.

@example
import gpg
import hkp4py
import os.path
import sys

print("This script sends one or more public keys to the SKS keyservers and is essentially a slight variation on the export-key.py script.
")

context = gpg.Context(armor=True)
server = hkp4py.KeyServer("hkps://hkps.pool.sks-keyservers.net")

if len(sys.argv) > 2:
    logrus = ".join(sys.argv[1:])
elif len(sys.argv) == 2:
    logrus = sys.argv[1]
else:
    logrus = input("Enter the UID matching the key(s) to send: ")

if len(logrus) > 0:
    try:
        export_result = context.key_export(pattern=logrus)
    except Exception as e:
        print(e)
        export_result = None
    else:
        export_result = context.key_export(pattern=None)

if export_result is not None:
    try:
        try:
            send_result = server.add(export_result)
        except:
            send_result = server.add(export_result.decode())
        if send_result is not None:
            print(send_result)
        else:
            pass
    except Exception as e:
        print(e)
    else:
        pass
@end example

An expanded version of this script with additional functions for specifying an alternative homedir location is in the examples directory as @samp{send-key-to-keyserver.py}.  

---

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The @samp{hkp4py} module appears to handle both string and byte literal text data equally well, but the GPGME bindings deal primarily with byte literal data only and so this script sends in that format first, then tries the string literal form.

@node Basic Functions
@chapter Basic Functions

The most frequently called features of any cryptographic library will be the most fundamental tasks for encryption software. In this section we will look at how to programmatically encrypt data, decrypt it, sign it and verify signatures.

@menu
* Encryption::
* Decryption::
* Signing text and files::
* Signature verification::
@end menu

@node Encryption
@section Encryption

Encrypting is very straight forward. In the first example below the message, @samp{text}, is encrypted to a single recipient's key. In the second example the message will be encrypted to multiple recipients.

@menu
* Encrypting to one key::
* Encrypting to multiple keys::
@end menu

@node Encrypting to one key
@section Encrypting to one key

Once the the Context is set the main issues with encrypting data is essentially reduced to key selection and the keyword arguments specified in the @samp{gpg.Context().encrypt()} method.

Those keyword arguments are: @samp{recipients}, a list of keys encrypted to (covered in greater detail in the following section); @samp{sign}, whether or not to sign the plaintext data, see subsequent sections on signing and verifying signatures below (defaults to @samp{True}); @samp{sink}, to write results or partial results to a secure sink instead of returning it (defaults to @samp{None}); @samp{passphrase}, only used when utilising symmetric encryption (defaults to @samp{None}); @samp{always_trust}, used to override the trust model settings for recipient keys (defaults to @samp{False});
@samp{add_encrypt_to}, utilises any preconfigured @samp{encrypt-to} or @samp{default-key} settings in the user's @samp{gpg.conf} file (defaults to @samp{False}); @samp{prepare}, prepare for encryption (defaults to @samp{False}); @samp{expect_sign}, prepare for signing (defaults to @samp{False}); @samp{compress}, compresses the plaintext prior to encryption (defaults to @samp{True}).

@example
import gpg

a_key = "0x12345678DEADBEEF"
text = b"Some text to test with."

Since the text in this case must be bytes, it is most likely that the input form will be a separate file which is opened with "rb" as this is the simplest method of obtaining the correct data format.

```python
c = gpg.Context(armor=True)
rkey = list(c.keylist(pattern=a_key, secret=False))
ciphertext, result, sign_result = c.encrypt(text, recipients=rkey, sign=False)

with open("secret_plans.txt.asc", "wb") as afile:
    afile.write(ciphertext)
@end example
```

Though this is even more likely to be used like this; with the plaintext input read from a file, the recipient keys used for encryption regardless of key trust status and the encrypted output also encrypted to any preconfigured keys set in the @samp{gpg.conf} file:

@example
import gpg

a_key = "0x12345678DEADBEEF"

with open("secret_plans.txt", "rb") as afile:
    text = afile.read()

c = gpg.Context(armor=True)
rkey = list(c.keylist(pattern=a_key, secret=False))
ciphertext, result, sign_result = c.encrypt(text, recipients=rkey, sign=True,
                                      always_trust=True,
                                      add_encrypt_to=True)

with open("secret_plans.txt.asc", "wb") as afile:
    afile.write(ciphertext)
@end example
If the `@samp{recipients}` parameter is empty then the plaintext is encrypted symmetrically. If no `@samp{passphrase}` is supplied as a parameter or via a callback registered with the `@samp{Context()}` then an out-of-band prompt for the passphrase via pinentry will be invoked.

```
@node Encrypting to multiple keys
@subsection Encrypting to multiple keys

Encrypting to multiple keys essentially just expands upon the key selection process and the recipients from the previous examples.

The following example encrypts a message (`@samp{text}`) to everyone with an email address on the `@samp{gnupg.org}` domain,\footnote{You probably don't really want to do this. Searching the keyservers for "gnupg.org" produces over 400 results, the majority of which aren't actually at the gnupg.org domain, but just included a comment regarding the project in their key somewhere.} but does \textit{not} encrypt to a default key or other key which is configured to normally encrypt to.

````
@example
import gpg

text = b""""Oh look, another test message.

The same rules apply as with the previous example and more likely than not, the message will actually be drawn from reading the contents of a file or, maybe, from entering data at an input() prompt.

Since the text in this case must be bytes, it is most likely that the input form will be a separate file which is opened with "rb" as this is the simplest method of obtaining the correct data format.

````

```python
c = gpg.Context(armor=True)
rpattern = list(c.keylist(pattern="@@gnupg.org", secret=False))
logrus = []

for i in range(len(rpattern)):
    if rpattern[i].can_encrypt == 1:
        logrus.append(rpattern[i])

ciphertext, result, sign_result = c.encrypt(text, recipients=logrus, sign=False, always_trust=True)

with open("secret_plans.txt.asc", "wb") as afile:
````
afie.write(ciphertext)
@end example

All it would take to change the above example to sign the message and also encrypt the message to any configured default keys would be to change the `@samp{c.encrypt}` line to this:

@example
ciphertext, result, sign_result = c.encrypt(text, recipients=logrus,
       always_trust=True,
       add_encrypt_to=True)
@end example

The only keyword arguments requiring modification are those for which the default values are changing. The default value of `@samp{sign}` is `@samp{True}`, the default of `@samp{always_trust}` is `@samp{False}`, the default of `@samp{add_encrypt_to}` is `@samp{False}`.

If `@samp{always_trust}` is not set to `@samp{True}` and any of the recipient keys are not trusted (e.g. not signed or locally signed) then the encryption will raise an error. It is possible to mitigate this somewhat with something more like this:

@example
import gpg

with open("secret_plans.txt.asc", "rb") as afie:
    text = afie.read()

c = gpg.Context(armor=True)
rpattern = list(c.keylist(pattern="@@gnupg.org", secret=False))
logrus = []

for i in range(len(rpattern)):
    if rpattern[i].can_encrypt == 1:
        logrus.append(rpattern[i])

try:
    ciphertext, result, sign_result = c.encrypt(text, recipients=logrus,
        add_encrypt_to=True)
except gpg.errors.InvalidRecipients as e:
    for i in range(len(e.recipients)):
        for n in range(len(logrus)):
            if logrus[n].fpr == e.recipients[i].fpr:
                logrus.remove(logrus[n])
            else:
                pass
    try:
ciphertext, result, sign_result = c.encrypt(text,
    recipients=logrus,
    add_encrypt_to=True)

with open("secret_plans.txt.asc", "wb") as afi:
    afi.write(ciphertext)
except:
    pass
@end example

This will attempt to encrypt to all the keys searched for, then remove invalid recipients if it fails and try again.

@node Decryption
@section Decryption

Decrypting something encrypted to a key in one's secret keyring is fairly straight forward.

In this example code, however, preconfiguring either @samp{gpg.Context()} or @samp{gpg.core.Context()} as @samp{c} is unnecessary because there is no need to modify the Context prior to conducting the decryption and since the Context is only used once, setting it to @samp{c} simply adds lines for no gain.

@example
import gpg
ciphertext = input("Enter path and filename of encrypted file: ")
newfile = input("Enter path and filename of file to save decrypted data to: ")

with open(ciphertext, "rb") as cfile:
    try:
        plaintext, result, verify_result = gpg.Context().decrypt(cfile)
    except gpg.errors.GPGMEError as e:
        plaintext = None
        print(e)

    if plaintext is not None:
        with open(newfile, "wb") as nfile:
            nfile.write(plaintext)
    else:
        pass
@end example

The data available in @samp{plaintext} in this example is the decrypted content as a byte object, the recipient key IDs and algorithms in @samp{result} and the results of verifying any signatures of the data in @samp{verify_result}.
If `@samp{gpg.Context().decrypt(cfile, verify=False)}` is called instead, then `@samp{verify_result}` will be returned as `@samp{None}` and the rest remains as described here.

@node Signing text and files
@section Signing text and files

The following sections demonstrate how to specify keys to sign with.

@menu
* Signing key selection::
* Normal or default signing messages or files::
* Detached signing messages and files::
* Clearsigning messages or text::
@end menu

@node Signing key selection
@subsection Signing key selection

By default GPGME and the Python bindings will use the default key configured for the user invoking the GPGME API. If there is no default key specified and there is more than one secret key available it may be necessary to specify the key or keys with which to sign messages and files.

@example
import gpg

logrus = input("Enter the email address or string to match signing keys to: ")
h Hancock = gpg.Context().keylist(pattern=logrus, secret=True)
    sig_src = list(h Hancock)
@end example

The signing examples in the following sections include the explicitly designated `@samp{signers}` parameter in two of the five examples; once where the resulting signature would be ASCII armoured and once where it would not be armoured.

While it would be possible to enter a key ID or fingerprint here to match a specific key, it is not possible to enter two fingerprints and match two keys since the pattern expects a string, bytes or None and not a list. A string with two fingerprints won't match any single key.

@node Normal or default signing messages or files
@subsection Normal or default signing messages or files
The normal or default signing process is essentially the same as is most often invoked when also encrypting a message or file. So when the encryption component is not utilised, the result is to produce an encoded and signed output which may or may not be ASCII armoured and which may or may not also be compressed.

By default compression will be used unless GnuPG detects that the plaintext is already compressed. ASCII armouring will be determined according to the value of `gpg.Context().armor`.

The compression algorithm is selected in much the same way as the symmetric encryption algorithm or the hash digest algorithm is when multiple keys are involved; from the preferences saved into the key itself or by comparison with the preferences with all other keys involved.

```python
import gpg
text0 = '''Declaration of ... something.

```

```python
text = text0.encode()

c = gpg.Context(armor=True, signers=sig_src)
signed_data, result = c.sign(text, mode=gpg.constants.sig.mode.NORMAL)

with open("/path/to/statement.txt.asc", "w") as afile:
    afile.write(signed_data.decode())
@end example
```

Though everything in this example is accurate, it is more likely that reading the input data from another file and writing the result to a new file will be performed more like the way it is done in the next example. Even if the output format is ASCII armoured.

```python
import gpg

with open("/path/to/statement.txt", "rb") as tfile:
    text = tfile.read()

c = gpg.Context()
signed_data, result = c.sign(text, mode=gpg.constants.sig.mode.NORMAL)

with open("/path/to/statement.txt.sig", "wb") as afile:
    afile.write(signed_data)
@end example
```
Detached signing messages and files

Detached signatures will often be needed in programmatic uses of GPGME, either for signing files (e.g. tarballs of code releases) or as a component of message signing (e.g. PGP/MIME encoded email).

@example
import gpg

text0 = """"Declaration of ... something.

text0 = text0.encode()

c = gpg.Context(armor=True)
signed_data, result = c.sign(text0, mode=gpg.constants.sig.mode.DETACH)

with open("/path/to/statement.txt.asc", "w") as afile:
    afile.write(signed_data.decode())
@end example

As with normal signatures, detached signatures are best handled as byte literals, even when the output is ASCII armoured.

@example
import gpg

with open("/path/to/statement.txt", "rb") as tfile:
    text = tfile.read()

c = gpg.Context(signers=sig_src)
signed_data, result = c.sign(text, mode=gpg.constants.sig.mode.DETACH)

with open("/path/to/statement.txt.sig", "wb") as afile:
    afile.write(signed_data)
@end example

Clearsigning messages or text

Though PGP/in-line messages are no longer encouraged in favour of PGP/MIME, there is still sometimes value in utilising in-line signatures. This is where clear-signed messages or text is of value.

@example
import gpg

text0 = """Declaration of ... something.

====

text = text0.encode()

c = gpg.Context()
signed_data, result = c.sign(text, mode=gpg.constants.sig.mode.CLEAR)

with open("/path/to/statement.txt.asc", "w") as afile:
    afile.write(signed_data.decode())
@end example

In spite of the appearance of a clear-signed message, the data handled by GPGME in signing it must still be byte literals.

@example
import gpg

with open("/path/to/statement.txt", "rb") as tfile:
    text = tfile.read()

c = gpg.Context()
signed_data, result = c.sign(text, mode=gpg.constants.sig.mode.CLEAR)

with open("/path/to/statement.txt.asc", "wb") as afile:
    afile.write(signed_data)
@end example

@node Signature verification
@section Signature verification

Essentially there are two principal methods of verification of a signature. The first of these is for use with the normal or default signing method and for clear-signed messages. The second is for use with files and data with detached signatures.

The following example is intended for use with the default signing method where the file was not ASCII armoured:

@example
import gpg
import time

filename = "statement.txt"
gpg_file = "statement.txt.gpg"

c = gpg.Context()
try:
    data, result = c.verify(open(gpg_file))
    verified = True
except gpg.errors.BadSignatures as e:
    verified = False
    print(e)

if verified is True:
    for i in range(len(result.signatures)):
        sign = result.signatures[i]
        print("""Good signature from:
            @ {0@}
            with key @ {1@}
            made at @ {2@}
        ",
            time.ctime(sign.timestamp)))
else:
    pass
@end example

Whereas this next example, which is almost identical would work with
normal ASCII armoured files and with clear-signed files:

@example
import gpg
import time

filename = "statement.txt"
asc_file = "statement.txt.asc"

c = gpg.Context()

try:
    data, result = c.verify(open(asc_file))
    verified = True
except gpg.errors.BadSignatures as e:
    verified = False
    print(e)

if verified is True:
    for i in range(len(result.signatures)):
        sign = result.signatures[i]
        print("""Good signature from:
            @ {0@}
            with key @ {1@}
            made at @ {2@}
        ",
            time.ctime(sign.timestamp)))
else:
    pass
@end example
In both of the previous examples it is also possible to compare the
original data that was signed against the signed data in `@samp{data}` to see
if it matches with something like this:

```python
with open(filename, "rb") as afile:
    text = afile.read()

if text == data:
    print("Good signature.")
else:
    pass
```

The following two examples, however, deal with detached signatures.
With his method of verification the data that was signed does not get
returned since it is already being explicitly referenced in the first
argument of `@samp{c.verify}`. So `@samp{data}` is `@samp{None}` and only the information
in `@samp{result}` is available.

```python
import gpg
import time

filename = "statement.txt"
sig_file = "statement.txt.sig"

c = gpg.Context()

try:
    data, result = c.verify(open(filename), open(sig_file))
    verified = True
except gpg.errors.BadSignatures as e:
    verified = False
    print(e)

if verified is True:
    for i in range(len(result.signatures)):
        sign = result.signatures[i]
        print("Good signature from:
            @ {0@}
            with key @ {1@}
            made at @ {2@}
        "
        )
```
import gpg
import time

filename = "statement.txt"
asc_file = "statement.txt.asc"

c = gpg.Context()

try:
    data, result = c.verify(open(filename), open(asc_file))
    verified = True
except gpg.errors.BadSignatures as e:
    verified = False
    print(e)

if verified is True:
    for i in range(len(result.signatures)):
        sign = result.signatures[i]
        print("Good signature from:
               @{0@}
               with key @{1@}
               made at @{2@}
               ").format(c.get_key(sign.fpr).uids[0].uid, sign.fpr,
                          time.ctime(sign.timestamp)))
else:
    pass

@chapter Creating keys and subkeys

The one thing, aside from GnuPG itself, that GPGME depends on, of
course, is the keys themselves. So it is necessary to be able to
generate them and modify them by adding subkeys, revoking or disabling
them, sometimes deleting them and doing the same for user IDs.

In the following examples a key will be created for the world's
greatest secret agent, Danger Mouse. Since Danger Mouse is a secret
agent he needs to be able to protect information to \texttt{SECRET} level
clearance, so his keys will be 3072-bit keys.
The pre-configured @samp{gpg.conf} file which sets cipher, digest and other preferences contains the following configuration parameters:

@example
expert
allow-freeform-uid
allow-secret-key-import
trust-model tofu+pgp
tofu-default-policy unknown
enable-large-rsa
enable-dsa2
cert-digest-algo SHA512
default-preference-list TWOFISH CAMELLIA256 AES256 CAMELLIA192 AES192 CAMELLIA128 AES BLOWFISH IDEA CAST5 3DES SHA512 SHA384 SHA256 SHA224 RIPEMD160 SHA1 ZLIB BZIP2 ZIP Uncompressed
personal-cipher-preferences TWOFISH CAMELLIA256 AES256 CAMELLIA192 AES192 CAMELLIA128 AES BLOWFISH IDEA CAST5 3DES
personal-digest-preferences SHA512 SHA384 SHA256 SHA224 RIPEMD160 SHA1 personal-compress-preferences ZLIB BZIP2 ZIP Uncompressed
@end example

@menu
* Primary key::
* Subkeys::
* User IDs::
* Key certification::
@end menu

@node Primary key
@section Primary key

Generating a primary key uses the @samp{create_key} method in a Context. It contains multiple arguments and keyword arguments, including:
@samp{userid}, @samp{algorithm}, @samp{expires_in}, @samp{expires}, @samp{sign}, @samp{encrypt}, @samp{certify}, @samp{authenticate}, @samp{passphrase} and @samp{force}. The defaults for all of those except @samp{userid}, @samp{algorithm}, @samp{expires_in}, @samp{expires} and @samp{passphrase} is @samp{False}. The defaults for @samp{algorithm} and @samp{passphrase} is @samp{None}. The default for @samp{expires_in} is @samp{0}. The default for @samp{expires} is @samp{True}. There is no default for @samp{userid}.

If @samp{passphrase} is left as @samp{None} then the key will not be generated with a passphrase, if @samp{passphrase} is set to a string then that will be the passphrase and if @samp{passphrase} is set to @samp{True} then gpg-agent will launch pinentry to prompt for a passphrase. For the sake of convenience, these examples will keep @samp{passphrase} set to @samp{None}.

@example
import gpg
c = gpg.Context()

c.home_dir = "~/gupg-dm"
userid = "Danger Mouse <dm@@secret.example.net>"

dmkey = c.create_key(userid, algorithm="rsa3072", expires_in=31536000,
                    sign=True, certify=True)
@end example

One thing to note here is the use of setting the \texttt{c.home_dir} parameter. This enables generating the key or keys in a different location. In this case to keep the new key data created for this example in a separate location rather than adding it to existing and active key store data. As with the default directory, \texttt{~/.gnupg}, any temporary or separate directory needs the permissions set to only permit access by the directory owner. On posix systems this means setting the directory permissions to 700.

The \texttt{temp-homedir-config.py} script in the HOWTO examples directory will create an alternative homedir with these configuration options already set and the correct directory and file permissions.

The successful generation of the key can be confirmed via the returned \texttt{GenkeyResult} object, which includes the following data:

@example
print(""
Fingerprint: \texttt{0}
Primary Key: \texttt{1}
Public Key: \texttt{2}
Secret Key: \texttt{3}
Sub Key: \texttt{4}
User IDs: \texttt{5}
"
.format(dmkey.fpr, dmkey.primary, dmkey.pubkey, dmkey.seckey, dmkey.sub,
        dmkey.uid))
@end example

Alternatively the information can be confirmed using the command line program:

@example
bash-4.4$ gpg --homedir ~/.gnupg-dm -K
~/.gnupg-dm/pubring.kbx
----------------------
sec   rsa3072 2018-03-15 [SC] [expires: 2019-03-15]
177B7C25DB99745EE2EE13ED026D2F19E99E63AA
uid           [ultimate] Danger Mouse <dm@@secret.example.net>
As with generating keys manually, to preconfigure expanded preferences for the cipher, digest and compression algorithms, the `gpg.conf` file must contain those details in the home directory in which the new key is being generated. I used a cut down version of my own `gpg.conf` file in order to be able to generate this:

```bash
bash-4.4$ gpg --homedir ~/.gnupg-dm --edit-key 177B7C25DB99745EE2EE13ED026D2F19E99E63AA showpref quit
Secret key is available.

sec rsa3072/026D2F19E99E63AA
  trust: ultimate  validity: ultimate
[ultimate] (1). Danger Mouse <dm@@secret.example.net>

[ultimate] (1). Danger Mouse <dm@@secret.example.net>
  Cipher: TWOFISH, CAMELLIA256, AES256, CAMELLIA192, AES192, CAMELLIA128, AES, BLOWFISH, IDEA, CAST5, 3DES
  Digest: SHA512, SHA384, SHA256, SHA224, RIPEMD160, SHA1
  Compression: ZLIB, BZIP2, ZIP, Uncompressed
  Features: MDC, Keystore no-modify
```

In the following example an encryption subkey will be added to the primary key. Since Danger Mouse is a security conscious secret agent, this subkey will only be valid for about six months, half the length of the primary key.

```python
import gpg
c = gpg.Context()
```

@node Subkeys
@section Subkeys

Adding subkeys to a primary key is fairly similar to creating the primary key with the `create_subkey` method. Most of the arguments are the same, but not quite all. Instead of the `userid` argument there is now a `key` argument for selecting which primary key to add the subkey to.

In the following example an encryption subkey will be added to the primary key. Since Danger Mouse is a security conscious secret agent, this subkey will only be valid for about six months, half the length of the primary key.

```python
import gpg
c = gpg.Context()
```
c.home_dir = "~/.gnupg-dm"

key = c.get_key(dmkey.fpr, secret=True)
dmsub = c.create_subkey(key, algorithm="rsa3072", expires_in=15768000, encrypt=True)
@end example

As with the primary key, the results here can be checked with:

@example
print("{}
Fingerprint: @0@
Primary Key: @1@
Public Key: @2@
Secret Key: @3@
Sub Key: @4@
User IDs: @5@
{}").format(dmsub.fpr, dmsub.primary, dmsub.pubkey, dmsub.seckey, dmsub.sub, dmsub.uid)
@end example

As well as on the command line with:

@example
bash-4.4$ gpg --homedir ~/.gnupg-dm -K
~/.gnupg-dm/pubring.kbx
----------------------
sec rsa3072 2018-03-15 [SC] [expires: 2019-03-15]
177B7C25DB99745EE2EE13ED026D2F19E99E63AA
uid [ultimate] Danger Mouse <dm@@secret.example.net>
ssb rsa3072 2018-03-15 [E] [expires: 2018-09-13]

bash-4.4$
@end example

@node User IDs
@section User IDs

@menu
* Adding User IDs::
* Revoking User IDs::
@end menu

@node Adding User IDs
@subsection Adding User IDs

By comparison to creating primary keys and subkeys, adding a new user ID to an existing key is much simpler. The method used to do this is
@samp{key_add_uid} and the only arguments it takes are for the @samp{key} and the new @samp{uid}.

@example
import gpg

c = gpg.Context()
c.home_dir = "~/gnupg-dm"

dmfpr = "177B7C25DB99745EE2EE13ED026D2F19E99E63AA"
key = c.get_key(dmfpr, secret=True)
uid = "Danger Mouse <danger.mouse@@secret.example.net>"

c.key_add_uid(key, uid)
@end example

Unsurprisingly the result of this is:

@example
bash-4.4$ gpg --homedir ~/.gnupg-dm -K
~/.gnupg-dm/pubring.kbx
----------------------
sec   rsa3072 2018-03-15 [SC] [expires: 2019-03-15]
  177B7C25DB99745EE2EE13ED026D2F19E99E63AA
uid           [ultimate] Danger Mouse <danger.mouse@@@secret.example.net>
uid           [ultimate] Danger Mouse <dm@@@secret.example.net>
ssb  rsa3072 2018-03-15 [E] [expires: 2018-09-13]

bash-4.4$
@end example

@node Revoking User IDs
@subsection Revoking User IDs

Revoking a user ID is a fairly similar process, except that it uses the @samp{key_revoke_uid} method.

@example
import gpg

c = gpg.Context()
c.home_dir = "~/gnupg-dm"

dmfpr = "177B7C25DB99745EE2EE13ED026D2F19E99E63AA"
key = c.get_key(dmfpr, secret=True)
uid = "Danger Mouse <danger.mouse@@@secret.example.net>"

c.key_revoke_uid(key, uid)
Since key certification is more frequently referred to as key signing, the method used to perform this function is `key_sign`.

The `key_sign` method takes four arguments: `key`, `uids`, `expires_in` and `local`. The default value of `uids` is `None` and which results in all user IDs being selected. The default value of both `expires_in` and `local` is `False`; which results in the signature never expiring and being able to be exported.

The `key` is the key being signed rather than the key doing the signing. To change the key doing the signing refer to the signing key selection above for signing messages and files.

If the `uids` value is not `None` then it must either be a string to match a single user ID or a list of strings to match multiple user IDs. In this case the matching of those strings must be precise and it is case sensitive.

To sign Danger Mouse's key for just the initial user ID with a signature which will last a little over a month, do this:

```python
import gpg
c = gpg.Context()
uid = "Danger Mouse <dm@secret.example.net>"
dmfpr = "177B7C25DB99745EE2EE13ED026D2F19E99E63AA"
key = c.get_key(dmfpr, secret=True)
c.key_sign(key, uids=uid, expires_in=2764800)
```

To verify the key certifications, do this:

```python
import gpg
import time
```
c = gpg.Context()
dmfpnr = "177B7C25DB99745EE2EE13ED026D2F19E99E63AA"
keys = list(c.keylist(pattern=dmuid, mode=gpg.constants.keylist.mode.SIGS))
key = keys[0]

for user in key.uids:
    for sig in user.signatures:
        print("0x@{0}@".format(sig.keyid), ",", time.ctime(sig.timestamp), ",",
        sig.uid)
@end example

Which for Danger Mouse displays the following:

@example
0x92E3F6115435C65A Thu Mar 15 13:17:44 2018 Danger Mouse <dm@secret.example.net>
0x321E4E2373590E5D Mon Nov 26 12:46:05 2018 Ben McGinnes <ben@adversary.org>
@end example

The two key signatures listed are for the self-certification of Danger Mouse's key made when the key was created in March, 2018; and the second is a signature made by the author and set to expire at the end of the year. Note that the second signature was made with the following code (including the preceding code to display the output of the certifications or key signatures):

@example
import gpg
import math
import pendulum
import time

hd = "/home/dm/.gnupg"
c = gpg.Context()
d = gpg.Context(home_dir=hd)
dmfpnr = "177B7C25DB99745EE2EE13ED026D2F19E99E63AA"
dmuid = "Danger Mouse <dm@secret.example.net>"
dkeys = list(c.keylist(pattern=dmuid))
dmkey = dkeys[0]
c.key_import(d.key_export(pattern=None))

tp = pendulum.period(pendulum.now(tz="local"), pendulum.datetime(2019, 1, 1))
ts = tp.total_seconds()
total_secs = math.ceil(ts)
c.key_sign(dmkey, uids=dmuid, expires_in=total_secs)

d.key_import(c.key_export(pattern=dmuid))
keys = list(c.keylist(pattern=dmuid, mode=gpg.constants.keylist.mode.SIGS))
key = keys[0]

for user in key.uids:
    for sig in user.signatures:
        print("0x@{0}@".format(sig.keyid), ",", time.ctime(sig.timestamp), ",", sig.uid)
@end example

Note that this final code block includes the use of a module which is
@emph{not} part of Python's standard library, the @uref{https://pendulum.eustace.io/, pendulum module}. Unlike
the standard datetime module, pendulum makes working with dates and
times significantly easier in Python; just as the requests module
makes working with HTTP and HTTPS easier than the builtin modules do.

Though neither requests nor pendulum are required modules for using
the GPGME Python bindings, they are both highly recommended more
generally.

@node Advanced or Experimental Use Cases
@chapter Advanced or Experimental Use Cases

@menu
* C plus Python plus SWIG plus Cython::
@end menu

@node C plus Python plus SWIG plus Cython
@section C plus Python plus SWIG plus Cython

In spite of the apparent incongruence of using Python bindings to a C
interface only to generate more C from the Python; it is in fact quite
possible to use the GPGME bindings with @uref{http://docs.cython.org/en/latest/index.html, Cython}. Though in
many cases
the benefits may not be obvious since the most computationally
intensive work never leaves the level of the C code with which GPGME
itself is interacting with.

Nevertheless, there are some situations where the benefits are
demonstrable. One of the better and easier examples being the one of
the early examples in this HOWTO, the @ref{Counting keys, , key counting} code. Running that
example as an executable Python script, @samp{keycount.py} (available in
the @samp{examples/howto/} directory), will take a noticeable amount of time
to run on most systems where the public keybox or keyring contains a
few thousand public keys.

Earlier in the evening, prior to starting this section, I ran that
script on my laptop; as I tend to do periodically and timed it using
@samp{time} utility, with the following results:
Sometime after that I imported another key and followed it with a little test of Cython. This test was kept fairly basic, essentially lifting the material from the [Cython Basic Tutorial](http://docs.cython.org/en/latest/src/tutorial/cython_tutorial.html) to demonstrate compiling Python code to C. The first step was to take the example key counting code quoted previously, essentially from the importing of the `gpg` module to the end of the script:

```python
import gpg

c = gpg.Context()
seckeys = c.keylist(pattern=None, secret=True)
pubkeys = c.keylist(pattern=None, secret=False)

seclist = list(seckeys)
secnum = len(seclist)

publist = list(pubkeys)
pubnum = len(publist)

print(''
    Number of secret keys: @{0@}
    Number of public keys: @{1@}
''
    .format(secnum, pubnum))
```

Save that into a file called `keycount.pyx` and then create a `setup.py` file which contains this:

```python
from distutils.core import setup
from Cython.Build import cythonize
```
setup(
    ext_modules = cythonize("keycount.pyx")
)  
@end example

Compile it:

@example
bash-4.4$ python setup.py build_ext --inplace
bash-4.4$
@end example

Then run it in a similar manner to @samp{keycount.py}:

@example
bash-4.4$ time python3.7 -c "import keycount"
Number of secret keys: 23
Number of public keys: 12113

real       6m47.905s
user       0m0.785s
sys        0m0.331s
bash-4.4$
@end example

Cython turned @samp{keycount.pyx} into an 81KB @samp{keycount.o} file in the @samp{build/} directory, a 24KB @samp{keycount.cpython-37m-darwin.so} file to be imported into Python 3.7 and a 113KB @samp{keycount.c} generated C source code file of nearly three thousand lines. Quite a bit bigger than the 314 bytes of the @samp{keycount.pyx} file or the full 1,452 bytes of the full executable @samp{keycount.py} example script.

On the other hand it ran in nearly half the time; taking 6 minutes and 47.905 seconds to run. As opposed to the 11 minutes and 52.945 seconds which the CPython script alone took.

The @samp{keycount.pyx} and @samp{setup.py} files used to generate this example have been added to the @samp{examples/howto/advanced/cython/} directory.

The example versions include some additional options to annotate the existing code and to detect Cython’s use. The latter comes from the @uref{http://docs.cython.org/en/latest/src/tutorial/pure.html#magic-attributes-within-the-pxd, Magic Attributes} section of the Cython documentation.

@node Miscellaneous extras and work-arounds
@chapter Miscellaneous extras and work-arounds

Most of the things in the following sections are here simply because there was no better place to put them, even though some are only peripherally related to the GPGME Python bindings. Some are also workarounds for functions not integrated with GPGME as yet. This is especially true of the first of these, dealing with @ref{Group lines, , group lines}.

@endmenu

@node Group lines
@section Group lines

There is not yet an easy way to access groups configured in the gpg.conf file from within GPGME. As a consequence these central groupings of keys cannot be shared amongst multiple programs, such as MUAs readily.

The following code, however, provides a work-around for obtaining this information in Python.

@example
import subprocess
import sys

if sys.platform == "win32":
    gpgconfcmd = "gpgconf.exe --list-options gpg"
else:
    gpgconfcmd = "gpgconf --list-options gpg"

process = subprocess.Popen(gpgconfcmd.split(), stdout=subprocess.PIPE)
procom = process.communicate()

if sys.version_info[0] == 2:
    lines = procom[0].splitlines()
else:
    lines = procom[0].decode().splitlines()

for line in lines:
    if line.startswith("group") is True:
        break

    groups = line.split(";")[1].replace("", ").split(,)
@endexample
```python
group_lines = []
group_lists = []

for group in groups:
    group_lines.append(group.split("="))
    group_lists.append(group.split("="))

for glist in group_lists:
    glist[1] = glist[1].split()
@end example
```

The result of that code is that @samp{group_lines} is a list of lists where @samp{group_lines[i][0]} is the name of the group and @samp{group_lines[i][1]} is the key IDs of the group as a string.

The @samp{group_lists} result is very similar in that it is a list of lists. The first part, @samp{group_lists[i][0]} matches @samp{group_lines[i][0]} as the name of the group, but @samp{group_lists[i][1]} is the key IDs of the group as a list.

A demonstration of using the @samp{groups.py} module is also available in the form of the executable @samp{mutt-groups.py} script. This second script reads all the group entries in a user's @samp{gpg.conf} file and converts them into crypt-hooks suitable for use with the Mutt and Neomutt mail clients.

@node Keyserver access for Python
@section Keyserver access for Python

The @uref{https://github.com/Selfnet/hkp4py, hkp4py} module by Marcel Fest was originally a port of the old @uref{https://github.com/dgladkov/python-hkp, python-hkp} module from Python 2 to Python 3 and updated to use the @uref{http://docs.python-requests.org/en/latest/index.html, requests} module instead. It has since been modified to provide support for Python 2.7 as well and is available via PyPI.

Since it rewrites the @samp{hkp} protocol prefix as @samp{http} and @samp{hkp4py} as @samp{http}, the module is able to be used even with servers which do not support the full scope of keyserver functions. @footnote{Such as with ProtonMail servers. This also means that restricted servers which only advertise either HTTP or HTTPS end points and not HKP or HKPS end points must still be identified as as HKP or HKPS within the Python Code. The @samp{hkp4py} module will rewrite these appropriately when the connection is made to the server.} It also works quite readily when incorporated into a @ref{C plus Python plus SWIG plus Cython, , Cython} generated and compiled version of any code.

@menu
The hkp4py module returns key data via requests as string literals (@samp{r.text}) instead of byte literals (@samp{r.content}). This means that the returned key data must be encoded to UTF-8 when importing that key material using a @samp{gpg.Context().key_import()} method.

For this reason an alternative method has been added to the @samp{search} function of @samp{hkp4py.KeyServer()} which returns the key in the correct format as expected by @samp{key_import}. When importing using this module, it is now possible to import with this:

@example
for key in keys:
    if key.revoked is False:
        gpg.Context().key_import(key.key_blob)
    else:
        pass
@end example

Without that recent addition it would have been necessary to encode the contents of each @samp{hkp4py.KeyServer().search()[i].key} in @samp{hkp4py.KeyServer().search()} before trying to import it.

An example of this is included in the @ref{Importing keys, , Importing Keys} section of this HOWTO and the corresponding executable version of that example is available in the @samp{lang/python/examples/howto} directory as normal; the executable version is the @samp{import-keys-hkp.py} file.

For various reasons it may be necessary to check which version of GPGME the bindings have been built against; including whether a minimum required version of GPGME is in use.

For the most part the @samp{gpg.version.versionstr} and @samp{gpg.version.versionlist} methods have been quite sufficient. The former returns the same string as @samp{gpgme-config --version}, while the latter returns the major, minor and patch values in a list.

To check if the installed bindings have actually been built against the current installed libgpgme version, this check can be performed:
@example
import gpg
import subprocess
import sys

gpgme_version_call = subprocess.Popen(['gpgme-config', '--version'],
    stdout=subprocess.PIPE,
    stderr=subprocess.PIPE)
gpgme_version_str = gpgme_version_call.communicate()

if sys.version_info[0] == 2:
gpgme_version = gpgme_version_str[0].strip()
elif sys.version_info[0] >= 3:
gpgme_version = gpgme_version_str[0].decode().strip()
else:
gpgme_version = None

if gpgme_version is not None:
    if gpgme_version == gpg.version.versionstr:
        print("The GPGME Python bindings match libgpgme.")
    else:
        print("The GPGME Python bindings do NOT match libgpgme.")
else:
    print("Upgrade Python and reinstall the GPGME Python bindings.")
@end example

For many developers, however, the preferred checking means checking for a minimum version or point release. This is now readily available via the `gpg.version.versionintlist` method (added in version `1.12.1-beta79`). It is also now possible to easily check whether the installed GPGME Python bindings were built from a development or beta branch of the GPGME source code.

The following code demonstrates how both of those methods may be used:

@example
import gpg

try:
    if gpg.version.is_beta is True:
        print("The installed GPGME Python bindings were built from beta code.")
    else:
        print("The installed GPGME Python bindings are a released version.")
except Exception as e:
    print(e)

try:
    if gpg.version.versionintlist[0] == 1:
        print("..."
if gpg.version.versionintlist[1] == 12:
    if gpg.version.versionintlist[2] == 1:
        print("This is the minimum version for using versionintlist.")
    elif gpg.version.versionintlist[2] > 1:
        print("The versionintlist method is available.")
    else:
        pass
elif gpg.version.versionintlist[1] > 12:
    print("The versionintlist method is available.")
else:
    pass
elif gpg.version.versionintlist[0] > 1:
    print("The versionintlist method is available.")
else:
    pass
except Exception as e:
    print(e)
@end example

The points where @samp{pass} is used in the above example will most likely also produce an @samp{Exception} error since those results should only occur in versions which do not have the @samp{gpgme.version.is_beta} and @samp{gpgme.version.versionintlist} methods available.

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Draft editions of this HOWTO may be periodically available directly from the author at any of the following URLs:

@itemize
@item
@uref{https://files.au.adversary.org/crypto/gpgme-python-howto.html, GPGME Python Bindings HOWTO draft (HTML single file, AWS S3 SSL)}
@item
@uref{http://files.au.adversary.org/crypto/gpgme-python-howto.html, GPGME Python Bindings HOWTO draft (HTML single file, AWS S3 no SSL)}
@item
@uref{https://files.au.adversary.org/crypto/gpgme-python-howto-split/index.html, GPGME Python Bindings HOWTO draft (HTML multiple files, AWS S3 SSL)}
@item
@uref{http://files.au.adversary.org/crypto/gpgme-python-howto/index.html, GPGME Python Bindings HOWTO draft (HTML multiple files, AWS S3 no SSL)}
@end itemize

These draft versions have been generated from this document via GNU Emacs @uref{https://orgmode.org/, Org mode} to @samp{.texi} and @uref{https://www.gnu.org/software/texinfo/, GNU Texinfo} to HTML. Though it is likely that the specific @uref{https://files.au.adversary.org/crypto/gpgme-python-howto, file} @uref{http://files.au.adversary.org/crypto/gpgme-python-howto.org, version} used will be on the same server with the generated output formats. Occasionally I may include the Org mode generated XHTML versions:

@itemize
@item
@uref{https://files.au.adversary.org/crypto/gpgme-python-howto.xhtml, GPGME Python Bindings HOWTO draft (HTML single file, AWS S3 SSL)}
@item
@uref{http://files.au.adversary.org/crypto/gpgme-python-howto.xhtml, GPGME Python Bindings HOWTO draft (HTML single file, AWS S3 no SSL)}
@end itemize

That XHTML version, however, is exported in a way which inherits a colour scheme from @uref{https://github.com/holomorph/emacs-zenburn, the author's Emacs theme} (which is a higher contrast version of @uref{http://kippura.org/zenburnpage/, Zenburn} ported by @uref{https://github.com/holomorph, Holomorph}). So it's fine for people who prefer dark themed web pages, but not so great for everyone else.

The GNU Texinfo and reStructured Text versions ship with the software, while the GNU Emacs Info version is generated from the Texinfo version using GNU Texinfo or GNU Makeinfo. The Texinfo format is generated from the original Org mode source file in Org mode itself either within GNU Emacs or via the command line by invoking Emacs in batch mode:

@example
emacs gpgme-python-howto.org --batch -f org-texinfo-export-to-texinfo --kill
emacs gpgme-python-howto --batch -f org-texinfo-export-to-texinfo --kill
@end example

The reStructuredText format is also generated from the Org mode source
file, except it is generated using @uref{https://pandoc.org, Pandoc} with either of the following commands (depending on the filename):

@example
pandoc -f org -t rst+smart -o gpgme-python-howto.rst gpgme-python-howto.org
pandoc -f org -t rst+smart -o gpgme-python-howto.rst gpgme-python-howto
@end example

Note that the Org mode source files are identified as such via a mode line at the top of each file and have had their @samp{.org} file extensions dropped in order to make scripted generation of output formats easier and not require renaming files post-conversion.

Due to a bug in Org mode's texinfo conversion method, the recommended steps for generating the Texinfo files for all the files in the @samp{lang/python/doc/src/} directory are as follows:

@example
for x in * ; do
  emacs $x --batch -f org-texinfo-export-to-texinfo --kill
  cat $x.texi | sed -e 's/@documentencoding UTF-8/@documentencoding utf-8/g' > ../texinfo/$x.texi
  pandoc -f org -t rst+smart -o ../rst/$x.rst $x
done ;
rm -fv *.texi
cd ../texinfo
mkdir info
mkdir html
for x in *.texi ; do
  makeinfo -v $x
  makeinfo --html --no-split $x
done ;
mv *.info info/
mv *.html html/
@end example

This code snippet includes the generation of the reStructuredText files and would be expected to be run from the @samp{doc/src/} directory containing the Org mode source files. It also assumes that the commands are being run on POSIX compliant systems with basic tools like sed, the Bourne shell and GNU Emacs@footnote{Okay, Emacs might not necessarily qualify as a basic tool, but it is common enough that having it installed on a system isn’t too great an expectation, nor is it difficult to add to most POSIX systems, even if the users of those systems do not personally use it.} available. The code snippet also includes the steps for generating the Emacs Info files and HTML files from the Texinfo files. Using reStructuredText files with Sphinx is best left for the documentation of that project.

In addition to these there is a significantly less frequently updated
Various generated output formats may occasionally be found in subdirectories of the GPGME Python bindings directory. In particular within the DITA, reStructuredText and Texinfo subdirectories.

The `rst` directory contains output files generated with Sphinx and may include a considerable number of its possible output formats, but there are no guarantees as to how recent these are or even if they are present.

These draft editions are not official documents and the version of documentation in the master branch or which ships with released versions is the only official documentation. Nevertheless, these draft editions may occasionally be of use by providing more accessible web versions which are updated between releases. They are provided on the understanding that they may contain errors or may contain content subject to change prior to an official release.

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@bye

# -*- mode: org -*-
#+TITLE: What Was New in the GPGME Python Bindings and Documentation
#+AUTHOR: Ben McGinnes
#+LATEX_COMPILER: xelatex
#+LATEX_CLASS: article
#+LATEX_CLASS_OPTIONS: [12pt]
#+LATEX_HEADER: \usepackage{ltextra}
#+LATEX_HEADER: \usepackage[margin=1in]{geometry}
#+LATEX_HEADER: \setmainfont[ Ligatures={Common}][Times New Roman]
#+LATEX_HEADER: \author{Ben McGinnes <ben@gnupg.org> }
* What Was New
:PROPERTIES:
:CUSTOM_ID: new-stuff
:END:

| Version:        | 0.0.1                                    |
| GPGME Version:  | 1.13.0                                   |
| Author:         | Ben McGinnes <ben@gnupg.org>             |
| Author GPG Key: | DB4724E6FA4286C92B4E55C4321E4E2373590E5D |
| Language:       | Australian English, British English      |
| xml:lang:       | en-AU, en-GB, en                         |

The following are all the past /What's New/ sections for the Python Bindings HOWTO and other documentation.

** What Was New in GPGME 1120
:PROPERTIES:
:CUSTOM_ID: gpgme-1-12-0
:END:

The most obviously new point for those reading this guide is this section on other new things, but that's hardly important. Not given all the other things which spurred the need for adding this section and its subsections.

*** New in GPGME 1120
:PROPERTIES:
:CUSTOM_ID: new-stuff-1-12-0
:END:

There have been quite a number of additions to GPGME and the Python bindings to it since the last release of GPGME with versions 1.11.0 and 1.11.1 in April, 2018.

The bullet points of new additions are:

- an expanded section on [[file:gpgme-python-howto#installation][installing]] and [[file:gpgme-python-howto#snafu][troubleshooting]] the Python bindings.
- The release of Python 3.7.0; which appears to be working just fine with our bindings, in spite of intermittent reports of problems for many other Python projects with that new release.
- Python 3.7 has been moved to the head of the specified python versions list in the build process.
- In order to fix some other issues, there are certain underlying functions which are more exposed through the `gpg.Context()` function, but ongoing documentation ought to clarify that or otherwise provide the best means of using the bindings. Some additions to `gpg.core` and the `Context()` (however, were intended (see below).

- Continuing work in identifying and confirming the cause of off-reported problems installing the Python bindings on Windows]]).

- GSOC: Google's Surreptitiously Ordered Conscription ... erm ... oh, right; Google's Summer of Code. Though there were two hopeful candidates this year; only one ended up involved with the GnuPG Project directly, the other concentrated on an unrelated third party project with closer ties to one of the GNU/Linux distributions than to the GnuPG Project. Thus the Python bindings benefited from GSOC participant Jacob Adams, who added the `key_import` function; building on prior work by Tobias Mueller.

- Several new methods functions were added to the `gpg.Context()`, including: `key_import`, `key_export`, `key_export_minimal`, and `key_export_secret`.

- Importing and exporting examples include versions integrated with Marcel Fest's recently released `HKP for Python` module. Some additional notes on this module are included at the end of the HOWTO.

- Instructions for dealing with semi-walled garden implementations like ProtonMail are also included. This is intended to make things a little easier when communicating with users of ProtonMail's services and should not be construed as an endorsement of said service. The GnuPG Project neither favours, nor disfavours ProtonMail and the majority of this deals with interacting with the ProtonMail keyserver.

- Semi-formalised the location where draft versions of this HOWTO may periodically be accessible. This is both for the reference of others and testing the publishing of the document itself. Renamed this file at around the same time.

- The Texinfo documentation build configuration has been replicated from the parent project in order to make to maintain consistency with that project (and actually ship with each release).

- A reStructuredText version is also generated for Python developers more used to and comfortable with that format as it is the standard Python documentation format and Python developers may wish to use it with Sphinx. Please note that there has been no testing of the reStructuredText version with Sphinx at all. The reST file was generated by the simple expedient of using Pandoc. The reST file was generated by the simple expedient of using Pandoc.

- Added a new section for advanced or experimental use.

- Began the advanced use cases with a section on using the module with Cython.

- Added a number of new scripts to the `example/howto/` directory;
some of which may be in advance of their planned sections of the
HOWTO (and some are just there because it seemed like a good idea at
the time).
- Cleaned up a lot of things under the hood.

*H
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Deutsches Forschungsnetz10UDFN-PCA1.0,U%DFN Top Level Certification Authority1!0*H
certify@pca.dfn.de0
981029180310Z
011231180310Z010UDE1!0U
Deutsches Forschungsnetz10UDFN-PCA1.0,U%DFN Top Level Certification Authority1!0*H
certify@pca.dfn.de0"0*
*H
0
nskvS2r#iA4H]*/
:Spv
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'HB42http://www.pca.dfn.de/dfnpca/policy/wwwpolicy.html08'HB
+)The DFN Top Level Certification Authority0'HBcgi/check-rev.cgi?0'HB
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1.1472 greenlet 1.1.0
1.1472.1 Available under license :

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1.1473 gevent 1.4.0
1.1473.1 Available under license :

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gevent/libuv/_coreffi_source.c
gevent/libuv/_coreffi_cdef.c

Originally based on code from https://github.com/veegee/guv

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This is an attempt to acknowledge early contributions to the garbage collector. Later contributions should instead be mentioned in README.changes.

HISTORY -

Early versions of this collector were developed as a part of research projects supported in part by the National Science Foundation and the Defense Advance Research Projects Agency.

The garbage collector originated as part of the run-time system for the Russell programming language implementation. The first version of the garbage collector was written primarily by Al Demers. It was then refined and mostly rewritten, primarily by Hans-J. Boehm, at Cornell U., the University of Washington, Rice University (where it was first used for C and assembly code), Xerox PARC, SGI, and HP Labs. However, significant contributions have also been made by many others.

Some other contributors:

More recent contributors are mentioned in the modification history in README.changes. My apologies for any omissions.

The SPARC specific code was originally contributed by Mark Weiser. The Encore Multimax modifications were supplied by Kevin Kenny (kenny@m.cs.uiuc.edu). The adaptation to the IBM PC/RT is largely due to Vernon Lee, on machines made available to Rice by IBM. Much of the HP specific code and a number of good suggestions for improving the generic code are due to Walter Underwood. Robert Brazile (brazile@diamond.bbn.com) originally supplied the ULTRIX code.
Al Dosser (dosser@src.dec.com) and Regis Cridlig (Regis.Cridlig@cl.cam.ac.uk) subsequently provided updates and information on variation between ULTRIX systems. Parag Patel (parag@netcom.com) supplied the A/UX code. Jesper Peterson (jep@mtiname.mtia.oz.au), Michel Schinz, and Martin Tauchmann (martintauchmann@bigfoot.com) supplied the Amiga port. Thomas Funke (thf@zelator.in-berlin.de(?)) and Brian D.Carlstrom (bdc@clark.lcs.mit.edu) supplied the NeXT ports. Douglas Steel (doug@wg.icl.co.uk) provided ICL DRS6000 code. Bill Janssen (janssen@parc.xerox.com) supplied the SunOS dynamic loader specific code. Manuel Serrano (serrano@cornas.inria.fr) supplied linux and Sony News specific code. Al Dosser provided Alpha/OSF/1 code. He and Dave Detlefs (detlefs@src.dec.com) also provided several generic bug fixes. Alistair G. Crooks (agc@uts.amdahl.com) supplied the NetBSD and 386BSD ports. Jeffrey Hsu (hsu@soda.berkeley.edu) provided the FreeBSD port. Brent Benson (brent@jade.ssd.csd.harris.com) ported the collector to a Motorola 88K processor running CX/UX (Harris NightHawk). Ari Huttunen (Ari.Huttunen@hut.fi) generalized the OS/2 port to nonIBM development environments (a nontrivial task). Patrick Beard (beard@cs.ucdavis.edu) provided the initial MacOS port. David Chase, then at Olivetti Research, suggested several improvements. Scott Schwartz (schwartz@groucho.cse.psu.edu) supplied some of the code to save and print call stacks for leak detection on a SPARC. Jesse Hull and John Ellis supplied the C++ interface code. Zhong Shao performed much of the experimentation that led to the current typed allocation facility. (His dynamic type inference code hasn't made it into the released version of the collector, yet.)

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# MPL Support, `<boost/mp11 mpl.hpp>`

The header `<boost/mp11 mpl.hpp>`, when included, defines the necessary support infrastructure for `mp_list` and `std::tuple` to be valid link::`/.././../libs/mp11/MPL` sequences.

NOTE: `mpl.hpp` is not included by `<boost/mp11.hpp>`.

--- end ---

////

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Eclipse

The following artifacts are EPL.
* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

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Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

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Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

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OW2

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org.ow2.asm:asm-commons
org.ow2.asm:asm

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Apache

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org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

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MortBay

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org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
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org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

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org.apache.tomcat:tomcat-el-api

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The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

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Assorted

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1.1484 libdb 5.3.28-42.el8_4

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1.1485 marshmallow 2.16.3

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1.1486 libsmbios 2.4.1 2.el8

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 *
* Whom: Steve Mertz <steve@dragon-ware.com>
* Date: 20010111
* Why: Because I couldn't find one that I liked. So I wrote this one.
* *
*/
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* *
*/

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This package was debianized by Jose Luis Tallon <jltallon@adv-solutions.net> on Fri, 1 Jul 2005 23:34:21 +0200.

It was downloaded from:
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1.1492 perl-mozilla-ca 20160104-7.module_el8.3.0+2091+9eecfe51

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=head1 NAME

Mozilla::CA - Mozilla's CA cert bundle in PEM format

=head1 SYNOPSIS

use IO::Socket::SSL;
use Mozilla::CA;

my $host = "www.paypal.com";
my $client = IO::Socket::SSL->new(
PeerHost => "$host:443",
SSL_verify_mode => 0x02,
SSL_ca_file => Mozilla::CA::SSL_ca_file(),
)
|| die "Can't connect: $@"

$client->verify_hostname($host, "http")
|| die "hostname verification failure"

=head1 DESCRIPTION
Mozilla::CA provides a copy of Mozilla's bundle of Certificate Authority certificates in a form that can be consumed by modules and libraries based on OpenSSL.

The module provide a single function:

=item SSL_ca_file()

Returns the absolute path to the Mozilla's CA cert bundle PEM file.

=head1 SEE ALSO

L<http://curl.haxx.se/docs/caextract.html>

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NAME

Mozilla::CA - Mozilla's CA cert bundle in PEM format
SYNOPSIS
use IO::Socket::SSL;
use Mozilla::CA;

my $host = "www.paypal.com";
my $client = IO::Socket::SSL->new(
    PeerHost => "$host:443",
    SSL_verify_mode => 0x02,
    SSL_ca_file => Mozilla::CA::SSL_ca_file(),
) || die "Can't connect: $@";

$client->verify_hostname($host, "http") ||
    die "hostname verification failure";

DESCRIPTION
Mozilla::CA provides a copy of Mozilla's bundle of Certificate Authority
certificates in a form that can be consumed by modules and libraries
based on OpenSSL.

The module provide a single function:

SSL_ca_file()
    Returns the absolute path to the Mozilla's CA cert bundle PEM file.

SEE ALSO
<http://curl.haxx.se/docs/caextract.html>

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* /opt/cola/permits/1302212300_1652759634.8452487/0/mozilla-ca-20160104-tar-gz/Mozilla-CA-20160104/README
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---
abstract: "Mozilla's CA cert bundle in PEM format"
author:
- 'Gisle Aas <gisle@activestate.com>'
built_requires:
Test: '0'
configure_requires:
  ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: `ExtUtils::MakeMaker version 7.02, CPAN::Meta::Converter version 2.142690'
license: unknown
meta-spec:
  url: http://module-build.sourceforge.net/META-spec-v1.4.html
  version: '1.4'
name: Mozilla-CA
no_index:
directory:
  - t
  - inc
requires:
  perl: '5.006'
resources:
  repository: http://github.com/gisle/mozilla-ca
version: '20160104'

Found in path(s):
* /opt/cola/permits/1302212300_1652759634.8452487/0/mozilla-ca-20160104-tar-gz/Mozilla-CA-
  20160104/META.yml

1.1493 xlsxwriter 1.2.8

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## Contributions to the urllib3 project

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### Contributors

In chronological order:

* victor.vde <http://code.google.com/u/victor.vde/>
* HTTPS patch (which inspired HTTPSConnectionPool)

* erikcederstrand <http://code.google.com/u/erikcederstrand/>
* NTLM-authenticated HTTPSConnectionPool
* Basic-authenticated HTTPSConnectionPool (merged into make_headers)

* niphlod <niphlod@gmail.com>
* Client-verified SSL certificates for HTTPSConnectionPool
* Response gzip and deflate encoding support
* Better unicode support for filepost using StringIO buffers

* btoconnor <brian@btoconnor.net>
* Non-multipart encoding for POST requests

* p.dobrogost <http://code.google.com/u/@WBRSRIBZDhBFXQB6/>
* Code review, PEP8 compliance, benchmark fix

* kennethreitz <me@kennethreitz.com>
* Bugfixes, suggestions, Requests integration

* georgemarshall <https://github.com/georgemarshall>
* Bugfixes, Improvements and Test coverage

* Thomas Kluyver <thomas@kluyver.me.uk>
* Python 3 support

* brandon-rhodes <http://rhodesmill.org/brandon>
* Design review, bugfixes, test coverage.

* studer <theo.studer@gmail.com>
* IPv6 url support and test coverage

* Shivaram Lingamneni <slingamn@cs.stanford.edu>
* Support for explicitly closing pooled connections

* hartator <hartator@gmail.com>
* Corrected multipart behavior for params

* Thomas Weischuh <thomas@t-8ch.de>
* Support for TLS SNI
* API unification of ssl_version/cert_reqs
* SSL fingerprint and alternative hostname verification
* Bugfixes in testsuite

* Sune Kirkeby <mig@ibofobi.dk>
* Optional SNI-support for Python 2 via PyOpenSSL.

* Marc Schlaich <marc.sclaich@gmail.com>
* Various bugfixes and test improvements.

* Bryce Boe <bbzbryce@gmail.com>
* Correct six.moves conflict
* Fixed pickle support of some exceptions

* Boris Figovsky <boris.figovsky@ravelosystems.com>
* Allowed to skip SSL hostname verification
* Cory Benfield <https://lukasa.co.uk/about/>
  * Stream method for Response objects.
  * Return native strings in header values.
  * Generate 'Host' header when using proxies.

* Jason Robinson <jaywink@basshero.org>
  * Add missing WrappedSocket.fileno method in PyOpenSSL

* Audrius Butkevicius <audrius.butkevicius@elastichosts.com>
  * Fixed a race condition

* Stanislav Vitkovskiy <stas.vitkovsky@gmail.com>
  * Added HTTPS (CONNECT) proxy support

* Stephen Holsapple <sholsapp@gmail.com>
  * Added abstraction for granular control of request fields

* Martin von Gagern <Martin.vGagern@gmx.net>
  * Support for non-ASCII header parameters

* Kevin Burke <kev@inburke.com> and Pavel Kirichenko <juanchy@yandex-team.ru>
  * Support for separate connect and request timeouts

* Peter Waller <p@pwaller.net>
  * HTTPResponse.tell() for determining amount received over the wire

* Nipunn Koorapati <nipunn1313@gmail.com>
  * Ignore default ports when comparing hosts for equality

* Danilo @dbrgn <https://dbrgn.ch/>__
  * Disabled TLS compression by default on Python 3.2+
  * Disabled TLS compression in pyopenssl contrib module
  * Configurable cipher suites in pyopenssl contrib module

* Roman Bogorodskiy <roman.bogorodskiy@ericsson.com>
  * Account retries on proxy errors

* Nicolas Delaby <nicolas.delaby@ezeep.com>
  * Use the platform-specific CA certificate locations

* Josh Schneier <https://github.com/jschneier>
  * HTTPHeaderDict and associated tests and docs
  * Bugfixes, docs, test coverage

* Tahia Khan <http://tahia.tk/>
  * Added Timeout examples in docs

* Arthur Grunseid <https://grunseid.com>
* source_address support and tests (with https://github.com/bui)

* Ian Cordasco <graffatcolmingov@gmail.com>
  * PEP8 Compliance and Linting
  * Add ability to pass socket options to an HTTP Connection

* Erik Tollerud <erik.tollerud@gmail.com>
  * Support for standard library io module.

* Krishna Prasad <kprasad.iitd@gmail.com>
  * Google App Engine documentation

* Aaron Meurer <asmeurer@gmail.com>
  * Added Url.url, which unparses a Url

* Evgeny Kapun <abacabadabacaba@gmail.com>
  * Bugfixes

* Benjamen Meyer <bm_witness@yahoo.com>
  * Security Warning Documentation update for proper capture

* Shivan Sornarajah <github@sornars.com>
  * Support for using ConnectionPool and PoolManager as context managers.

* Alex Gaynor <alex.gaynor@gmail.com>
  * Updates to the default SSL configuration

* Tomas Tomecek <ttomecek@redhat.com>
  * Implemented generator for getting chunks from chunked responses.

* tlynn <https://github.com/tlynn>
  * Respect the warning preferences at import.

* David D. Riddle <ddriddle@illinois.edu>
  * IPv6 bugfixes in testsuite

* Thea Flowers <magicalgirl@google.com>
  * App Engine environment tests.
  * Documentation re-write.

* John Krauss <https://github.com/talos>
  * Clues to debugging problems with `cryptography` dependency in docs

* Disassem <https://github.com/Disassem>
  * Fix pool-default headers not applying for url-encoded requests like GET.

* James Atherfold <jlatherfold@hotmail.com>
  * Bugfixes relating to cleanup of connections during errors.
* Christian Pedersen <https://github.com/chripede>
  * IPv6 HTTPS proxy bugfix

* Jordan Moldow <https://github.com/jmoldow>
  * Fix low-level exceptions leaking from `HTTPResponse.stream()`.
  * Bugfix for `ConnectionPool.urlopen(release_conn=False)`.
  * Creation of `HTTPConnectionPool.ResponseCls`.

* Predrag Gruevski <https://github.com/obi1kenobi>
  * Made cert digest comparison use a constant-time algorithm.

* Adam Talsma <https://github.com/a-tal>
  * Bugfix to ca_cert file paths.

* Evan Meagher <https://evanmeagher.net>
  * Bugfix related to `memoryview` usage in PyOpenSSL adapter

* John Vandenberg <jayvdb@gmail.com>
  * Python 2.6 fixes; pyflakes and pep8 compliance

* Andy Caldwell <andy.m.caldwell@googlemail.com>
  * Bugfix related to reusing connections in indeterminate states.

* Ville Skytt <ville.skytta@iki.fi>
  * Logging efficiency improvements, spelling fixes, Travis config.

* Shige Takeda <smtakeda@gmail.com>
  * Started Recipes documentation and added a recipe about handling concatenated gzip data in HTTP response

* Jesse Shapiro <jesse@jesseshapiro.net>
  * Various character-encoding fixes/tweaks
  * Disabling IPv6 DNS when IPv6 connections not supported

* David Foster <http://dafoster.net/>
  * Ensure order of request and response headers are preserved.

* Jeremy Cline <jeremy@jcline.org>
  * Added connection pool keys by scheme

* Aviv Palivoda <palaviv@gmail.com>
  * History list to Retry object.
  * HTTPResponse contains the last Retry object.

* Nate Prewitt <nate.prewitt@gmail.com>
  * Ensure timeouts are not booleans and greater than zero.
  * Fixed infinite loop in `stream` when amt=None.
  * Added length_remaining to determine remaining data to be read.
* Added enforce_content_length to raise exception when incorrect content-length received.

* Seth Michael Larson <sethmichaellarson@protonmail.com>
  * Created selectors backport that supports PEP 475.

* Alexandre Dias <alex.dias@smarkets.com>
  * Don’t retry on timeout if method not in whitelist

* Moinuddin Quadri <moin18@gmail.com>
  * Lazily load idna package

* Tom White <s6yg1ez3@mail2tor.com>
  * Made SOCKS handler differentiate socks5h from socks5 and socks4a from socks4.

* Tim Burke <tim.burke@gmail.com>
  * Stop buffering entire deflate-encoded responses.

* Tuukka Mustonen <tuukka.mustonen@gmail.com>
  * Add counter for statusforcerelist retries.

* Erik Rose <erik@mozilla.com>
  * Bugfix to pyopenssl vending

* Wolfgang Richter <wolfgang.richter@gmail.com>
  * Bugfix related to loading full certificate chains with PyOpenSSL backend.

* Mike Miller <github@mikeage.net>
  * Logging improvements to include the HTTP(S) port when opening a new connection

* Ioannis Tziakos <mail@itziakos.gr>
  * Fix ``util.selectors._fileobj_to_fd`` to accept ``long``.
  * Update appveyor tox setup to use the 64bit python.

* Akamai (through Jesse Shapiro) <jshapiro@akamai.com>
  * Ongoing maintenance

* Dominique Leuenberger <dimstar@opensuse.org>
  * Minor fixes in the test suite

* Will Bond <will@wbond.net>
  * Add Python 2.6 support to ``contrib.securetransport``

* Aleksei Alekseev <alekseev.yeskela@gmail.com>
  * using auth info for socks proxy

* Chris Wilcox <git@crwilcox.com>
  * Improve contribution guide
  * Add `HTTPResponse.geturl` method to provide `urlib2.urlopen().geturl()` behavior
* Bruce Merry <https://www.brucemerry.org.za>
  * Fix leaking exceptions when system calls are interrupted with zero timeout

* Hugo van Kemenade <https://github.com/hugovk>
  * Drop support for EOL Python 2.6

* Tim Bell <https://github.com/timb07>
  * Bugfix for responses with Content-Type: message/* logging warnings

* Justin Bramley <https://github.com/jbramleycl>
  * Add ability to handle multiple Content-Encodings

* [Your name or handle] <[email or website]>
  * [Brief summary of your changes]

1.1498 modernc.org-memory 1.0.4
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1.1505 libxfixes 5.0.3 7.el8

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*
* @throws IllegalStateException
* If a subclass calls this constructor.
*/

Found in path(s):
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-
  jar/org/objectweb/asm/util/Textifier.java

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* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-
  jar/org/objectweb/asm/util/ASMifier.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-
  jar/org/objectweb/asm/tree/LdcInsnNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-
  jar/org/objectweb/asm/tree/ParameterNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-
  jar/org/objectweb/asm/tree/InnerClassNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/Handle.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/analysis/Frame.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/IntInsnNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/InsnNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/analysis/AnalyzerException.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/analysis/SimpleVerifier.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/FieldNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/lookupSwitchInsnNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/util/CheckSignatureAdapter.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/commons/AdviceAdapter.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/ClassVisitor.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/FieldInsnNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/util/CheckFieldAdapter.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/commons/RemappingClassAdapter.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/Interpreter.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/tryCatchBlockNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/LineNumberNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/ClassWriter.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/InvokeDynamicInsnNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/AnnotationVisitor.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/SourceInterpreter.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/LineNumbersNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/MatrixNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/SSAInstructionNode.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/tree/Tree.class
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*/
/**
* Constructs a new [ @link ClassNode ]. <i>Subclasses must not use this
* constructor</i>. Instead, they must use the [ @link #ClassNode(int) ]
* version.
*
* @throws IllegalStateException
*
* If a subclass calls this constructor.
*/

Found in path(s):
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-
* jar/org/objectweb/asm/tree/ClassNode.java

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*/
/** *
 * Constructs a new {@link LocalVariableAnnotationNode}. <i>Subclasses must
 * not use this constructor</i>. Instead, they must use the
 * {@link #LocalVariableAnnotationNode(int, TypePath, LabelNode[], LabelNode[], int[], String)}
 * version.
 *
 * @param typeRef
 *     a reference to the annotated type. See {@link TypeReference}.
 * @param typePath
 *     the path to the annotated type argument, wildcard bound, array
 *     element type, or static inner type within 'typeRef'. May be
 *     <tt>null</tt> if the annotation targets 'typeRef' as a whole.
 * @param start
 *     the fist instructions corresponding to the continuous ranges
 *     that make the scope of this local variable (inclusive).
 * @param end
 *     the last instructions corresponding to the continuous ranges
 *     that make the scope of this local variable (exclusive). This
 *     array must have the same size as the 'start' array.
 * @param index
 *     the local variable's index in each range. This array must have
 *     the same size as the 'start' array.
 * @param desc
 *     the class descriptor of the annotation class.
 */

Found in path(s):
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-
jar/org/objectweb/asm/tree/LocalVariableAnnotationNode.java
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* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/TypePath.java
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*/
/**
 * Creates a new {@link AnalyzerAdapter}. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the
 * [ @link #AnalyzerAdapter(int, String, int, String, String, MethodVisitor)]
 * version.
 *
 * @param owner
 *            the owner's class name.
 * @param access
 *            the method's access flags (see [ @link Opcodes}).
 * @param name
 *            the method's name.
 * @param desc
 *            the method's descriptor (see [ @link Type Type}).
 * @param mv
 *            the method visitor to which this adapter delegates calls. May
 *            be <tt>null</tt>.
 * @throws IllegalStateException
 *             If a subclass calls this constructor.
 */

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/**
 * Creates a new JSRInliner. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the
 * { @link #JSRInlinerAdapter(int, MethodVisitor, int, String, String, String, String[])}
 * version.
 *
 * @param mv
 * the <code>MethodVisitor</code> to send the resulting inlined
 * method code to (use <code>null</code> for none).
 * @param access
 * the method's access flags (see { @link Opcodes}). This
 * parameter also indicates if the method is synthetic and/or
 * deprecated.
 * @param name
 * the method's name.
 * @param desc
 * the method's descriptor (see { @link Type}).
 * @param signature
 * the method's signature. May be <tt>null</tt>.
 * @param exceptions
 * the internal names of the method's exception classes (see
 * { @link Type#getName()}). May be
 * <tt>null</tt>.
 * @throws IllegalStateException
 * If a subclass calls this constructor.
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/**
* Creates a new [@link GeneratorAdapter]. <i>Subclasses must not use this
* constructor</i>. Instead, they must use the
* {@link #GeneratorAdapter(int, MethodVisitor, int, String, String)}
* version.

* @param mv
* the method visitor to which this adapter delegates calls.
* @param access
* the method's access flags (see {@link Opcodes}).
* @param name
* the method's name.
* @param desc
* the method's descriptor (see {@link Type Type}).
* @throws IllegalStateException
* If a subclass calls this constructor.
*/

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* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/xml/Processor.java
* /opt/cola/permits/1136404780_1613763524.85/0/asm-tree-5-0-4-sources-5-jar/org/objectweb/asm/xml/SAXAdapter.java
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Version 2, June 1991

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[This is the first released version of the library GPL. It is numbered 2 because it goes with version 2 of the ordinary GPL.]

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/* nicstar.c v0.22 Jawaid Bazyar (bazyar@hypermall.com)
   * nicstar.c, M. Welsh (matt.welsh@cl.cam.ac.uk)
   *
   * Hacked October, 1997 by Jawaid Bazyar, Interlink Advertising Services Inc.
   * http://www.hypermall.com/
   * 10/1/97 - commented out CFG_PHYIE bit - we don't care when the PHY
   * interrupts us (except possibly for removal/insertion of the cable?)
   * 10/4/97 - began heavy inline documentation of the code. Corrected typos
   * and spelling mistakes.
   * 10/5/97 - added code to handle PHY interrupts, disable PHY on
*loss of link, and correctly re-enable PHY when link is
*re-established. (put back CFG_PHYIE)
*
* Modified to work with the IDT7721 nicstar -- AAL5 (tested) only.
*
* R. D. Rechenmacher <ron@fnal.gov>, Aug. 6, 1997
*
* Linux driver for the IDT77201 NICStar PCI ATM controller.
* PHY component is expected to be 155 Mbps S/UNI-Lite or IDT 77155;
* see init_nicstar() for PHY initialization to change this. This driver
* expects the Linux ATM stack to support scatter-gather lists
* (skb->atm.iovcnt != 0) for Rx skb's passed to vcc->push.
*
* Implementing minimal-copy of received data:
* IDT always receives data into a small buffer, then large buffers
* as needed. This means that data must always be copied to create
* the linear buffer needed by most non-ATM protocol stacks (e.g. IP)
* Fix is simple: make large buffers large enough to hold entire
* SDU, and leave <small_buffer_data> bytes empty at the start. Then
* copy small buffer contents to head of large buffer.
* Trick is to avoid fragmenting Linux, due to need for a lot of large
* buffers. This is done by 2 things:
* 1) skb->destructor / skb->atm.recycle_buffer
*     combined, allow nicstar_free_rx_skb to be called to
*     recycle large data buffers
* 2) skb_clone of received buffers
* See nicstar_free_rx_skb and linearize_buffer for implementation
* details.
*
*
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*
* M. Welsh, 6 July 1996
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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/CharSequenceValueConverter.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/ValueConverter.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/DefaultHeadersImpl.java
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  jar/io/netty/handler/codec/protobuf/ProtobufEncoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/protobuf/ProtobufEncoderNano.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/protobuf/ProtobufDecoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/protobuf/ProtobufVarint32FrameDecoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/ProtocolDetectionState.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/UnsupportedValueConverter.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/protobuf/ProtobufDecoderNano.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
  jar/io/netty/handler/codec/protobuf/Varint32FrameDecoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-

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* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-jar/io/netty/handler/codec/DefaultHeaders.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-jar/io/netty/handler/codec/Headers.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-jar/io/netty/handler/codec/EmptyHeaders.java
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* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-jar/io/netty/handler/codec/compression/Crc32c.java

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 */

/**
 * Enumeration of supported Base64 dialects.
 * <p>
 * The internal lookup tables in this class has been derived from
 * <a href="http://iharder.sourceforge.net/current/java/base64/">Robert Harder's Public Domain
 * Base64 Encoder/Decoder</a>.
 */

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* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-1.jar/io/netty/handler/codec/base64/Base64Dialect.java

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* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1.jar/io/netty/handler/codec/DatagramPacketDecoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1.jar/io/netty/handler/codec/string/LineSeparator.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1.jar/io/netty/handler/codec/compression/ByteBufChecksum.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1.jar/io/netty/handler/codec/DateFormatter.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1.jar/io/netty/handler/codec/CodecOutputList.java
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jar/io/netty/handler/codec/compression/SnappyFramedDecoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/MessageAggregationException.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/Bzip2Encoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/SnappyFramedEncoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/Lz4FrameDecoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/Bzip2Rand.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/FastLzFrameEncoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/Lz4FrameEncoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/Bzip2HuffmanAllocator.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/LzfDecoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
jar/io/netty/handler/codec/compression/Bzip2MTFAndRLE2StageEncoder.java
* /opt/ws_local/PERMITS_SQL/1068232267_1594320776.43/0/netty-codec-4-1-49-final-sources-1-
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*/
/**
* A decoder that splits the received {@link ByteBuf}s dynamically by the
* value of the length field in the message. It is particularly useful when you
* decode a binary message which has an integer header field that represents the
* length of the message body or the whole message.
* <p>
* {@link LengthFieldBasedFrameDecoder} has many configuration parameters so
* that it can decode any message with a length field, which is often seen in
* proprietary client-server protocols. Here are some example that will give
* you the basic idea on which option does what.
*<p>
*<h3>2 bytes length field at offset 0, do not strip header</h3><p>
* The value of the length field in this example is <tt>12 (0x0C)</tt> which
* represents the length of "HELLO, WORLD". By default, the decoder assumes
* that the length field represents the number of the bytes that follows the
* length field. Therefore, it can be decoded with the simplistic parameter
* combination.
* <pre>
* lengthFieldOffset   = 0
* lengthFieldLength   = 2
* lengthAdjustment    = 0
* initialBytesToStrip = 0 (= do not strip header)
* </pre>
* BEFORE DECODE (14 bytes) AFTER DECODE (14 bytes)
* +--------+----------------+---->+--------+----------------+
* | Length | Actual Content |----->| Length | Actual Content |
* | 0x000C | "HELLO, WORLD" |      | 0x000C | "HELLO, WORLD" |
* +--------+----------------+---->+--------+----------------+
* </pre>
*<p>
*<h3>2 bytes length field at offset 0, strip header</h3><p>
* Because we can get the length of the content by calling
* {@link ByteBuf#readableBytes()}, you might want to strip the length
* field by specifying <tt>initialBytesToStrip</tt>. In this example, we
* specified <tt>2</tt>, that is same with the length of the length field, to
* strip the first two bytes.
* <pre>
* lengthFieldOffset = 0
* lengthFieldLength = 2
* lengthAdjustment = 0
* initialBytesToStrip = 2 (= the length of the Length field)
* </pre>
* BEFORE DECODE (14 bytes) AFTER DECODE (12 bytes)
  * +----------------+ +----------------+
  * | Length | Actual Content |----->| Actual Content |
  * | 0x000C | "HELLO, WORLD" |      | "HELLO, WORLD" |
  * +----------------+ +----------------+
  * </pre>

* BEFORE DECODE (14 bytes) AFTER DECODE (14 bytes)
  * +----------------+ +----------------+
  * | Length | Actual Content |----->| Actual Content |
  * | 0x000E | "HELLO, WORLD" |      | "HELLO, WORLD" |
  * +----------------+ +----------------+
  * </pre>

* BEFORE DECODE (14 bytes) AFTER DECODE (14 bytes)
  * +----------------+ +----------------+
  * | Length | Actual Content |----->| Actual Content |
  * | 0x000E | "HELLO, WORLD" |      | "HELLO, WORLD" |
  * +----------------+ +----------------+
  * </pre>

* BEFORE DECODE (17 bytes) AFTER DECODE (17 bytes)
  * +----------------+ +----------------+
  * | Header 1 | Length | Actual Content |----->| Header 1 | Length | Actual Content |
  * | 0xCAFE | 0x00000C | "HELLO, WORLD" |      | 0xCAFE | 0x00000C | "HELLO, WORLD" |
  * +----------------+ +----------------+
  * </pre>
This is an advanced example that shows the case where there is an extra header between the length field and the message body. You have to specify a positive lengthAdjustment so that the decoder counts the extra header into the frame length calculation.

```
| lengthFieldOffset   = 0 |
| lengthFieldLength   = 3 |
| <b>lengthAdjustment</b> = <b>2</b> (= the length of Header 1) |
| initialBytesToStrip = 0 |
```

**BEFORE DECODE (17 bytes)**
```
+----------+----------+----------------+      +----------+----------+----------------+
|  Length  | Header 1 | Actual Content |----->|  Length  | Header 1 | Actual Content |
| 0x00000C | 0xCAFE   | "HELLO, WORLD" |      | 0x00000C | 0xCAFE   | "HELLO, WORLD" |
```

**AFTER DECODE (17 bytes)**
```
+----------+----------+----------------+      +----------+----------+----------------+
|  Length  | Header 1 | Actual Content |----->|  Length  | Header 1 | Actual Content |
| 0x00000C | 0xCAFE   | "HELLO, WORLD" |      | 0x00000C | 0xCAFE   | "HELLO, WORLD" |
```

This is a combination of all the examples above. There are the prepended header before the length field and the extra header after the length field. The prepended header affects the lengthFieldOffset and the extra header affects the lengthAdjustment. We also specified a non-zero initialBytesToStrip to strip the length field and the prepended header from the frame. If you don't want to strip the prepended header, you could specify initialBytesToSkip for initialBytesToStrip.

```
| lengthFieldOffset   = 1 (= the length of HDR1) |
| lengthFieldLength   = 2 |
| <b>lengthAdjustment</b> = <b>1</b> (= the length of HDR2) |
| <b>initialBytesToStrip</b> = <b>3</b> (= the length of HDR1 + LEN) |
```

**BEFORE DECODE (16 bytes)**
```
+------+--------+------+----------------+      +------+----------------+
| HDR1 | Length  | HDR2 | Actual Content |----->| HDR2 | Actual Content |
| 0xCA | 0x000C  | 0xFE | "HELLO, WORLD" |      | 0xFE | "HELLO, WORLD" |
```

**AFTER DECODE (13 bytes)**
```
+------+--------+------+----------------+      +------+----------------+
| HDR2 | Actual Content |----->| HDR2 | Actual Content |
| 0xFE | "HELLO, WORLD" |      | 0xFE | "HELLO, WORLD" |
```

Let's give another twist to the previous example. The only difference from
the previous example is that the length field represents the length of the
whole message instead of the message body, just like the third example.
We have to count the length of HDR1 and Length into \textit{lengthAdjustment}.
Please note that we don't need to take the length of HDR2 into account
because the length field already includes the whole header length.
\begin{pre}
\begin{verbatim}
lengthFieldOffset   = 1
lengthFieldLength   = 2
<\texttt{b}>lengthAdjustment<\texttt{b}> = <\texttt{b}>-3<\texttt{b}> (= the length of HDR1 + LEN, negative)
<\texttt{b}>initialBytesToStrip<\texttt{b}> = <\texttt{b}> 3<\texttt{b}>

* BEFORE DECODE (16 bytes)                       AFTER DECODE (13 bytes)
+-----------------------------------------------+      +-----------------------------------------------+
| HDR1 | Length | HDR2 | Actual Content |----->| HDR2 | Actual Content |
| 0xCA | 0x0010 | 0xFE | "HELLO, WORLD" |      | 0xFE | "HELLO, WORLD" |
+-----------------------------------------------+      +-----------------------------------------------+
\end{verbatim}
\end{pre}

@see LengthFieldPrepender
*/

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*/
/**
* Utility class for [ @link ByteBuf ] that encodes and decodes to and from
* \texttt{a href="http://en.wikipedia.org/wiki/Base64">Base64</a> notation.
* <p>
* The encoding and decoding algorithm in this class has been derived from
* Base64 Encoder/Decoder</a>.
*/

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* https://github.com/eclipse-ee4j/jaxrs-api

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<!-- DO NOT EDIT! Generated by `%(generating_script_filename)s --spec %(spec_directory)s/` -->

## -*-makefile-*-
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## Commands to generate dependency files
GEN_DEPS.c=$(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc=$(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIEC
## Additional flags when building libraries and with threads

THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path

LD_RPATH =
LD_RPATH_PRE = -Wl,-rpath,

## Compiler switch to embed a library name

LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options

LD_SOOPTIONS = -Wl,-Bsymbolic

## Shared object suffix

SO = so
## Non-shared intermediate object suffix

STATIC_O = ao

## Compilation rules

%.$(STATIC_O): $(srcdir)/%.c
$(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%:.o: $(srcdir)/%.c
$(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
$(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%:.o: $(srcdir)/%.cpp
$(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<

## Dependency rules

%.d: $(srcdir)/%.c
@echo "generating dependency information for $<"
@$(SHELL) -ec \"$(GEN_DEPS.c) $< \ |
| sed \"s/(\x\n)\o\[ :]*\A1.o \@ : /g\" > $@; \n[ -s $@ ] || rm -f $@\"

%.d: $(srcdir)/%.cpp
@echo "generating dependency information for $<"
@$$(SHELL) -ec \"$(GEN_DEPS.cc) $< \ |
| sed \"s/(\x\n)\o\[ :]*\A1.o \@ : /g\" > $@; \n[ -s $@ ] || rm -f $@\"

## Versioned libraries rules

%.S$(SO).$(SO_TARGET_VERSION_MAJOR): %.S$(SO).$(SO_TARGET_VERSION)$RM $@ && ln -s ${<F} $@
Open Source Used In BGP TE Controller Version 4.3.0 17595

%.SO: %.SO.%.SO_TARGET_VERSION_MAJOR
$(RM) $@ && ln -s $(F).%.SO.%.SO_TARGET_VERSION $@

## Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup
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A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

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definitions

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// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
    Name string `json:"name",omitempty`
    URL string `json:"url",omitempty`
}

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------
Eclipse
The following artifacts are EPL.
* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPLv2 with classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm
-----

Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

-----

MortBay

The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

-----

Mortbay

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

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Assorted

The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies.
1.1538 lz4-java 1.7.1

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1.1539 x-crypto 0.0.0-20210921155107-089bfa567519

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1.1540 elasticsearch 7.10.2-1

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src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java
contains test data from http://aspell.net/test/orig/batch0.tab.
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---
teardown:
- do:
  license.post:
    acknowledge: true
    body: |
    {
      "licenses": [{
        "uid": "3aa62ffe-36e1-4fad-bfde-9df88301eb22",
        "type": "trial",
        "issue_date_in_millis": 1523456691721,
        "expiration_date_in_millis": 1838816691721,
        "max_nodes": 5,
        "issued_to": "customer",
        "issuer": "elasticsearch",
        "signature": "6edff8b5b7e05784ebd6f3d67f1f0e88",
        "start_date_in_millis": -1
      }]
    }

---

"Installing and getting license works":

## current license version
- do:
  license.post:
    acknowledge: true
    body: |
    {
      "licenses": [{
        "uid": "894371dc-9t49-4997-93cb-8o2e3r7faa8a",
        "type": "trial",
        "issue_date_in_millis": 1411948800000,
        "expiration_date_in_millis": 1916956799999,
        "max_nodes": 1,
        "issued_to": "customer",
        "issuer": "elasticsearch",
        "signature": "6edff8b5b7e05784ebd6f3d67f1f0e88",
        "start_date_in_millis": -1
      }]
    }

- match: { license_status: "valid" }

---

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```
- do:
  license.get: {}

## the rest API defaults to a v4 license output with 11 attributes
- length: { license: 11 }

## bwc for licenses format
- do:
  license.post:
    acknowledge: true
    body: |
    match: { license_status: "valid" }

- do:
  license.get: {}

- length: { license: 11 }

## license version: 1.x
- do:
  license.post:
    acknowledge: true
    body: |
      [{"licenses":null}]
```

- match: { license_status: "valid" }
- do:
  license.get: {}
- length: { license: 11 }

## multiple licenses version: 1.x
- do:
  license.post:
    acknowledge: true
    body: |
    ```
    {"licenses": [{
      "uid": "893361dc-9749-4997-93cb-8023ed3df4a8",
      "type": "internal",
      "subscription_type": "none",
      "issue_date_in_millis": 1440827999999,
      "max_nodes": 1,
      "feature": "shield",
      "expiry_date_in_millis": 1411948800000,
      "issued_to": "issuedTo",
      "issuer": "issuer",
      "signature": "A AAAAQAAA A04QkxhyyWLFkyeEAAABMs9ZNOhjZDBGYyvyRXpCOW5SBbF3jDZAOWpShTvOMVZW
UrxVkP1smxakxzdW5U0hIITN0N1N2MXMvRFk4dT3ZEt3S3RRZ0p3U3oobWJKZqSefava0ppTHbK
kpTZWZSQ9iMiRNQKw1SLp0LLdAlZCS095MXRGN1lIzJpYeVTiTnFrcTE2edZJmZrdFQrN3JqGwxb0U0
MXZodDHSHSERiZTVOHmzSBYwnpoZepHZHEZjUrTVbXRENNSXnsWjzllaoDzVmEzUjNwlktNW
GM57U9Pv2pluoOq4QJOuml4MXNuL0pSOEhQaVB2azhmU9QVzhFteFtOM1Q0rNjXSG53MwK2K055c28z
SmRvMknF1J2QskFLV2VXumvZ0N23o2VE1qbVNQ2sL0vHN5bUerZJNWKZSvZm1EwuA9U9JTEndV
VtT1NCYklacUYyK2FwWR9xa0t6ddBmbmMzSGtQc3FWOTgzZ3ZUcXMvQkt2RUZwMFJnZzlvL2d2b
bDRWUzh6UG5pdENGWFReXNKknE9PQAQAAGa4qscUCRRZVdF0lwgy9dqybYQELLW8yLkiAyPV5XHHH
dtk+dxZlepNEDUKxSx2wvAJsNRFS/4kqpDfwN0DZTUM8fTgilSiZyYGTGDGT+ST/y5eAveEU5Jv1lBN27b
wkqL+l4V4yAat7cm7NKKJWeSfKAIHUTV3f8chPKfCHE0kQqJwvPC9RE82pTw0s/ur4RPLGNFqPM0uiE5n
uclUfVnJt899JQi0K/A7ZyFb0v7VTVXzQzJ7T7tZWBCPK91jptXzrUk0Q5S+5rSoJNYBo3HGIrCVrSz/55rceNtd
wKXU1lwnSeir41/CLduQT1FLy0+1th87VST8T8UT" ]}
    ```
```
```
match: { license_status: "valid" }

do:
  license.get: {} 

- length: { license: 11 }
- match: { license.uid: "893361dc-9749-4997-93cb-802e3d0fh7aa" }

"Should revert back to basic license after license deletion": 

do:
  license.delete: {}

match: { acknowledged: true }

do:
  license.get: {} 

match: { license.type: "basic" }

set: { license.uid: id }

do: # delete an existing basic license is a no-op 
  license.delete: {} 

do:
  license.get: {} 

match: { license.uid: $id }

"Should install a feature type license":

# VERSION_NO_FEATURE_TYPE license version

do:
  license.post: 
    acknowledge: true 
    body: |

    "license": { 
      "uid": "893361dc-9749-4997-93cb-802e3d7fa4a8", 
      "type": "gold", 
      "issue_date_in_millis": 1411948800000, 
      "expiry_date_in_millis": 1914278399999, 
      "max_nodes": 1, 
      "issued_to": "issued_to", 
      "issuer": "issuer", 
      "signature": "AAAAAgAAAA3U8+YmnnvC+CWsv/mRAAABmC92Z0hjZDGyJnVyRxpCOWS5Bb3FjZDAXOWpSbTvOMZwUzRxV1PSmxxaxZDw5IMhTHNoN1N2MXMvRFk4d37TZe3R3Z0puz3IoWJKZnQvSEFva0ppTHBkWkpzWZSqi9lNnRMkw1SlpLN0SilzC2S095MXRGN111zYcVVTnFrCTEdzhJZmZrDFQrN3JQeGwxb0U0MXZ0dDJHSEriZTVLOHNzSDByWnpoZEpzhZHBsEUrTVBxRENNSXnWWjZ11aODrzVmEzUjNiWktNGM5TuM4V2plaUo4QjOUnm4MXNuI0pS
OEhQaVb2azhmUk9QVzhFeTFOmQ1RnJXSG53MWk2K055c28zSmRnVkJFm2JSH5KFLV2VXUmVHNDZ2R3o2VE1qboVNQ51xOH5nUeRzINlIwz5SVmZIWEytaSU9wTTJENDVvTICYkIacUYyK2FwRW9xa0t56ddMbm
MrzSGq3FWOTgzZ3ZUcXMyQkt2RUZwMFJnZzvIL2d2bDRWUzheUG5pdENGWFReXKKK4e9PQAAABQc
e8GfDrm6t537luvejtb3K5dvg0K5NQapv+rCwCQFxgCuzf8pikgetP1aAGZP4uRESDQPMOCsx4d0UqqAm
9r7GBPQ3l93P+PogInPFtEH9NvoMavqoxVM95E6DSdqUX4cKSO+bgWpXPTd2LmpoQc1fXd6Z8l3euyYp
VHVKhIhVU0tAYjw6HzYOE7+zuOl0jYOxElqy66AnIfkHrhnvi+flym3te7iDTgsDRaz7W3IhbaqiSmEqzFbK
- match: { license_status: "valid" }

- do:
  license.get: {}

- length: { license: 11 }
---
"Cannot start basic":

- do:
  catch: bad_request
  license.post:
    acknowledge: true
    body: |
      { "license": { "uid": "893361dc-9749-4997-93cb-802e3d7fa4a8", "type": "basic", "issue_date_in_millis": 1411948800000, "expiry_date_in_millis": 1914278399999, "max_nodes": 1, "issued_to": "issuedTo", "issuer": "issuer", "signature": "AAAAAgAAAA0lKPZ0a7aZquUltho/AAABmC9ZN0hjZDBGYnVxyRxpCOW5Bb3fjZDAxOWpSbTvOvMZwUrzxVkl1PSmkkaxZldW51MhTHNoN1N2MXMvRFk4d3JTHQp3R0zZ0p3U3IobWJKZnqSFv0dpTHBKwkpZWSq9NhNmRQkWl1SlpLN0lDalZCS095MXRGp11IzlpYcVTThnFrcTE2dzhJزمZrdFqRn3JQeGwxbU0MXZ0dDJHSERiZTVLOHnZsDByWnpoZEphZHBEZjUrTVBxRENXSxNWWjZllOdZvmEzUjNiWktNWGm5TuQv2pluaO4qJOUm4MXNuLopSoEhQaVB2azhnuJK9QVzhFtFOm1Q0RnJXSg53Mwk2bK05c28zSmRnVfKbJSQkFLV2VXUmVHND2Z3ro2VE1q

- match: { error.root_cause.0.reason: 'Installing basic licenses is no longer allowed. Use the POST /_license/start_basic API to install a basic license that does not expire.' }
---
"Should fail gracefully when body content is not provided":

- do:
  catch: bad_request
  license.post:
    acknowledge: true
    body: |
      { "error": { "root_cause": [ { "reason": 'The license must be provided in the request body' } ] } }
---
"Current license is trial means not eligible to start trial":

- do:
  license.get_trial_status: { }
- match: { eligible_to_start_trial: false }

- do:
  license.post_start_basic:
    acknowledge: true

- match: { basic_was_started: true }

- do:
  license.get_trial_status: {} 

- match: { eligible_to_start_trial: false }

- do:
  catch: forbidden
  license.post_start_trial:
    acknowledge: true

- match: { trial_was_started: false }
- match: { error_message: "Operation failed: Trial was already activated." }

---
"Trial license cannot be basic":
- do:
  catch: bad_request
  license.post_start_trial:
    type: "basic"
    acknowledge: true

---
"Can start basic license if do not already have basic":
- do:
  license.get_basic_status: {} 

- match: { eligible_to_start_basic: true }

- do:
  license.post_start_basic:
    acknowledge: true

- match: { basic_was_started: true }
- match: { acknowledged: true }

- do:
  license.get_basic_status: {} 

- match: { eligible_to_start_basic: false }

- do:
catch: forbidden
license.post_start_basic: {}

- match: { basic_was_started: false }
- match: { acknowledged: true }
- match: { error_message: "Operation failed: Current license is basic." }

---
"Must acknowledge to start basic":
do:
  license.post_start_basic: {}

- match: { basic_was_started: false }
- match: { acknowledged: false }
- match: { error_message: "Operation failed: Needs acknowledgement." }

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---
"No features should be used just by starting up with default configuration":
- do:
  license.get_feature_usage: {}
- length: { features: 0 }

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teardown:
- do:
  license.post:
    acknowledge: true
    body: |
      "licenses": [{"uid":"3aa62ffe-36e1-4fad-bfde-9df8301eb22","type":"trial","issue_date_in_millis":1523456691721,"expiry_date_in_millis":1838816691721,"max_nodes":5,"issu```
license.post:
  acknowledge: true
  body: |
    { "license": { "uid": "6e57906b-a8d1-4c1f-acb7-73a1bdeca394", "type": "enterprise", "issue_date_in_millis": 1523456691721, "expiry_date_in_millis": 1838816691721, "max_nodes": null, "max_resource_units": 50, "issued_to": "rest-test", "issuer": "elasticsearch", "signature": "AAAAABQAAAAM0s6Kf6f9T6DItbXVJKAAYIAo5/x6hrsGh1GqqrJmy4qgmEC7gK0U4zQ6q5ZEMhm4jAAABAKFCFrix7w/xPG14+wdhl/lRmphDmXmHfL1xeuI33AhrlmOYUYZ30eR6GZuh7CnK8BQhflq4+63!gc3epWlvvDSgkOvXWLHRJtn75Crzizbism0ZHw7Swh9DO7vePomVBQo/Hm9+eX0pV4/cFQNMmbFaX11tqJZYBE08sNASVAFh17A1ZcVoB2evweGU9pUQYVfvmzyzySf99miDo3NH0XYdow
  - match: { license_status: "valid" }

  - do:
    license.get: {}

## a v4 (7.X compatible) license object has 11 attributes
- length: { license: 11 }

## by default the enterprise license is "platinum", and return "max_nodes"
- match: { license.type: "platinum" }
- match: { license.max_nodes: 50 }

## Check the xpack info API as well
- do:
  xpack.info: {}
- match: { license.type: "platinum" }
- match: { license.mode: "platinum" }

## Check the opt-in v5 license type
- do:
  license.get:
    accept_enterprise: true

## a v5 license object has 12 attributes
- length: { license: 12 }

## opt-in to return real enterprise type
- match: { license.type: "enterprise" }
- match: { license.max_resource_units: 50 }
- match: { license.max_nodes: null }

## Check the xpack info API as well
- do:
  xpack.info:
    accept_enterprise: true
- match: { license.type: "enterprise" }
- match: { license.mode: "enterprise" }

- do:
  license.get:
    accept_enterprise: false

### a v4 license object has 11 attributes
- length: { license: 11 }

### opt-out of real enterprise type
- match: { license.type: "platinum" }
- match: { license.max_nodes: 50 }

### Check the xpack info API as well
- do:
  xpack.info:
    accept_enterprise: false
- match: { license.type: "platinum" }
- match: { license.mode: "platinum" }

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[[java-rest-high-delete-license]]
=== Delete License

[[java-rest-high-delete-license-execution]]
==== Execution
The license can be deleted using the `deleteLicense()` method:

```java
[[java-rest-high-delete-license-response]]
```

Response

The returned `DeleteLicenseResponse` contains the `acknowledged` flag, which returns true if the request was processed by all nodes.

```java
[[java-rest-high-delete-license-async]]
```

Asynchronous Execution

This request can be executed asynchronously:

```java
[[java-rest-high-delete-license-execute-async]]
```

A typical listener for `DeleteLicenseResponse` looks like:

```java
[[java-rest-high-delete-license-execute-listener]]
```

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   analysis/common/src/resources/org/apache/lucene/analysis/bg/stopwords.txt,
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- `analysis/common/src/java/org/apache/lucene/analysis/de/GermanLightStemmer.java`
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===========================================================================
Nori Korean Morphological Analyzer - Apache Lucene Integration
===========================================================================

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[role="xpack"]
[tevent="basic"]
[[delete-license]]

=== Delete license API
++++
<titleabbrev>Delete license</titleabbrev>
++++

This API enables you to delete licensing information.

[discrete]
==== Request

`DELETE /_license`

[discrete]
==== Description

When your license expires, {xpack} operates in a degraded mode. For more information, see {kibana-ref}/managing-licenses.html#license-expiration[License expiration].
==== Authorization

You must have `manage` cluster privileges to use this API.
For more information, see <<security-privileges>>.

==== Examples

The following example queries the info API:

[source,console]
------------------------------------------------------------
DELETE /_license
------------------------------------------------------------
// TEST[skip:license testing issues]

When the license is successfully deleted, the API returns the following response:
[source,js]
------------------------------------------------------------
{
  "acknowledged": true
}
------------------------------------------------------------
// NOTCONSOLE

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---

Updates the license for your {es} cluster.

`PUT _license`

`POST _license`

If {es} {security-features} are enabled, you need `manage` cluster privileges to
install the license.

If {es} {security-features} are enabled and you are installing a gold or higher license, you must enable TLS on the transport networking layer before you install the license. See <<configuring-tls>>.

[[update-license-api-desc]]
==== [api-description-title]

You can update your license at runtime without shutting down your nodes. License updates take effect immediately. If the license you are installing does not support all of the features that were available with your previous license, however, you are notified in the response. You must then re-submit the API request with the `acknowledge` parameter set to `true`.

For more information about the different types of licenses, see https://www.elastic.co/subscriptions.

[[update-license-api-query-params]]
==== [api-query-parms-title]

`acknowledge`: (Optional, Boolean)
Specifies whether you acknowledge the license changes. The default value is `false`.

[[update-license-api-request-body]]
==== [api-request-body-title]

`licenses`: (Required, array)
A sequence of one or more JSON documents containing the license information.

[[update-license-api-example]]
==== [api-examples-title]

The following example updates to a basic license:

[source,console]
-------------------------------
PUT _license
{
  "licenses": [
  
  "uid": "893361dc-9749-4997-93cb-802e3d7fa4xx",
  "type": "basic",
  "issue_date_in_millis": 1411948800000,
  "expiry_date_in_millis": 1914278399999,
}
"max_nodes":1,
"issued_to":"issuedTo",
"issuer":"issuer",
"signature":"xx"
}
]

---------------------------------------------
// TEST[skip:license testing issues]

NOTE: These values are invalid; you must substitute the appropriate content from your license file.

You can also install your license file using a `curl` command. Be sure to add `@` before the license file path to instruct curl to treat it as an input file.

[source,shell]
---------------------------------------------
curl -XPUT -u <user> 'http://<host>:<port>/_license' -H "Content-Type: application/json" -d @license.json
---------------------------------------------

// NOTCONSOLE

On Windows, use the following command:

[source,shell]
---------------------------------------------
Invoke-WebRequest -uri http://<host>:<port>/_license -Credential elastic -Method Put -ContentType "application/json" -InFile .\license.json
---------------------------------------------

In these examples,

* `<user>` is a user ID with the appropriate authority.
* `<host>` is the hostname of any node in the {es} cluster (`localhost` if executing locally)
* `<port>` is the http port (defaults to `9200`)
* `license.json` is the license JSON file

NOTE: If your {es} node has SSL enabled on the HTTP interface, you must start your URL with `https://`

If you previously had a license with more features than the basic license, you receive the following response:

[source,js]
---------------------------------------------
{
  "acknowledged": false,
}
"license_status": "valid",
"acknowledge": [ 
  "message": "This license update requires acknowledgement. To acknowledge the license, please read the following messages and update the license again, this time with the "acknowledge=true" parameter:",
  "watcher": [ 
    "Watcher will be disabled"
  ],
  "logstash": [ 
    "Logstash will no longer poll for centrally-managed pipelines"
  ],
  "security": [ 
    "The following X-Pack security functionality will be disabled: ..."] 
]
}

// NOTCONSOLE

To complete the update, you must re-submit the API request and set the 'acknowledge' parameter to 'true'. For example:

[source,console]

---------------------------------------------
PUT _license?acknowledge=true
{
  "licenses": [ 
    
    "uid": "893361dc-9749-4997-93cb-802e3d7fa4xx",
    "type": "basic",
    "issue_date_in_millis": 1411948800000,
    "expiry_date_in_millis": 1914278399999,
    "max_nodes": 1,
    "issued_to": "issuedTo",
    "issuer": "issuer",
    "signature": "xx"
  ]
}
---------------------------------------------

// TEST[skip:license testing issues]

Alternatively:

[source,sh]

---------------------------------------------
curl -XPUT -u elastic 'http://<host>:<port>/_license?acknowledge=true' -H "Content-Type: application/json" -d @license.json
---------------------------------------------

// NOTCONSOLE
For more information about the features that are disabled when your license expires, see
{kibana-ref}/managing-licenses.html#license-expiration

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OSXAdapter

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***The art of simplicity is a puzzle of complexity.***

## Overview ##

[YAML](http://yaml.org) is a data serialization format designed for human readability and interaction with scripting languages.

SnakeYAML is a YAML processor for the Java Virtual Machine.

## SnakeYAML features ##
* a **complete** [YAML 1.1 processor](http://yaml.org/spec/1.1/current.html). In particular, SnakeYAML can parse all examples from the specification.
* Unicode support including UTF-8/UTF-16 input/output.
* high-level API for serializing and deserializing native Java objects.
* support for all types from the [YAML types repository](http://yaml.org/type/index.html).
* relatively sensible error messages.

## Info ##
* [Changes](https://bitbucket.org/asomov/snakeyaml/wiki/Changes)
* [Documentation](https://bitbucket.org/asomov/snakeyaml/wiki/Documentation)

## Contribute ##
* Mercurial DVCS is used to dance with the [source code](https://bitbucket.org/asomov/snakeyaml/src).
* If you find a bug in SnakeYAML, please [file a bug report](https://bitbucket.org/asomov/snakeyaml/issues?status=new&status=open).
* You may discuss SnakeYAML at [the mailing list](http://groups.google.com/group/snakeyaml-core).

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--- Get License

--- Execution

The license can be added or updated using the `getLicense()` method:

--- Response

The returned `GetLicenseResponse` contains the license in the JSON format.

--- Asynchronous Execution

This request can be executed asynchronously:
The `GetLicenseRequest` to execute and the `ActionListener` to use when the execution completes

The asynchronous method does not block and returns immediately. Once it is completed the `ActionListener` is called back using the `onResponse` method if the execution successfully completed or using the `onFailure` method if it failed.

A typical listener for `GetLicenseResponse` looks like:

1. Called when the execution is successfully completed. The response is provided as an argument
2. Called in case of failure. The raised exception is provided as an argument

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This API enables you to retrieve licensing information.

```
[discrete]
==== Request

`GET /_license`

[discrete]
==== Description

This API returns information about the type of license, when it was issued, and when it expires, for example.

For more information about the different types of licenses, see https://www.elastic.co/subscriptions.
```

`local`: (Boolean) Specifies whether to retrieve local information. The default value is `false`, which means the information is retrieved from the master node.
[discrete]
==== Authorization

You must have `monitor` cluster privileges to use this API. For more information, see <<security-privileges>>.

[discrete]
==== Examples

The following example provides information about a trial license:

[source,console]
--------------------------------------------------
GET /_license
--------------------------------------------------

[source,console-result]
--------------------------------------------------
{
    "license": {
        "status": "active",
        "uid": "cbff45e7-c553-41f7-ae4f-9205eabd80xx",
        "type": "trial",
        "issue_date": "2018-10-20T22:05:12.332Z",
        "issue_date_in_millis": 1540073112332,
        "expiry_date": "2018-11-19T22:05:12.332Z",
        "expiry_date_in_millis": 1542665112332,
        "max_nodes": 1000,
        "issued_to": "test",
        "issuer": "elasticsearch",
        "start_date_in_millis": -1
    }
}
--------------------------------------------------

// TESTRESPONSE["cbff45e7-c553-41f7-ae4f-9205eabd80xx"=$body.license.uid/]
// TESTRESPONSE["basic"=$body.license.type/]
// TESTRESPONSE["2018-10-20T22:05:12.332Z"=$body.license.issue_date/]
// TESTRESPONSE[1540073112332=$body.license.issue_date_in_millis/]
// TESTRESPONSE["2018-11-19T22:05:12.332Z"=$body.license.expiry_date/]
// TESTRESPONSE[1542665112332=$body.license.expiry_date_in_millis/]
// TESTRESPONSE[1000=$body.license.max_nodes/]
// TESTRESPONSE["test"=$body.license.issued_to/]
// TESTRESPONSE["elasticsearch"=$body.license.issuer/]

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The license can be added or updated using the `putLicense()` method:

```java
include-tagged::{doc-tests}/LicensingDocumentationIT.java[put-license-execute]
```

1. Set the categories of information to retrieve. The default is to return no information which is useful for checking if {xpack} is installed but not much else.
2. A JSON document containing the license information.

The returned `PutLicenseResponse` contains the `LicensesStatus`, `acknowledged` flag and possible acknowledge messages. The acknowledge messages are present if you previously had a license with more features than one you are trying to update and you didn't set the `acknowledge` flag to `true`. In this case you need to display the messages to the end user and if they agree, resubmit the license with the `acknowledge` flag set to `true`. Please note that the request will still return a 200 return code even if requires an acknowledgement. So, it is necessary to check the `acknowledged` flag.

```java
include-tagged::{doc-tests}/LicensingDocumentationIT.java[put-license-response]
```
<1> The status of the license
<2> Make sure that the license is valid.
<3> Check the acknowledge flag. It should be true if license is acknowledged.
<4> Otherwise we can see the acknowledge messages in ‘acknowledgeHeader()’
<5> and check component-specific messages in ‘acknowledgeMessages()’.

[[java-rest-high-put-license-async]]
==== Asynchronous Execution

This request can be executed asynchronously:

["source","java",subs="attributes,callouts,macros"]
include-tagged:{doc-tests}/LicensingDocumentationIT.java[put-license-execute-async]
--------------------------------------------------

<1> The `PutLicenseRequest` to execute and the `ActionListener` to use when the execution completes

The asynchronous method does not block and returns immediately. Once it is completed the `ActionListener` is called back using the `onResponse` method if the execution successfully completed or using the `onFailure` method if it failed.

A typical listener for `PutLicenseResponse` looks like:

["source","java",subs="attributes,callouts,macros"]
include-tagged:{doc-tests}/LicensingDocumentationIT.java[put-license-execute-listener]
--------------------------------------------------

<1> Called when the execution is successfully completed. The response is provided as an argument
<2> Called in case of failure. The raised exception is provided as an argument

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===========================================================================
Kuromoji Japanese Morphological Analyzer - Apache Lucene Integration
===========================================================================

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```
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```

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```
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<signature of Ty Coon>, 1 April 1989
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1.1554 cookiecutter 1.6.0

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1.1555 e2fsprogs 1.45.6-2.el8
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# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)

all:: image

real-subdirs:: Makefile
@echo "MKDIR pic"
@mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:$(BSD_LIB)
$(BSD_LIB): $(OBJS)
(cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
$(MV) pic/$(BSD_LIB) .
$(RM) -f $(BSD_LIB)
(cd ..; $(LN) $(LINK_BUILD_FLAGS) \ 
  `echo $(my_dir) | sed -e \'s;lib/;;\'" $(BSD_LIB) $(BSD_LIB))
install-shlibs install:: $(BSD_LIB)
@echo "INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
@$($(INSTALL_PROGRAM) $(BSD_LIB) \ 
  $(DESTDIR)$BSDLIB_INSTALL_DIR)/$(BSD_LIB) \ 
  @-$(LDCONFIG)\ninstall-strip: install
install-shlibs-strip:: install-shlibs
uninstall-shlibs uninstall::
$(RM) -f $(DESTDIR)$BSDLIB_INSTALL_DIR)/$(BSD_LIB)
clean::
$(RM) -rf pic
$(RM) -f $(BSD_LIB)
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This package was added to the e2fsprogs debian source package by
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+++ tdbsa/tdb.c
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Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
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trivial database library - private includes

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Theodore Ts'o
23-June-2007

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That's all there is to it!
This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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Upstream Author: Theodore Ts'o <tytso@mit.edu>

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Gadi Oxman, August 1995

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Clockwork - a clock process to replace cron

Cron is non-ideal for running scheduled application tasks, especially in an app deployed to multiple machines. [More details.](http://adam.heroku.com/past/2010/4/13/rethinking_cron/)

Clockwork is a cron replacement. It runs as a lightweight, long-running Ruby process which sits alongside your web processes (Mongrel/Thin) and your worker processes (DJ/Resque/Minion/Stalker) to schedule recurring work at particular times or dates. For example, refreshing feeds on an hourly basis, or send reminder emails on a nightly basis, or generating invoices once a month on the 1st.

Quickstart

--------

Create clock.rb:
require 'clockwork'
include Clockwork

handler do |job|
  puts "Running #{job}"
end

every(10.seconds, 'frequent.job')
every(3.minutes, 'less.frequent.job')
every(1.hour, 'hourly.job')
every(1.day, 'midnight.job', :at => '00:00')

Run it with the clockwork binary:

$ clockwork clock.rb

Use with queueing
-------------

The clock process only makes sense as a place to schedule work to be done, not to do the work. It avoids locking by running as a single process, but this makes it impossible to parallelize. For doing the work, you should be using a job queueing system, such as
[Delayed Job](http://www.therailsway.com/2009/7/22/do-it-later-with-delayed-job),
[Beanstalk/Stalker](http://adam.heroku.com/past/2010/4/24/beanstalk_a_simple_and_fast_queueing_backend/),
[RabbitMQ/Minion](http://adamblog.heroku.com/past/2009/9/28/background_jobs_with_rabbitmq_and_minion/),
or
[Resque](http://github.com/blog/542-introducing-resque). This design allows a simple clock process with no locks, but also offers near infinite horizontal scalability.

For example, if you're using Beanstalk/Staker:

require 'stalker'

handler { |job| Stalker.enqueue(job) }

every(1.hour, 'feeds.refresh')
every(1.day, 'reminders.send', :at => '01:30')

Using a queueing system which doesn't require that your full application be loaded is preferable, because the clock process can keep a tiny memory footprint. If you're using DJ or Resque, however, you can go ahead and load your full application enviroment, and use per-event blocks to call DJ or Resque enqueue methods. For example, with DJ/Rails:
require 'config/boot'
require 'config/environment'

every(1.hour, 'feeds.refresh') { Feed.send_later(:refresh) }
every(1.day, 'reminders.send', :at => '01:30') { Reminder.send_later(:send_reminders) }

Anatomy of a clock file
-----------------------

clock.rb is standard Ruby. Since we include the Clockwork module (the
Clockwork binary does this automatically, or you can do it explicitly), this
exposes a small DSL ('handler' and 'every') to define the handler for events,
and then the events themselves.

The handler typically looks like this:

    handler { |job| enqueue_your_job(job) }

This block will be invoked every time an event is triggered, with the job name
passed in. In most cases, you should be able to pass the job name directly
through to your queueing system.

The second part of the file are the events, which roughly resembles a crontab:

    every(5.minutes, 'thing.do')
    every(1.hour, 'otherthing.do')

In the first line of this example, an event will be triggered once every five
minutes, passing the job name 'thing.do' into the handler. The handler shown
above would thus call enqueue_your_job('thing.do').

You can also pass a custom block to the handler, for job queueing systems that
rely on classes rather than job names (i.e. DJ and Resque). In this case, you
need not define a general event handler, and instead provide one with each
event:

    every(5.minutes, 'thing.do') { Thing.send_later(:do) }

If you provide a custom handler for the block, the job name is used only for
logging.

You can also use blocks to do more complex checks:

    every(1.day, 'check.leap.year') do
        Stalker.enqueue('leap.year.party') if Time.now.year % 4 == 0
    end
In production
------------

Only one clock process should ever be running across your whole application
deployment. For example, if your app is running on three VPS machines (two app
servers and one database), your app machines might have the following process
topography:

* App server 1: 3 web (thin start), 3 workers (rake jobs:work), 1 clock (clockwork clock.rb)
* App server 2: 3 web (thin start), 3 workers (rake jobs:work)

You should use Monit, God, Upstart, or Inittab to keep your clock process
running the same way you keep your web and workers running.

Meta
----

Created by Adam Wiggins

Inspired by [rufus-scheduler](http://rufus.rubyforge.org/rufus-scheduler/) and [http://github.com/bvandenbos/resque-scheduler](resque-scheduler)

Design assistance from Peter van Hardenberg and Matthew Soldo

Patches contributed by Mark McGranaghan

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http://github.com/adamwiggins/clockwork

Found in path(s):
* /opt/cola/permits/1213082843_1634008352.31/0/clockwork-0-2-2-1-gem/data-tar-gz/README.md

1.1559 golang-lru 0.5.4
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